



UNIVERSITY OF  
EDUCATION, WINNEBA

# 2024

CONGREGATION FIRST SESSION

**Research &  
Publications**

DECEMBER  
2024





UNIVERSITY OF  
EDUCATION, WINNEBA

TH  
CONGREGATION FIRST  
SESSION

**Research & Publications**

# BRIEF HISTORY

The University of Education, Winneba (UEW) was established in September, 1992 as a University College under PNDC Law 322. On 14th May, 2004, the University of Education Act, (2004) Act 672 was enacted to upgrade the status of the University College of Education of Winneba to the status of a full University.

The University College of Education of Winneba brought together seven diploma awarding colleges located in different towns under one umbrella institution. These Colleges were the Advanced Teacher Training College, the Specialist Training College and the National

Academy of Music, all at Winneba; the School of Ghana Languages, Ajumako; the College of Special Education, Akwapim- Mampong; the Advanced Technical Training College, Kumasi; and the St. Andrews Agricultural Training College, Asante-Mampong.

By enactment of the Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development Act (2020) Act 1026, the Kumasi and Asante-Mampong Campuses have ceased to be satellite campuses of UEW.

## VISION

to be an internationally reputable institution for teacher education and research

## MISSION

To train competent professional teachers for all levels of education as well as conduct research, disseminate knowledge and contribute to educational policy and development

## CORE VALUES

- » Academic Excellence
- » Service to Community
- » Good Corporate Governance
- » Judicious Utilization and Management of Funds
- » Gender Equity and Social Inclusiveness
- » Teamwork and Partnerships Development
- » Positive Work Attitude
- » Environmental Responsibility

## SPECIAL STATUS AND MANDATE

The University is charged with the responsibility of producing professional educators to spearhead a new national vision of education aimed at redirecting Ghana's efforts along the path of rapid economic and social development.

The University of Education, Winneba is expected to play a leading role in the country's drive to produce scholars whose knowledge would be fully responsive to the realities and exigencies of contemporary Ghana and the West African sub-region.





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P R I N C I P A L S O F C O L L E G E S



# FOREWARD

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It is with great pleasure that I present the Research and Publication Report for the 2023–2024 academic year of the University of Education, Winneba (UEW). This report highlights our commitment to advancing knowledge, fostering innovation, and addressing critical challenges in education and beyond.

Research and publications are pivotal to the mission of our institution, serving as the foundation for academic excellence, societal impact, and global relevance. Over the past academic year, our faculty and staff have demonstrated remarkable dedication to producing research that aligns with our strategic priorities and addresses contemporary issues.

Key among the achievements highlighted in this report are the strides made in multidisciplinary research, collaborative partnerships, and the increased visibility of our scholarly works in reputable journals. These accomplishments underscore the vibrant research culture we are nurturing at UEW.

As we look to the future, we remain committed to fostering a research environment that emphasises innovation, inclusivity, and societal relevance. We aim to deepen international collaborations, enhance mentorship for emerging scholars, and streamline the dissemination of research findings to maximise their impact on policy and practice.

I extend my heartfelt gratitude to our researchers, faculty, and staff who have contributed to these successes. Your efforts have advanced the frontiers of knowledge and reinforced UEW's position as a leader in educational research and innovation.

May this report encourage further inquiry and collaboration as we continue to highlight pathways for progress and transformation in education and beyond.

Thank you.

**Prof. Stephen Jobson Mitchual, PhD**  
Vice-Chancellor,  
University of Education, Winneba

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# FACULTY OF APPLIED BEHAVIOURAL SCIENCES IN EDUCATION

## Department of Early Grade Education

### Articles In Journal

- Mensah, A. F., Oduro, T. A., Badu, S., Woode-Eshun, A., & Subbey, M. (2024). Teacher knowledge about assessment practices for diagnosing kindergarteners' cognitive needs within Ejisu Municipality in Ghana. *International Journal for Early Childhood Care and Educational Research*, 1(1), 48-68.
- Subbey, M. (2023). Stress management strategies employed by lecturers of special education in selected public universities of Ghana. *British Journal of Multidisciplinary and Advanced Studies*, 1, 29-39.

### Conferences/Workshops/Symposia/Seminars with Presentations

- Georgina, K., Acquah, J. M., Subbey, M. (2023, December 7-9). *Support services available for children with disabilities at early childhood centers in the New Juabeng Municipality* [Paper presentation]. 6th International Conference on New Trends in Social Sciences, Berlin.
- Subbey, M., Quendar, S. H. (2024, May 17-19). *Material factors as determinants of teacher behaviour toward the inclusion of kindergarteners with disabilities in the Sissala East Municipality* [Paper presentation]. International Conference on Teaching and Education, Liverpool.

# Department of Counselling Psychology

## Articles In Journal

**Addai-Mununkum, R., Amoah, S. A., Tamanja, E. M. J., Amos, P. M., Agyeman, E. A., Addai-Poku, C., Akayuure, P., & Kusi, H. (2024). "It Makes Us Feel More Professional!" Stakeholders' Perception of the Ghana Teacher Licensure Examination. *Teacher Education and Curriculum Studies*, 9(1), 21–29. <https://doi.org/10.11648/j.tecs.20240901.13>**

### Abstract

The professionalism of teaching has been subject of an age long debate. Teachers beseech others to recognize them as professionals and they become belligerent when they fail to receive recognition. Since 2018, Ghana has instituted the Ghana Teacher Licensure Examinations (GTLE) to regulate entry into the teaching profession. This policy has received a mixed bag of reactions with the populace sharply divided in opinion. Given that knowledge gap existed, it was important to interrogate the general perception of all stakeholders across Ghana to unravel how the GTLE is perceived among stakeholders. This paper is culled out of a broader study that employed a mixed-methods research approach in a nationwide study involving over 2800 respondents. For this paper, we report on the qualitative data generated from 145 participants. We describe the concerns of stakeholders who are in favour, against, or ambivalent about the GTLE. Drawing on an adaptation of CBAM model, we discuss stakeholders' perceptions of GTLE as stages of concern. We conclude that stakeholders opposed to the licensing of teachers do so because of their concerns about its form, content, and other logistical challenges. To sustain the policy, it is recommended for the National Teaching Council and the Ministry of Education to take steps to address these concerns. Regardless, what stakeholders agree to be the biggest strength of the GTLE is that it is a positive step towards professionalizing teaching. It is a useful yardstick to determine who is qualified to perform the function of teaching, and prevents all others who do not qualify from accessing classrooms.

**Amos, P. M. (2023). Relational depth in counselling: The perspectives and experiences of counsellors. *Journal of Pedagogical Sociology and Psychology*, 5(1), 44–59. <https://doi.org/10.33902/JPSP.202320610s>**

**Bedu-Addo, P. K. A., Mahama, I., Amoako, B. M., Amos, P. M., & Antwi, T. (2023). Neglectful parenting and personality traits as predictors of malevolent creativity among Ghanaian tertiary education students. *Creative Education*, 14(2), 232–244. <https://doi.org/10.4236/CE.2023.142016>**

**Mahama, I., Danquah, S. O., Ammah, C., Amos, P. M., & Eshun, P. (2023). An examination of mindfulness and academic resilience among higher education students amidst COVID-19 pandemic in Ghana. *Psychology*, 14, 974–999. <https://doi.org/10.4236/psych.2023.146052>**

**Mahama, I., Eshun, P., Amos, P. M., Antwi, T., Amoako, B. M., & Egglely, V. E. (2023). Psychological precursors of entrepreneurial intentions among higher education students in Ghana. *Discover Education*, 2(29), 1-11. <https://doi.org/10.1007/s44217-023-00047-w>**



## Abstract

Background Entrepreneurship is seen as the solution to graduate unemployment in Ghana, and students are required to take a course on entrepreneurship that teaches them how to work for themselves. Therefore, this study investigated the psychological precursors of entrepreneurial intentions among higher education students. Methods Using the analytical cross-sectional survey design, 250 participants were sampled from public universities to participate in the survey. Participants were required to respond to three constructs (entrepreneurial scaffolding, psychological capital, and entrepreneurial intentions). The data analyses were performed using multivariate regression. Results The study's findings showed that entrepreneurial scaffolding and psychological capital were significant predictors of entrepreneurial intentions. Conclusion The researchers concluded that students' convictions about succeeding or failing and plans to engage in entrepreneurial behaviours depended on proper entrepreneurial guidance and a positive mindset. As a result, higher education institutions and career counsellors in Ghana should be strengthened and include practical guides to entrepreneurial training, thereby reducing graduate unemployment in Ghana.

**Obeng, C., Adade, J. R. D., Amos, P. M., Antwi, T., & Asiedu, B. W. K. (2023). Social media practices among married couples in a Ghanaian residential area. *New Media and Mass Communication*, 104, 1-13. <http://doi.org/10.7176/NMMC/104-07>**

**Amponsah, A. G., Awini, A. P., Namale, M. K., & Adjei, S. R. (2024). Exploring personal problems of returnee 'Kayayei' in Zebilla, Ghana, through the lens of rational emotive behavioural therapy. *International Journal of Advance Research in Multidisciplinary*, Volume 2(2), 107 – 121. <https://multiresearchjournal.theviews.in>**

**Awini, A. P., Amponsah, A. G., Adei, S. R., & Namale, M. K. (2024). Triggering events leading to the migration and social problems of returnee Kayayei in Zebilla, Ghana. *International Journal of Advance Research in Multidisciplinary*, Volume 2(2), 90 – 106. <https://multiresearchjournal.theviews.in/>**

**Anovunga, A. A., N-yelbi, J., & Sandow V., A. (2024). Determinants of career choice among final year students of University of Education, Winneba. *International Journal of Science Academic Research*, 5(4), 7338-7343. <http://www.scienceijsar.com>**

## Abstract

In recent times, choosing a career is an extremely difficult task due to changing interest and self-knowledge. Choosing a career that is in line with one's interest and self-knowledge are crucial in ensuring effectiveness, efficiency and productivity. The purpose of this study was to investigate the determinants of career choice among final year students of University of Education, Winneba. The study was guided by the following research objectives: To find out the extent to which interest influence career choice of final year students and to find out which ways self-knowledge influence career choice of final year students. A quantitative approach underpinned by a descriptive survey design was used. Population comprised of all final year undergraduate students of University of Education, Winneba. Stratified and proportionate random sampling techniques were employed to select a sample size of 357 for the study. Mean, standard deviation, frequencies and percentages were used in analysing the data. The findings revealed that lack of interest as well as self-knowledge negatively influenced career

choice. It was recommended that parents should be encouraged by counsellors, the school authority, government and the mass media to positively guide their children to make realistic career choices based on their interest. Also, Ghana Education Service should post school counsellors to all schools to provide functional career counselling services to students to enable them develop self-knowledge and appropriately with their careers.

Keywords: Career, Determinants, Self-knowledge, and Interest

**N-yelbi, J. (2024). Influence of retirement experiences on psychological well-being of retired teachers in East Gonja Municipality, Ghana. *Journal of Advanced Psychology*, 6(1), 1 - 20.**

### Abstract

**Purpose:** The purpose of the study was to examine the influence of retirement experiences on psychological well-being of retired teachers in the East Gonja Municipality. The study employed a quantitative approach underpinned by analytical cross-sectional design. The target population of the study comprised of retired teachers in the East Gonja Municipality. A total of 320 retired teachers from East Gonja Municipality were purposively selected to constitute the sample for the study. **Methodology:** Scale of Positive and Negative Experience (SPANES) and Psychological Well-Being Scale were adopted for data collection. Data was analysed using means and standard deviation and linear regression. **Findings:** The study found that most of the retired teachers in the East Gonja Municipality in the Savannah Region of Ghana experience positive emotions, express optimism, and are satisfied with their lives in their retirement phase of life. **Unique contribution to theory, policy and practice:** The study concludes that retirement experiences are unique and can be a liberating experience for retired teachers, where they can pursue their interests and hobbies without any restrictions. It is recommended that retirement should be a time for retired teachers to focus on their health and well-being, a time they can pursue activities that promote physical and mental health. This study recommends to education system to provide pre-retirement counselling and post-retirement support programmes, focusing on mental health and well-being. Also, the study recommends to pension and retirement agencies to develop and implement workshops and peer support programmes to promote retired teachers' psychological well-being, addressing issues of social isolation and identity loss.

Keywords: Retirement Experiences, Psychological Well-Being, Retired Teachers

**N-yelbi, J., Acquah, S., Dzakadzie, Y., & Eshun, P. (2024). Level of education, marital longevity and religion as determinants of marital stability among couples in Tamale Metropolis, Ghana. *Advances in Research*, 25(3), 137-147. <https://doi.org/10.9734/AIR/2024/v25i31059>**

### Abstract

The study was a descriptive survey aimed at investigating couples' level of education, marital longevity and religion as determinants of marital stability among couples in the Tamale Metropolis. The population of the study were married couples drawn from the Metropolis who have been married for 1-25 years and could read and understand. A sample of 381 married couples aged between 30 to 50 years were drawn from the region using stratified random sampling. A questionnaire was used to gather data for the study. Quantitative data was analysed by using one-way ANOVA. Hypothesis one revealed a statistically significant differences in marital stability of couples based on their level of education. Hypothesis two revealed a

statistically significant differences in the length of marriage and marital stability of couples. For hypothesis 3, it was revealed that there is a statistically significant differences in marital stability among couples based on their religion. It was concluded that married couples' levels of education, how long they have been married and couples' religion were key determinants of marital stability among couples. It is therefore recommended that couples intending to marry should have some level of education to be effectively resolve conflicts during marriage. Also, couples should be educated on the need to stay longer in marriage despite conflicts and misunderstandings and adherence to religious practices, values and teachings on marriage should be adhered to.

Keywords: Level of education; marital longevity; religion; marriage; marital stability; determinants; couples; Tamale Metropolis; Ghana

**N-yelbi, J., & Anovunga, A. A. (2024). Effects of family characteristics and work relationship on retirement among teachers in Agona West Municipality, Ghana. *Journal of Advances in Education and Philosophy*, 8(2), 88-98. <https://doi.org/10.36348/jaep.2024.v08i02.006>**

## **Abstract**

Family characteristics and work relationships have effects on teachers' retirement decision-making in the country. This has led to much frustrations of life for some retired teachers in Ghana. The study was guided by the following research objectives: Effects of family characteristics on retirement decision-making, the influence of work relationships on retirement decision-making and the strategies that can be put in place to improve retirement decision-making among teachers. A quantitative approach and descriptive survey design were used. The target population comprised teachers in public Basic schools in the Agona West Municipality. 150 teachers formed the sample for the study. Data was obtained using a self-developed questionnaire. It emerged from the findings that high financial demands stemming from home expenses, expectations from family members, and being first-borns hindered individuals' ability to save and plan for their retirement. Also, it revealed that teachers in the Agona Swedru Municipal place considerable importance on their interactions with colleagues when it comes to retirement decision-making. It was found that teachers in the Agona Swedru Municipal place considerable importance on their interactions with colleagues when it comes to retirement decision-making. It was therefore recommended that retirement planning initiatives and financial education programmes should prioritize offering diverse and adaptable forms of psychoeducation and guidance to cater for the varying expectations and preferences of respondents. Educational institutions and policymakers should encourage and support peer relationships to improve retirement preparedness and satisfaction among teachers in the Municipality. Prioritize and tailor retirement planning guidance and education to address the diverse preferences and needs of respondents. Keywords: teachers' retirement in Ghana, retirement decision-making, financial education programmes, Educational institutions.

**N-yelbi, J., & Anovunga, A. A. (2024). Influence of occupational stress on psychological well-being of senior high school teachers in Nanumba South District, Ghana. *Asian Journal of Advanced Research and Reports*, 18(5), 1-11. <https://doi.org/10.9734/ajarr/2024/v18i5626>**

### **Abstract**

The purpose of the study was to investigate the influence of occupational stress on psychological well-being of Senior High School teachers in Nanumba South District in the Northern Region of Ghana. The study used a quantitative research approach and a descriptive survey design. The population included all Senior High School teachers in the Nanumba South District. A survey sampling technique was employed to include all 101 teachers in the only Senior High School in the District. Structured questionnaire was the main instrument for data collection. The data was analysed using means and standard deviations. The study found that Senior High School teachers mostly felt anxious or depressed at work whenever they are stressed, sometimes they get low self-esteem when stressed up with excessive workload, there was no difficulty in working with colleagues of the opposite sex, lack of support from the immediate supervisor had no effect on the psychological well-being of Senior High School teachers in the Nanumba South District. Based on the findings, it was recommended among others that Senior High School teachers across the nation should device means of dealing with occupational stress such as making time for periodic relaxation (lunchtime, evenings, weekends and holidays), teachers should request for assistance and support from others whenever they feel exhausted with their task. The Ministry of Education, Ghana Education Service in collaboration with school counsellors should organise frequent workshop/seminars for teachers on how to manage occupational stress.

Keywords: Stress; occupational stress; psychological well-being; senior high school; ministry of education; opposite sex; workload; sampling technique

**N-yelbi., & Awuku-Larbi, M. M. (2024). Psychological well-being as correlate of academic achievement among postgraduate students in Ghanaian public universities. *Journal of Education and Practice*, 8(2), 82 – 94.**

### **Abstract**

**Purpose:** The purpose of the study was to examine postgraduate students' psychological well-being as correlate of their academic achievement in Ghanaian public universities. **Methodology:** The study adopted a quantitative approach underpinned by a cross-section design. The population of the study comprised of postgraduate drawn from three public universities in Ghana. A sample of 140 students between the ages of 29 to 45 years were drawn using simple random sampling. Psychological well-being scale and academic achievement questionnaire were employed for data collection. Research hypotheses 1 and 2 were analysed using Pearson correlation and independent sample t-test. **Findings:** The study reported a strong positive correlation between the psychological well-being and academic achievement. The study further that reported gender differences exist in psychological well-being and academic achievement. Findings revealed a statistically significant correlation existed between psychological well-being and academic achievement. Also, the study reported a statistically significant gender difference in psychological well-being and academic achievement. **Unique contribution to theory, policy and practice:** The study recommends that counsellors and psychologists should integrate psychological well-being theory and academic achievement theory to explain how psychological well-being influence academic achievement. The study recommends that University in collaboration with counsellors and psychologists

should institute psychological well-being focused initiatives such as mindfulness training, peer support groups, and counselling services into postgraduate programmes. Also, it was recommended that universities should institute peer mentoring initiatives where students will be paired with train mentors for support and guidance. Keywords: Achievement, Academic Achievement, Well-Being, Psychological Well-Being

**Mahama, I., Asamoah-Gyimah, K., & Dramanu, B. Y. (2024). Examining the interrelationships among curiosity, creativity, and academic motivation using students in high schools: A multivariate analysis approach. *Open Education Studies*, 6(1), 20240001. <https://doi.org/10.1515/edu-2024-0001>**

### **Abstract**

Psychological variables are a key component of the general outcome of students. In this sense, their complementary role in the academic lives of students is not doubtful. Therefore, this study examined the interrelationship among curiosity, creativity, and academic motivation of students in high school. A total of 568 students were surveyed using the correlational design (purposive, simple random, stratified-proportionate, and systematic sampling techniques). Adapted and confirmed curiosity, creativity, and academic motivation scales were used to gather the data for the study. Multiple linear regression was used to test the interrelationships. The study found that curiosity, creativity, and academic motivation predicted among themselves, where curiosity predicted higher, followed by creativity, and academic motivation. In this, curious behaviours, creative abilities, and motivation of students are related. It is recommended among others that the Ghana Education Service, in collaboration with the Ministry of Education and Curriculum Developers, should harmonise curiosity, creativity, and motivation in the High School syllabus so that teachers can guide students to become curious, creative, and motivated.

**Baidoo-Anu, D., Gyamerah, K., Mahama, I., & Ofori-Sasu, E. (2023). Towards classroom inclusivity: Exploring K-12 teachers' sensitivity to cultural diversity. *Culture and Education*, 35(4), 938-975. <https://doi.org/10.1080/11356405.2023.2200590>**

**Mahama I, Dampson, D. G., & Eshun, P. (2023). Tutors' chronological age and characteristics as predictors of creative nurturing behavior in the 21st-century classroom. *Frontiers in Psychology*, 8, 1078017. <https://doi.org/10.3389/feduc.2023.1078017>**

### **Abstract**

Introduction: The study examined tutors' characteristics and chronological age as they influenced their creativity nurturing behaviors. Methods: The descriptive cross-sectional design was used to survey 340 tutors (male = 220, female = 120) from 16 colleges of education. The data for the study were gathered using adapted versions of teachers' characteristics and creativity nurturing behaviors scales. The data were analyzed inferentially. Results: The study revealed that tutors' characteristics influenced their creativity nurturing behaviors and teachers with 30 years and above of teaching could influence their creativity nurturing behaviors. Differences were established in tutors' creativity nurturing behaviors based on their experience but such were not found in tutors' characteristics. Discussion: It was concluded that tutors' characteristics and age are two key drivers of their creative abilities



in the 21st century classroom. Therefore, management of teacher training institutions must cultivate an appreciable and appropriate tutor characteristics and dispositions so that they can use them to nurture trainee-teachers.

**Mahama, I., Danquah, S., Ammah, C., Amos, P., & Eshun, P. (2023). An examination of mindfulness and academic resilience among higher education students amidst COVID-19 pandemic in Ghana. *Psychology, 14*, 974-999.**

### **Abstract**

The COVID-19 pandemic has disrupted many aspects of higher education students' lives. The COVID-19 has influenced their cognitive abilities regarding schoolwork, balancing their lives, and maintaining academic success using mindfulness awareness and academic resilience as productive strategies. Therefore, this study examined Ghanaian students' mindfulness and academic resilience amid the pandemic with a descriptive quantitative design survey. Data for the study were collected with adapted versions of the mindfulness and academic resilience scales. The data were analysed using descriptive and inferential procedures. The study revealed that students were mindful about themselves in the pandemic, and their level of academic resilience was high. In addition, the study found no statistically significant differences in mean scores of mindfulness between male and female students and their academic levels, but statistically significant differences existed in mean scores of academic resilience and their academic levels. In this regard, the study concludes that students were mindful and resilient about activities they do during the pandemic. Therefore, higher learning institution management and faculty need to devote time in advocating for and training of students about mindfulness and resilience, as well as providing them with the best strategies for their application.

**Mahama, I., Baidoo-Anu, D., Eshun, P., Ayimbire, B., & Egglely, V. E. (2023). ChatGPT in academic writing: A threat to human creativity and academic integrity? An exploratory study. *Indonesian Journal of Innovation and Applied Sciences (IJIAS)*, 3(3), 228-239. <https://doi.org/10.47540/ijias.v3i3.1005>**

### **Abstract**

OpenAI ChatGPT has become the most popular academic writing software due to the kind of responses it gives, being seen as a replacement for much of the daily mundane writing, from emails to even college-style essays. As generative software, ChatGPT has caught the attention of everyone from business and policy stakeholders, signaling a paradigm shift in artificial intelligence. Despite ChatGPT's popularity and appeal in academic writing, there are fears regarding its consequences for human creativity and academic integrity. The study employed critical literature review analysis to explore the importance of ChatGPT in academic writing, its effects on human creativity and academic integrity, and suggestions for proper adoption and application. In the review process, it was revealed that ChatGPT is important in improving the learning and academic outcomes of diverse professionals and learners. However, the review suggests that the responses or outputs from ChatGPT sometimes are inaccurate and misleading. Therefore, implications for policy and practice were discussed.

**Mahama, I., Dramanu, B. Y., & Asamoah-Gyimah, A. (2023). Predictive abilities of curiosity, creativity, and motivation on academic performance of high school students in Ghana. *Education Research International*, 10(1), 1-10. <https://doi.org/10.1155/2023/4626945>**

### **Abstract**

The study looked at how learners innate possessions (motivation, curiosity, curiosity) affect their performance (science and mathematics). A total of 568 high school students were surveyed through a quantitative-correlational research design. Data for the study were gathered using an adapted curiosity measure, an adapted creativity measure, an adapted motivation measure, and an expert-developed academic performance measure. Multiple multivariate was used to test the hypothesis. The study revealed that students' motivated behaviors, curious abilities, creative potentials jointly explained 15.5% change or variance in science score and 33.1% change or variance in mathematics score. In this sense, it is evident that students' who become curious, creative, and motivated in their learning situation could improve upon their academic performance and achieve their academic goals. Therefore, school managers of high schools should call for intersubject workshops, as it is evident that science and mathematics are related. Furthermore, the Ghana Education Service should revise the way and manner in which it organizes professional development programs for practitioners in order to make them cross-curricular.

**Mahama, I., Eshun, P., Amos, P. M., Antwi, T., Amoako, B. M., & Egglely, V. E. (2023). Psychological precursors of entrepreneurial intentions among higher education students in Ghana. *Discover Education*, 2(1), 29. <https://doi.org/10.1007/s44217-023-00047-w>**

### **Abstract**

Background: Entrepreneurship is seen as the solution to graduate unemployment in Ghana, and students are required to take a course on entrepreneurship that teaches them how to work for themselves. Therefore, this study investigated the psychological precursors of entrepreneurial intentions among higher education students. Methods: Using the analytical cross-sectional survey design, 250 participants were sampled from public universities to participate in the survey. Participants were required to respond to three constructs (entrepreneurial scaffolding, psychological capital, and entrepreneurial intentions). The data analyses were performed using multivariate regression. Results: The study's findings showed that entrepreneurial scaffolding and psychological capital were significant predictors of entrepreneurial intentions. Conclusion: The researchers concluded that students' convictions about succeeding or failing and plans to engage in entrepreneurial behaviours depended on proper entrepreneurial guidance and a positive mindset. As a result, higher education institutions and career counsellors in Ghana should be strengthened and include practical guides to entrepreneurial training, thereby reducing graduate unemployment in Ghana.

**Bedu-Addo, P. K. A., Mahama, I., Amoako, B. M., Amos, P. M. & Antwi, T. (2023). Neglectful parenting and personality traits as predictors of malevolent creativity among Ghanaian tertiary students. *Creative Education*, 14, 232-244. <https://doi.org/10.4236/ce.2023.142016>**

### **Abstract**

Creative potentials are diverse in humans and can be manifested when influenced by other unobservable and observable factors. In light of this, we examined the predictive roles of neglectful parenting and personality traits on malevolent creativity. The cross-sectional design was used to survey 623 participants. Data for the study were collected with adapted neglectful parenting, personality traits, and malevolent creativity scales. The data were analyzed inferentially with CB-SEM. The study revealed positive predictions of physical and emotional neglect on hurting people, lying, and playing tricks as aspects of malevolent creativity. Furthermore, conscientious personality trait predicted higher on hurting people, lying, and playing tricks as aspects of malevolent creativity. We concluded that neglectful parenting and improper parenting can bring about unacceptable behaviours among people as many of the victims might become a social canker. Therefore, families and significant others in communities should be taken through strategies in preventing irregular parenting and moderated personality dispositions before they develop into unacceptable behaviours that might ruin the gains of society.

Keywords: Malevolent Creativity, Malevolent Behaviours, Neglectful Parenting, Personality Trait

**Bedu-Addo, P. K. A., & Gyasi, F. (2023). Determinants of test anxiety among undergraduate students in Ghana. *International Journal of Research and Innovation in Social Science*, 5(1), 1281 - 1288.**

### **Abstract**

Cognitive test anxiety is common in university students and may have long-term detrimental effects on their well-being. This cross-sectional study, aimed at assessing the prevalence of cognitive test anxiety among university students in Ghana. A sample of 230 university regular students was selected using random classified sampling. Symptoms of cognitive test anxiety were measured by using the Westside Anxiety Test scale. Descriptive and inferential statistics (Independent T-test and Kruskal – Wallis Test statistic) were used to assess cognitive test anxiety and determinants. The study found symptoms of cognitive test anxiety among the students, where students female ( $M = 3.4157$ ) experiencing cognitive test anxiety were higher than their male counterparts ( $M = 3.1383$ ). The study also identified students' residential status as another determinant of test anxiety. We recommend that university authorities should take steps to provide accommodation on campus for all students since students in rented apartments were found to have higher test anxiety. Additionally, early screening and psychological counselling support for students experiencing cognitive test anxiety should be provided to help the overcome such challenges.

Keywords: Cognitive test anxiety, emotional test anxiety, performance anxiety, social phobia, well-being

**Apoenchir, H. K., Bedu-Addo, P. K. A., Bornaa, C. S., Dabone, T. K., Kwarteng-Nantwi, E., Atta-Gyamfi, G., Churcher, K. A., Oppong-Wusu, M., Owusu-Sekyere, F., & Kissi-Abrokwa, B. (2023). Impact of mathematics teachers' self-efficacy belief and professional development on teaching mathematics in inclusive settings in Ghana. *Contemporary Mathematics and Science Education*, 4(1), 1 - 10. <https://doi.org/10.30935/conmaths/13009>**

## **Abstract**

The study was based on quantitative assumptions, and investigation was done to check the impact of mathematics teachers' self-efficacy beliefs (MTSEB) and their professional development (PD) in teaching mathematics in inclusive settings. The theoretical foundation of the study was based on self-efficacy beliefs and the concept of system thinking. A purposive sampling technique was used to select all senior high schools practising inclusive education and mathematics teachers teaching in those inclusive settings. The sample used for the study was all 95 mathematics teachers found in all the inclusive settings. The study concluded that MESEB and PD have enhanced the 14 instructional delivery of mathematics and assisted families to help their children do well in mathematics. It was also found that the most difficult parts of teaching in an inclusive setting were not being able to help students understand pictures and diagrams during mathematics lessons and not having enough resources to help students learn. On issues related to teachers managing students in an inclusive setting, it was concluded that the PD of teachers helps them gradually shape students until they can perform the expected behaviour before they are reinforced. However, it was recommended that institutions in charge of issuing certificates for teachers should ensure that the training and development of teachers are done intensively through presentations or practicums to build teachers' self-efficacy for good instructional delivery. Again, the Ministry of Education needs to concentrate on creating more inclusive educational institutions and giving them the tools, they require so that instructors can effectively instruct pupils. The researchers recommend that the inclusive education environment should have a well-established classroom management plan or guideline within which the instructor must function. The national rules should be modified to include a classroom management guideline that is adapted to the unique needs of the students in each inclusive educational environment. During their practicum, teachers should learn about this classroom management rule, which will help them do their jobs in the classroom.

Keywords: professional development, self-efficacy belief, mathematics teachers, inclusive setting, Ghana, senior high schools

**Dabone, K. T., Serebour Asante, J., Kissi-Abrokwa, B., Saani, A.-J., & Bedu-Addo, P.K.A. (2023). Teenage pregnancy and child education in Ghana: Implications for counselling. *International Journal of Research Trends and Innovation*, 8(2), 160 - 166. <http://doi.org/10.1729/Journal.32991>**

## **Abstract**

The purpose of this research is to examine the perceived influence of teenage pregnancy on the academic performance of female students at a Senior High School (SHS). Descriptive survey methodology was used. There were 1,200 pupils in the pool of people who could participate. A total of 100 students were selected through a snowball sampling procedure. A modified questionnaire was used to compile the data quantitatively, and its reliability was calculated to be .85. Descriptive statistics were used to examine the demographic data collected from the respondents and the data collected to answer the four study questions (frequencies, percentages, means, and standard deviations). Teenage pregnancy is not caused by parents'

incapacity to provide for their children, according to the study's findings. Girls are more likely to go to school if there is no teen pregnancy, according to the study. As a result, it is crucial to implement effective policies that prevent pregnancies among adolescents. Research indicated that interventions such as advising parents to support their daughters, passing laws to protect them, creating a welcoming school climate for girls, etc., were effective. It was suggested that Ghana Education Service (GES) update curricula to make basic sex education mandatory, and that it be taught with more emphasis and by subject matter specialists.

Keywords: Teenage, Pregnancy, Education, Counselling, Ghana

**Borna, C. S., Opon-Wusu, M., Bedu-Addo, P. K. A., Dabone, K. T., Kwarteng-Nantwi, E., Churcher, K. A., Aninganigu, K., Owusu-Sekyere, F., & Kissi-Abrokwah, B. (2023). Professional Development of Mathematics Teachers: Its Impact on Their Classroom Delivery in Ghana. *East African Journal of Education Studies*, 6(1), 320-337. <https://doi.org/10.37284/eajes.6.1.1152>**

## Abstract

The study imperatively ascertains the impact of Professional Development (PD) of mathematics teachers in their classroom delivery in Kwabre East Municipality (KEM). The study was embedded with positivist philosophical assumptions concerning how knowledge was gained and constructed. A descriptive survey was adopted and the census sampling technique was used to sample all the Junior High School (JHS) mathematics teachers. The sample selected was made up of 221 mathematics teachers. It was concluded that PD for mathematics teachers enhanced their mode of delivery, which improved their students' understanding of mathematics. The study also suggests that teachers' development of rudimentary skills and knowledge for classroom management was based on their own beliefs as well as professional beliefs and practices. The factors that contribute to low performance after PD are high and depend on the lack or unavailability of training materials for teachers to use after training and inadequate teaching and learning materials or resources to teach students. It is recommended that the government institutes a policy that requires every teacher to attend PD training to be considered for promotion. Our educational institution's headmaster/teacher and leaders should also make it a habit to hold in-house workshops and seminars to refresh their teachers' knowledge and skills in delivering instructional objectives. Additionally, the Ministry of Education and other non-government organisations should help improve our schools by focusing on resources that make teaching and learning better.

Keywords: Professional Development, Mathematics Teachers, Junior High Schools

**Bedu-Addo, P. K. A. (2023). Assessing the impact of work-related stress (WRS) and work family interference (WFI) on the well-being of Ghanaian professional women: Who is at risk? *International Journal of Research and Innovation in Social Sciences*, 7(2), 174-189.**

## Abstract

The purpose of the study was to investigate how work-related stress (WRS) and work family interference (WFI) affects the lives of Ghanaian professional women. The current paper focused on the impact of work-related stress and work-family interference on the well-being of Ghanaian professional women, with particular reference to those at risk. Data was collected from Ghanaian women (N=125) in managerial positions from the education and financial sectors using a structured questionnaire. Women's ages ranged from 25 – 58 years (mean =36). The data was analyzed using standard deviations means, factor analysis (for scale development), correlation analysis (Pearson's product moment correlation) and T-tests. The results show that Ghanaian women's self-report of issues that affected them



personally at work was the highest predictor of WRS, while time poverty, family strain, and family exhaustion were all high predictors of WFI. Again women were more likely to report family satisfaction than job satisfaction, while reporting being more worn out than tense. Additionally the women who were most at risk were younger middle level managers, with low tenures and heavy work schedules, who had younger children living with them. Finally practical implications, possible interventions, as well as recommendations are provided.

Keywords: work-related stress, work-family interference, emotional exhaustion, worn out

**Antwi, T. (2023). From theory to practice: The perspective of Ghanaian counselling students.** *International Journal of Innovative Science and Research Technology*, 8(5), 2456-2165. <https://doi.org/10.5281/zenodo.8021502>

**Antwi, T. (2023). What it is like to be single: Experiences of unmarried female professionals in Ghana.** *Journal of Research on Humanities and Social Sciences*, 13(8), 41-51. <https://doi.org/10.7176/RHSS/13-8-05>

**Antwi, T. (2023). The unplanned journey: Challenges of parents of children living with disabilities in Ghana.** *Psychology*, 14, 635-655. <https://doi.org/10.4236/psych.2023.144033>

**Antwi, T. (2023). Assessing the effectiveness of continuous professional development programs organised for counsellors in Ghanaian public senior high schools.** *Open Journal of Social Sciences*, 11, 91-107. <https://doi.org/10.4236/jss.2023.116008>

**Bedu-Addo, P. K., Mahama, I., Amoako, B. M., Amos, P. M., & Antwi, T. (2023). Neglectful parenting and personality traits as predictors of malevolent creativity among Ghanaian tertiary education students.** *Creative Education*, 14, 232-244. <https://doi.org/10.4236/ce.2023.142016>

**Mahama, I., Eshun, P., Amos, P. M., Antwi, T., Amoako, B. M., Egglely, V. E., (2023). Psychological precursors of entrepreneurial intentions among higher education students in Ghana.** *Discover Education*, open, 1-11. <https://doi.org/10.1007/s44217-023-00047-w>

**Obeng, C., Adade, J. R. D., Amos, P. M., Antwi, T., & Asiedu, B. W. K. (2023). Social media practices among married couples in a Ghanaian residential area.** *Journal of New Media and Mass Communication*, 104, 74-86. <https://doi.org/10.7176/NMMC/104-07>

## Abstract

Creative potentials are diverse in humans and can be manifested when influenced by other unobservable and observable factors. In light of this, we examined the predictive roles of neglectful parenting and personality traits on malevolent creativity. The cross-sectional design was used to survey 623 participants. Data for the study were collected with adapted neglectful parenting, personality traits, and malevolent creativity scales. The data were analysed inferentially with CB-SEM. The study revealed positive predictions of physical and emotional neglect on hurting people, lying, and playing tricks as aspects of malevolent creativity. Furthermore, conscientious personality trait predicted higher on hurting people, lying, and playing tricks as aspects of malevolent creativity. We concluded that neglectful

parenting and improper parenting can bring about unacceptable behaviours among people as many of the victims might become a social canker. Therefore, families and significant others in communities should be taken through strategies in preventing irregular parenting and moderated personality dispositions before they develop into unacceptable behaviours that might ruin the gains of society.

**Mahama, I., Eshun, P., Amos, P. M., Antwi, T., Amoako, B. M., & Eggle, V. E. (2023). Psychological precursors of entrepreneurial intentions among higher education students in Ghana. *Discover Education*, 2(1), 29. <https://doi.org/10.1007/s44217-023-00047-w>**

### **Abstract**

Background Entrepreneurship is seen as the solution to graduate unemployment in Ghana, and students are required to take a course on entrepreneurship that teaches them how to work for themselves. Therefore, this study investigated the psychological precursors of entrepreneurial intentions among higher education students. Methods Using the analytical cross-sectional survey design, 250 participants were sampled from public universities to participate in the survey. Participants were required to respond to three constructs (entrepreneurial scaffolding, psychological capital, and entrepreneurial intentions). The data analyses were performed using multivariate regression. Results The study's findings showed that entrepreneurial scaffolding and psychological capital were significant predictors of entrepreneurial intentions. Conclusion The researchers concluded that students' convictions about succeeding or failing and plans to engage in entrepreneurial behaviours depended on proper entrepreneurial guidance and a positive mindset. As a result, higher education institutions and career counsellors in Ghana should be strengthened and include practical guides to entrepreneurial training, thereby reducing graduate unemployment in Ghana.

**Danquah, S. O. & Yirenkyi, S. M. (2023). Perception formation and attitude towards art as therapy. *Journal Of African Arts & Culture*, 6(2), 1-16. <https://jaac-sca.org/wp-content/uploads/2024/01/Danquah-Yirenkyi.pdf>**

### **Abstract**

Art therapy, facilitated by a professional art therapist, effectively supports personal and relational treatment goals, as well as community concerns. Art therapy is used to improve cognitive and sensorimotor functions, foster self-esteem and self-awareness, cultivate emotional resilience, promote insight, enhance social skills, reduce and resolve conflicts and distress, and advance societal and ecological change. Perception formation and attitude were indexed on Gestalt's theory. The study sought to elicit more traditional interventions which concerns are not explicit in orthodox forms of offering counselling therapy by therapists to lecturers in the University of Education, Winneba. The study employed qualitative research methods to elicit information from 8 senior counsellors from the University of Education, Winneba. A multiple case study was adopted to provide sets of contexts used to explore research questions. Discussions in the study provide a rich source of information that counsellors in academia and lecturers can use as anti-stressors. The study demonstrates that Ghanaian society acknowledges the existence of various art forms that is fine art, dance, photography, music, drama, film and other visual and performing arts and their usefulness in offering psychological support. It is recommended that counsellors in academic settings inculcate the practice of using the various art forms as therapy during their counselling

sessions and art therapy must be introduced into counselling education and training in Ghana.

Keywords: Art therapy, cognitive, expressive, Gestalt, therapeutic

**Mahama, I., Danquah, S. O., Ammah, C., Amos, P. M., & Eshun, P. (2023). An Examination of Mindfulness and Academic Resilience among Higher Education Students amidst COVID-19 Pandemic in Ghana. *Psychology*, 14(No.6), 974-999. <http://doi.org/10.4236/psych.2023.146052>**

### **Abstract**

The COVID-19 pandemic has disrupted many aspects of higher education students' lives. The COVID-19 has influenced their cognitive abilities regarding schoolwork, balancing their lives, and maintaining academic success using mindfulness awareness and academic resilience as productive strategies. Therefore, this study examined Ghanaian students' mindfulness and academic resilience amid the pandemic with a descriptive quantitative design survey. Data for the study were collected with adapted versions of the mindfulness and academic resilience scales. The data were analysed using descriptive and inferential procedures. The study revealed that students were mindful about themselves in the pandemic, and their level of academic resilience was high. In addition, the study found no statistically significant differences in mean scores of mindfulness between male and female students and their academic levels, but statistically significant differences existed in mean scores of academic resilience and their academic levels. In this regard, the study concludes that students were mindful and resilient about activities they do during the pandemic. Therefore, higher learning institution management and faculty need to devote time in advocating for and training of students about mindfulness and resilience, as well as providing them with the best strategies for their application.

Keywords: Mindfulness, Academic Resilience, COVID-19, Pandemic, Higher Education

**Eshun, P., Dabone, K. T., Annan-Brew, R. K., Mahama, I., & Danquah, S. O. (2023). Personality traits and levels of self-efficacy as predictors of academic dishonesty among higher education students in Ghana. *Psychology*, 14(1), 13–34. <https://doi.org/10.4236/psych.2023.141002>**

### **Abstract**

The study focused on the predictive abilities of personality traits and self-efficacy on academic dishonesty among students. After satisfying ethical protocols, the study surveyed 453 higher education students using an analytical cross-section design. Respondents were exposed to respond to three constructs such as personality traits scale, academic self-efficacy scale, and academic dishonesty scale. The data were quantitatively analyzed using means and standard deviations, frequencies and percentages, and regression. The study revealed that conscientiousness was the dominant personality trait. In addition, the study revealed that dishonest academic behaviours were exhibited among students despite their high level of self-efficacy. Furthermore, conscientiousness, openness and self-efficacy significantly predicted academically dishonest behaviours of students. Therefore, it is recommended that students be presented with opportunities to maintain their high level of self-efficacy to help reduce incidents of academic dishonesty. The study's findings appear original as they may serve as panacea for curbing dishonesty in teacher education programs in Ghana to churn credible teachers that might mount the teaching podium to impart knowledge onto the young that serve nations in the future. Keywords Personality, Self-Efficacy, Dishonesty, Higher Education, Students, Ghana

**Upoalkpajor, J.-L. N. (2023). Counselling adolescents with somatic symptom disorder in Ghana: The role of mindfulness-based stress reduction therapy. *International Journal of Advanced Multidisciplinary Research and Studies*, 3(1), 910-915. <https://www.multiresearchjournal.com/admin/uploads/archives/archive-1676570436.pdf>**

### **Abstract**

The study aimed at exploring the usefulness of Mindfulness- Based Stress Reduction Therapy (MBSRT) in handling adolescents with significant focus on physical symptoms in the Nanumba North Municipality of the Northern Region of Ghana. The study was guided by three research questions and hypotheses each, to help the researcher. They were all tested at a 0.05 level of significance. The pre-test, post-test, control group and experimental design was used for the study. Three thousand, five hundred and sixty-one (3,561) students, which included all students in junior high school Two (JHS 2) from the twenty public junior high schools in the Nanumba north municipality of the northern region made up the population for the study. Thirty-three (33) students (made up of fourteen (14) males and nineteen (19) females reporting somatic symptom disorder) were selected as the sample size for the study. They were selected from two schools, making use of the multi-stage random sampling method. The researcher adopted “Adolescents Somatic Symptom Scale” (ASSS) and modified it for use. The Cronbach Alpha reliability method was used to determine the consistency of the reliability which made use of the test items. The reliability of the coefficient obtained was 0.70. The instrument was run on the students first, and thirty-three (33) students who showed significant focus on physical symptoms in the two schools were assigned for treatment to experimental group A (Mindfulness-Based Stress Reduction Therapy), and B (Control Group) randomly. The data collected were scrutinized by the use of descriptive statistics of mean and standard deviation, and inferential statistics of paired t-test sample, One Way Analysis of Variance (ANOVA) and Two-Way Analysis of Covariance (ANCOVA). The findings of the study elicited the fact that there is a significant dissimilarity in the pre-test and post- test of somatic symptoms disorder scores of adolescent students exposed to MBSRT. Also, there was no significant communication outcome on treatment by socioeconomic level. Judging from the findings of the study, it is recommended that counsellors should introduce, encourage and promote Mindfulness-Based Stress Reduction Therapy (MBSRT) in all junior high schools as an effective counselling treatment for adolescents

**Mahama, I., Danquah, S., Ammah, C., Amos, P., & Eshun, P. (2023). An examination of mindfulness and academic resilience among higher education students amidst COVID-19 pandemic in Ghana. *Psychology*, 14(6), 974-999. <https://doi.org/10.4236/psych.2023.146052>**

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The COVID-19 pandemic has disrupted many aspects of higher education students’ lives. The COVID-19 has influenced their cognitive abilities regarding schoolwork, balancing their lives, and maintaining academic success using mindfulness awareness and academic resilience as productive strategies. Therefore, this study examined Ghanaian students’ mindfulness and academic resilience amid the pandemic with a descriptive quantitative design survey. Data for the study were collected with adapted versions of the mindfulness and academic resilience scales. The data were analysed using descriptive and inferential procedures. The study revealed that students were mindful about themselves in the pandemic, and their level of academic resilience was high. In addition, the study found no statistically significant differences in mean scores of mindfulness between male and female students and their academic levels, but statistically significant differences existed in mean scores

of academic resilience and their academic levels. In this regard, the study concludes that students were mindful and resilient about activities they do during the pandemic. Therefore, higher learning institution management and faculty need to devote time in advocating for and training of students about mindfulness and resilience, as well as providing them with the best strategies for their application.

**Mahama, I., Baidoo-Anu, D., Eshun, P., Ayimbire, B., & Egglely, V. E. (2023). ChatGPT in Academic Writing: A Threat to Human Creativity and Academic Integrity? An Exploratory Study. Indonesian Journal of Innovation and Applied Sciences (IJIAS), 3(3), 228 – 239. <https://doi.org/10.47540/ijias.v3i3.1005>**

### **Abstract**

OpenAI ChatGPT has become the most popular academic writing software due to the kind of responses it gives, being seen as a replacement for much of the daily mundane writing, from emails to even college-style essays. As generative software, ChatGPT has caught the attention of everyone from business and policy stakeholders, signaling a paradigm shift in artificial intelligence. Despite ChatGPT's popularity and appeal in academic writing, there are fears regarding its consequences for human creativity and academic integrity. The study employed critical literature review analysis to explore the importance of ChatGPT in academic writing, its effects on human creativity and academic integrity, and suggestions for proper adoption and application. In the review process, it was revealed that ChatGPT is important in improving the learning and academic outcomes of diverse professionals and learners. However, the review suggests that the responses or outputs from ChatGPT sometimes are inaccurate and misleading. Therefore, implications for policy and practice were discussed.

**Mahama, I., Egglely, V. E., Abu-Sadat, R., & Ayimbire, B. A. (2023). (2023). Gender debate is not worthy in the 21st century classroom: Evidence-based outcomes from psychological abilities in students. Academic Publishing PTE LTD, v1i1.269, 1-11. <https://doi.10.59400>**

### **Abstract**

The debate about differences in intellectual abilities is far from over. This debate has astronomically drifted from academic success to mental possessions. In this regard, the current study examined curiosity, creativity, and academic motivation in students for possible differences in terms of gender. A total of 568 high school students were surveyed using a cross-sectional design. The data were gathered using adapted curiosity, creativity, and academic motivation scales to test for possible differences. Male and female students had similar abilities in curious, creative, and motivated potentials, according to the test MANOVA results [ $F(3,549) = 0.718, p > 0.610$ ; Wilks' Lambda = 0.993, partial eta squared = 0.007]. This could be the result of similar opportunities presented to both male and female students in their academic journey. Therefore, educational policies on gender parity should be developed to help tone down unnecessary comparisons and mental competition between male and female students in the areas of curiosity, creativity, and academic motivation.



## **Conferences/Workshops/Symposia/Seminars with Presentations**

- Amos, P. M. (2024, March 23). *Introduction to addiction: Basic understanding, assessment and working with clients* [Paper presentation]. Ghana Psychological Council CPD, Online Webinar.
- Amos, P. M. (2024, April 5). Ethics, legal issues and professionalism in contemporary clinical psychology practice [Paper presentation]. Ghana Psychological Council CPD, Online Webinar.
- Amos, P. M. (2024, April 15 – 17). Orientation and capacity building workshop for lecturers for the special PostGraduate Diploma in Education (PGDE) [Paper presentation]. TTEL Organisation, Freedom Hotel, Ho, Volta Region, Ghana.
- Amos, P. M. (2024, April 19.). Gestalt language development with Ashley Gillespie [Paper presentation]. Online Webinar.
- Amos, P. M. (2024, May 18). Child and adolescent wellbeing: Personality exploration and career interest development [Paper presentation]. Ghana Psychological Association CPD, Online Webinar.
- Amos, P. M. (2023, April 13th). An Evaluation of the Ghana Teacher Licensure Examination - Presenter [Paper presentation]. Alisa Hotel, Accra.
- Amos, P. M. (2023, March 22 – 25). Relational depth in counselling: The perspectives and experiences of counsellors [Paper presentation]. Society for Research in Child Development (SRCD), 2023 Biennial Conference, Salt Lake Convention Center, Salt Lake City, Utah.
- Amos, P. M. (2023, November 9). Counselling Skills and Techniques [Paper presentation]. Academic Counselling Training, University of Education, Winneba; Student Centre, Seminar Room 3, Central Region, Ghana.
- Antwi, T. (2024, March 12). Counselling Skills and Techniques [Paper presentation]. Training of Academic Counsellors, Ajumako Campus Assembly Hall, University of Education, Winneba, Ghana.
- Bedu-Addo, P. K. A. & Andoh- Robertson, T. (2024, May 29 – 30 ). Influence of psychological distress on miners’ productivity and psychological well-being: A study of underground and surface gold miners in Ghana [Paper presentation]. 2nd International Positive Schools and Wellbeing Congress, “Lifelong Learning and Wellbeing in a Digitalized World, Casambra.

### **Abstract**

This paper investigated the influence of psychological distress on productivity and psychological well-being of underground and surface miners in Ghana using the explanatory sequential mixed-method design. The study was underpinned by the Pearlin’s theory of psychological distress, the Acceptance and Commitment Theory (ACT), Ryff’s Six factor model of Psychological wellbeing , as well as Maslow’s Theory of Needs. Using an adapted version of the Outcome Questionnaire-45 (OQ-45), as well as structured interview schedule, purposive and convenient sampling techniques were used to collect data from 115 respondents from the Chirano Gold Mine Limited in the Western North Region of Ghana,

in two phases. Two research questions and two hypotheses were addressed in this study. The quantitative data was analyzed using One-Sample T-Test, Hotelling's T<sup>2</sup> and Pearson Product Moment Correlation. Additionally, axial and open coding, as well as deductive thematic analysis was employed in analyzing the qualitative data. The results of the study indicated that though miners were distressed, they were mostly below clinical cut-off points for symptom distress. Additionally, underground miners were statistically more significantly distressed than their surface mining counterparts. Further, female miners reported being more distressed than their male counterparts. Again, there were positive correlations between miners' levels of psychological distress, productivity and psychological wellbeing. It was therefore recommended that appropriate measures including national occupational mental health policy should be put in place to help ameliorate the level psychological distress of miners. Finally, it was recommended that counselling psychologist should be employed onsite to provide walk-in counselling services to miners.

**Keywords:** Psychological distress, psychological wellbeing, clinical cut off, mental health, depression

**Bedu-Addo, P. K. A. (2023, July 18 – 19). Enhancing the mental health of Ghanaian Youth: A counselling psychology perspective [Paper presentation]. 2-day Seminar for Student Counsellors Association of Ghana, Winneba, Central Region**

### **Books**

**Antwi, T. (2024). Communication skills and techniques in counselling (2nd Edition). Pilato Design and Printing.**

## Department of Special Education

### Articles In Journal

**Anku, F. K. (2024). The impact of phonemic awareness and phonics instructions on the reading skills of learners with reading difficulties. *International Journal of Research and Scientific Innovation*, 11(1), 88 – 107. <https://doi.org/10.51244/IJRSI.2024.1101008>**

#### Abstract

This study aimed to investigate the impact of phonemic awareness instruction and phonics instruction on the reading skills of children with reading difficulties. A factorial design in a quantitative approach was employed in the study. A stratified random sampling technique was used to sample thirty (30) respondents from a population of fifty (50) students. A questionnaire was used to collect data and the analysis was done using descriptive statistics to summarize the data, including measures of central tendency and variability. Inferential statistics, including a t-test and a two-way ANOVA, were used to test hypotheses and determine the significance of any differences between the two groups in the study and other effect size measures. The results revealed a statistically significant interaction effect, indicating that the combined use of explicit phonemic awareness and phonics instruction had a significant impact on reading achievement. It was concluded that both approaches to teaching reading have a positive impact on learners' reading skills and thus, teachers should incorporate them in teaching reading to learners with reading difficulties.

Keywords: Explicit phonemic awareness instruction, Implicit phonemic awareness instruction, Explicit phonics instruction, Implicit phonics instruction, Reading difficulties, Reading skills.

**Dogbe, D. S. Q., & Anku, F. K. (2024). Prospects and challenges of educating a deaf-blind student in a university in Ghana. *European Journal of Education Studies*, 11(1), 118-134. <http://dx.doi.org/10.46827/ejes.v11i1.5157>**

#### Abstract

This study explored the challenges and prospects of educating a deaf-blind student in a public university in Ghana. The study utilised an exploratory qualitative research design based on interviews and observation to explore how the deaf-blind learner navigated university life. The study found that the challenges experienced by all stakeholders included a lack of knowledge and understanding about deaf-blindness, communication challenges, inadequate preparation of educators/teachers and resource persons, lack of support structures for all stakeholders, and the time-consuming nature needed to educate the deaf-blind learner. The study recommends continuous in-service training on basic knowledge of deaf-blindness, instructional and socially inclusive strategies, and communication modes for deaf-blind learners for all stakeholders. A collaborative team approach to delivering training and inclusive education that involves all stakeholders is necessary. The study concludes that

if lecturers of learners who are deaf-blind are provided with the necessary training on the skills and knowledge of facilitating communication with their students, this would, in turn, contribute positively towards teaching and learning.

Keywords: deaf-blind(ness), Ghanaian sign language, hearing loss, inclusive education, visual impairment

**Awini, A., Dery, T. K. & Offei, Y. N. (2024). Students with deafness' access to counselling services at the University of Education, Winneba-Ghana. *International Journal for Multidisciplinary Research*, 6(3), 1-15. <https://doi.org/10.36948/ijfmr.2024.v06i03.21538>**

### **Abstract**

This qualitative study sought to explore deaf students access to counselling services at the University of Education, Winneba. The study was underpinned by Murray's system of needs theory, phenomenological research was adopted as the design and a purposive sampling technique was used to select twelve deaf students and two counsellors for the study. Data was collected through semi-structured interviews and analyzed thematically via verbatim transcriptions, coding, drawing of themes and discussions of findings. The findings of the study indicated that deaf students have unique counselling needs such as educational needs, financial, health and personal needs that are often not adequately addressed by the existing counselling services at the University of Education, Winneba. The findings again revealed that deaf students often perceived counselling as mere advise-giving, not relevant for the needs and is meant for the hearing students only. Deaf students however, as revealed by the students resort to accessing counselling services from lecturers, church leaders, peers and sign language interpreters who are most times closer to them and who again can communicate with them through sign language. Based on the study's findings, the study recommended collaboration between lecturers who offer counselling services and the University counselling professionals, lecturers should be aware of their role as facilitators and the limits of their counselling capabilities, The University Management in collaboration with Counseling Unit should recruit and train counselors who are proficient in sign language and have a deep understanding of deaf culture and experiences. The Counseling Unit should offer online counseling options with sign language interpretation for students who may face challenges accessing on-campus services.

**Atta, E. O., Teye, E. Q., & Awini, A. (2023). Basic computing knowledge of students with visual impairments. *International Journal of Current Educational Studies*, 2(1), 77-90.**

### **Abstract**

This study investigated the computing knowledge of students with visual impairments in a Ghanaian university. Using the case study research design, 103 students were randomly sampled from a population of 118 students with visual impairments. A test instrument was used to collect data for the study. Descriptive statistical methods were used to analyze the data. The results of the study indicated that the participants were knowledgeable in some aspects of basic computer operations, while they were not competent in the use of software. The study concluded that students with visual impairments can gain knowledge and competence in basic computer operations and the use of software and applications if the necessary steps

are taken. It was recommended that students with visual impairments should be given access to computers and training by competent ICT professionals who understand the technological needs of students with visual impairments.

**Amissah, J., Amissah, A. B., Rockson, G. N. Y., & Nakua, E. K. (2024). Understanding the Relationship between Depression and Suicidal Tendencies Among Tertiary Students in Ghana. *Value in Health*, 26(6), 204. <https://doi.org/10.1016/j.jval.2023.03.2571>**

### **Abstract**

**Objectives:** Global evidence estimates indicate suicide to be the second leading cause of intentional deaths among tertiary students and the possible relationship between suicidal behavior and the mental health status of victims. Therefore this study aims to examine the relationship between depression and suicidal tendencies and identify the factors influencing this behavior among tertiary students in Ghana. **Methods:** A cross-sectional design was employed to collect data from 824 tertiary students in a public university in Ghana over 90 days using the Center of Epidemiology Scale of Depression (CESD-R) and the suicidal behavior questionnaire-revised (SBQ-R) to estimate depression and suicidal behavior prevalence among the students. Pearson correlation and multivariate logistics regression was employed to describe and predict the relationship between depression and the outcome and the factors influencing.

**Dzakadzie, Y., Honu-Mensah, C. M., Rockson, G. N. Y., & Abu-Sadat, R. (2023). Assessment of Demographic Variables affecting Teacher Attitudes towards Inclusive Education in Ghana. *Disability, CBR & Inclusive Development*, 34(2), 132-147. <https://doi.org/10.20372/dcidj.572>**

### **Abstract**

**Abstract Objective:** This study examined teachers' attitudes toward the inclusion of learners with special educational needs (LWSEN) in three schools in the Central region of Ghana. **Methods:** The study adopted a cross-sectional survey involving 142 teachers, [68 (48%) female teachers and 74 (52%) male teachers], selected from two special schools and one inclusive school in the Central Region of Ghana. Independent T-test and one-way ANOVA measures were used for data analysis. **Results:** Differences exist in male and female teacher attitudes, with age found to be the most influential in determining teacher attitudes toward inclusion. Female teachers were more positive in overall attitudes than male teachers. Younger teachers aged between 20-30 years and being classroom teachers were associated with positive attitudes towards LWSEN. However, the level of education and length of professional service did not affect teacher attitudes toward LWSEN. The study recommends that in-service training be organized for teachers of LWSEN **Conclusion:** The study concluded that generally, educators in special schools and inclusive schools in the Central Region of Ghana have a positive attitude towards LWSEN and recommends further training as a means of improving teacher attitudes towards inclusion in Ghana.

Gbagbo, F. Y., Rockson, G. N. Y., Quansah, F., & Ameyaw, E. K. (2023). Sexual Coercion and Harassment of Students with Disabilities in a Public University in Ghana. *Journal of Sex & Marital Therapy*, 49(7), 798-815. <https://www.tandfonline.com/doi/abs/10.1080/0092623X.2023.2211577>

Ofori Atta, E., Teye, E. Q., & Awini, A. (2023). Basic Computing Knowledge of Students with Visual Impairments. *International Journal of Current Educational Studies*, 2(1), 77-90. <https://doi.org/10.5281/zenodo.8019078>

## Abstract

This study investigated the computing knowledge of students with visual impairments in a Ghanaian university. Using the case study research design, 103 students were randomly sampled from a population of 118 students with visual impairments. A test instrument was used to collect data for the study. Descriptive statistical methods were used to analyze the data. The results of the study indicated that the participants were knowledgeable in some aspects of basic computer operations, while they were not competent in the use of software. The study concluded that students with visual impairments can gain knowledge and competence in basic computer operations and the use of software and applications if the necessary steps are taken. It was recommended that students with visual impairments should be given access to computers and training by competent ICT professionals who understand the technological needs of students with visual impairments.

## Conferences/Workshops/Symposia/Seminars with Presentations

Awini, A. (2023, November 29 - December 3). *Access to E-learning Resources: The Perspective of Students with Visual Impairment in Ghana* [Paper presentation]. 7th Africa Network for Evidence-to-Action in Disability (AfriNEAD) Conference, CapeTown, Cape Town – South Africa

## Article(s)/ Chapters in an Edited Book

Abugre, T. N., Frimpong, A. & Awini, A. (2023). Learning and learning styles: VAKI learning model. In N. Y. Offei, A. Awini, E. S. A. Asumang, E. L. Yirenkyi, M. Tsyawo, & G. Segu-Essel (Eds.), *Growth, development and learning for colleges and universities of education in Ghana*. Sprint Publications Ltd.

Andoh, T., Edusei, O. & Awini, A. (2023). Domains of human development 2. In N. Y. Offei, A. Awini, E. S. A. Asumang, E. L. Yirenkyi, M. Tsyawo, & G. Segu-Essel (Eds.), *Growth, development and learning for colleges and universities of education in Ghana*. Sprint Publications Ltd.

Ansah, M. R. Agyei, W. K. & Awini, A. (2023). Classroom-based interventions. In N. Y. Nyadu, A. Awini, M. Tsyawo, M. R. Ansah, & B. Brew (Eds.), *Inclusive school-based enquiry for universities and colleges of education in Ghana*. (2nd edition). Authors.

Awini, A., Oduro, P., & Ansah, M. R. (2023). Issues in enquiry based learning. In N. Y. Nyadu, A. Awini, M. Tsyawo, M. R. Ansah, & B. Brew (Eds.), *Inclusive school-based enquiry for universities and colleges of education in Ghana*. (2nd edition). Authors.



- Boafo, S. S., Larbi, F. A. & Awini, A. (2023). Moral development and morality-Kohlberg/PJean Piaget. In N. Y. Offei, A. Awini, E. S. A. Asumang, E. L. Yirenkyi, M. Tsyawo, & G. Segu-Essel (Eds.), Growth, Development and learning for colleges and universities of education in Ghana. Sprint Publications Ltd.**
- Brew, B., Anglow, E. S. & Awini, D. (2023). Using assistive technology for classroom intervention. In N. Y. Nyadu, A. Awini, M. Tsyawo, M. R. Ansah, & B. Brew (Eds.), Inclusive school-based enquiry for universities and colleges of education in Ghana. (2nd edition). Authors.**
- Sadow, V., Segu-Essel, G. & Awini, A. (2023). Domains of human development 1. In N. Y. Offei, A. Awini, E. S. A. Asumang, E. L. Yirenkyi, M. Tsyawo, & G. Segu-Essel (Eds.), Growth, development and learning for colleges and universities of education in Ghana. Sprint Publications Ltd.**
- Acheampong, E. K., Fobi, D., Fobi, J., & Appau, O. (2023). Early intervention. In D. Fobi (Ed.), Promoting home-school partnership and early years education for learners with special needs. Achievers Publishers.**
- Fobi, D., Asomaning, D., Fobi, J., Acheampong, E. K., Appau, O. (2023). Inclusive education in Ghana. In D. Fobi (Ed.), Inclusive practices for learners with special educational needs. Achievers Publishers.**
- Fobi, D., Asomaning, D., Fobi, J., Acheampong, E. K., Appau, O. & Bunbun, D. U. (2023). Inclusive theories and practice in education. In D. Fobi (Ed.), Inclusive Practices for Learners with Special Educational Needs. Achievers Publishers.**
- Fobi, D., Fobi, J., Appau, O., Asomaning, D., Acheampong, E. K., Abu-Sadat, R., Rockson, G. N. Y., Acheampong, N. O. & Bunbun, D. U. (2023). Models of Disabilities. In D. Fobi (Ed.), Inclusive Practices for Learners with Special Educational Needs. Achievers Publishers.**
- Fobi, D., Owusu, T. A., Acheampong, E. K., Fobi, J., Appau, O., Abu-Sadat, R., Rockson, G. N. Y. & Acheampong, N. O. (2023). Assistive Technology. In D. Fobi (Ed.), Inclusive Practices for Learners with Special Educational Needs. Achievers Publishers.**
- Fobi, J., Fobi, D., & Acheampong, E. K. (2023). Home, school and community partnership in supporting students with disabilities. In D. Fobi (Ed.), Promoting Home-School Partnership and Early Years Education for Learners with Special Needs. Achievers Publishers.**

# FACULTY OF FOREIGN LANGUAGES EDUCATION

## Department of Applied Linguistics

### Articles In Journal

- Bisilki, K. A., Quint, N., & Yakpo, K. (2024). Relativization in Likpakpaanl (Ghana): New typological perspectives on the Mabia (Gur) languages. *Canadian Journal of Linguistics/Revue Canadienne de Linguistique*, 69(2), 235–255. <https://doi.org/10.1017/cnj.2024.17>
- Bisilki, K. A. (2023). Causative constructions in Likpakpaanl (Konkomba) from an areal- typological perspective. *Studies in African Linguistics*, 52(2), 189–212.
- Owusu, S. (2024). Speaking the unspeakable: Proverbs of obscenity and invectives in Akan. *International Journal of Language, Linguistics, Literature and Culture*, 3(1), 92-100. [https://www.academia.edu/115164963/SPEAKING\\_THE\\_UNSPEAKABLE\\_PROVERBS\\_OF\\_OBSCENITY\\_AND\\_INVECTIVES\\_IN\\_AKAN](https://www.academia.edu/115164963/SPEAKING_THE_UNSPEAKABLE_PROVERBS_OF_OBSCENITY_AND_INVECTIVES_IN_AKAN)
- Owusu, S. & Maomou, E. (2024). The integrated approach in ESL and EFL contexts: The practice in Ghana and Guinea-Conakry. *European Journal of English Language Teaching*, 7(1), 29-46. <https://oapub.org/lit/index.php/EJALS/article/view/503>
- Wasila, M., & Owusu, S. (2024). Pre-service teachers' views about their communicative competence: An analysis of ESL students' group oral presentations at Tumu college of education, Ghana. *European Journal of English Language Teaching*, 9(3), 1-22. <https://oapub.org/edu/index.php/ejel>
- Appiah, K. R., & Owusu, S. (2023). Ghanaian ESL teachers' beliefs and implementation of the core competencies of Ghana's new English language curriculum. *European Journal of Applied Linguistics Studies*, 6(2), 52–76. <https://oapub.org/lit/index.php/EJALS/article/view/463>
- Owusu, S. (2023). Evaluating the communicative nature of high-stakes English language tests in Ghana. *Journal of Applied Linguistics and Language Research*, 10(4), 12-29. <https://www.jallr.com/index.php/JALLR/article/view/1303>
- Aboagye, A. K., Lomotey, C. F., & Debrah-Amofah, J. (2023). A pivotal stride towards learner autonomy: Utilising language learning strategies in an ESL university. *REiLA: Journal of Research and Innovation in Language*, 5(3), 266-286.

## Abstract

Studies on English language learning strategies (ELLSs) predominantly emphasize their role in fostering learner autonomy (LA) in foreign language contexts, often overlooking their distinct application in English as a second language (ESL) scenario. Thus, this study addresses a significant gap in current literature regarding English Language Learning Strategies (ELLSs) in English as a Second Language (ESL) contexts, particularly in technical universities. Contrasting with the abundant research on English as a Foreign Language, this research focuses on the distinctive needs and strategies of ESL learners in fostering learner autonomy (LA). Employing a quantitative cross-sectional survey design, we examined 773 first-year students at a technical university in the 2022/2023 academic year. Participants were selected through stratified random sampling. The study utilized Oxford's Strategy Inventory for Language Learning (SILL) and Karabiyik's measures of LA, with data collection conducted via a Google form. A multiple regression analysis was applied to test the research model. Our findings indicate a significant positive impact of ELLSs on LA among ESL students. Among the six categories of ELLSs (memory, cognitive, compensation, metacognitive, affective, and social strategies), affective strategies showed the most substantial enhancement of LA. The study highlights the importance of affective strategies in promoting autonomous learning in ESL contexts, aligning with Constructivism theory.

**Lomotey, C. F., & Sam, B. B. (2023). Making complaints in Ghanaian English: An analysis of senior high school students. *European Journal of Literature, Language and Linguistics Studies*, 7(3), 126-159.**

## Abstract

Complaints are bound to occur in our daily interactions while seeking a remedy to that which has directly or indirectly affected someone unfavourably, thus, threatening the face of the addressee and may eventually engender social relationship breakdown if not done appropriately. This study examined complaints by speakers of Ghanaian English in three public second cycle schools in Ghana to ascertain the politeness strategies invested in expressing their dissatisfaction with an unacceptable act in Ghanaian English. The Brown and Levinson (1987) politeness theory served as the theoretical framework for the study. A case study design was adopted with data elicited from ninety-four (94) participants role-playing four complaint-provoking situations and analysed thematically. The findings revealed that eleven strategies are used in producing different complaints in Ghanaian English. The findings further indicated that Ghanaians are indirect and tend to have a high inclination toward positive politeness strategies as they try to reduce the effect of the face-threatening act of complaining on the addressee's positive face. It was also found that this complaint behaviour is influenced by the cultural norms of politeness in Ghanaian languages.

**Boakye, B., Akpanglo-Nartey, R. A., & Amuzu, E. K. (2023). Sociophonetics of [r] in Akan. *Ghana Journal Of Linguistics*, 12(2), 1 -20.**

## Abstract

The study interrogates what has hitherto been called 'free variation' in Akan (cf. Schachter and Fromkin (1968), Dolphyne (1988), and Abakah (2004)), i.e., the alternation of [r], [l] and [d] in intervocalic position (V V) and the alternation of [r] and [l] at the second consonant (C2) position of a CCV syllable structure in various dialects of the language. The study follows the quantitative sociolinguistic approach pioneered by Labov (1966) to

investigate the extent to which the choice of one rather than the other of these sounds is not free but is dependent on the social backgrounds of speakers (described in terms of their age, gender, educational background and what dialect of Akan they speak). Interview and picture elicitation were the primary instruments of collecting data from 120 respondents (60 speakers of Asante and Fante respectively). The study did not uncover any major dialectal difference in the alternation between [r] and [l] but finds that [d] is decidedly an Asante variant that competes with the other two sounds in the speech of adults. The data however shows that the social variables age, level of education, and gender do influence the choice of [r] versus [l] in both Asante and Fante. Young, educated speakers, especially female speakers, demonstrated a higher tendency of using the [r] variant, which seems to have emerged as the most prestigious of the three variants.

**Oblic, E. L. (2023). 'Righting' the wrong: Text revision in ESL students' composing processes in senior high schools in Greater Accra, Ghana. *Legon Journal of the Humanities*, 34(2), 109-139. <https://doi.org/10.4314/ljh.v34i2.5>**

## Department of English Education

### Articles In Journal

**Kyiileyang, M. (2024).** Exploring poetic depth: An analysis of ‘Lógyil’ performance by Anselm Niyágákür Kyōh of Nandom-Kuselle, *London Journal of Research in Humanities and Social Sciences LJRHSS*, 24(4), 45-74. <https://journalspress.com/a-literary-analysis-of-poetic-elements-in-logyil-performance-by-anselm-niyagakuu-kyoh-of-nandom-kuselle/>

#### Abstract

In most African societies, there are oral artists; prominent among the are folk singers and composers, ‘griots’ (praise singers in kings’ courts), oral poets and dirge singers. Categories of oral artists include professionals, free-lance and occasional poets. The most outstanding oral artists are the praise-singers at the various traditional courts. Niyágákür’s performance falls under the professional type because he is a renowned xylophonist who plays during the ‘Kákubé’ Festival celebrated in Nandom and funerals that he attends.

**Arthur, R., Addae, A., Nyarko, I. O., & Fenyi, D. A. (2023).** Misconceptions and perceived importance of literacy across the curriculum among student teachers in Ghana. *European Journal of English Language Teaching*, 8(3), 172 - 190. <https://doi.org/10.46827/25017136.4913>

**Danquah, G. (2023).** Embodying identity: Exploring the space and place of the émigré in testimonies of exile. *English Academy Review*, Volume 40(2), 71–86. <https://doi.org/10.1080/10131752.2023.2202515>

#### Abstract

Exile literature is saturated with the themes of rootlessness, loss of identity, and belonging. This article adopts an analytical perspective to explore Abena Busia’s poetry anthology *Testimonies of Exile* (Trenton: Africa World Press, 1990) as a prototype of exile literature. To inquire into how the selected poems project the identity of émigrés in relation to place and space, stylistic analysis of the poems was employed. The findings highlight Busia’s construction of the émigré’s identity, ranging from that of an enlightened, sophisticated enthusiast to that of a stricken straddler. Busia reconstructs the spaces occupied by émigrés as vociferous, since these spaces ascribe ever-mutating identities to them. Experiences, or what Busia refers to as testimonies of exile, disrupt and alter the émigré’s identity. Drawing inferences from Edward Said’s conceptualisation of the disposition of the émigré, it is argued that the place and space of the immigrant is not only secondary and bordering on the peripherals of foreign culture, but also contemptible. The immigrant’s identity formation undergoes different stages. As his/her “arrival identity” confronts elements in the new environment, the immigrant comes to revise, adopt, and adapt what is considered an acceptable or model personality. The émigré either fully integrates into society or resists change and clings to his/her “old” self. Busia’s feminist didacticism, evidenced in her exploration of pertinent feminist issues in the context of larger immigrant concerns, is obvious in her collection. The article concludes by noting that the female émigré, especially, has to grapple with a “desecrated place” where any form of

sacred insistence on self-acclamation is met with disdain. The exile experience then becomes a wound which might never heal, even as the immigrant's identity is permanently altered.

**Danquah, G. (2023). Echoes of Power: Portrayal of Women in Selected Akan Proverbs. *Research in African Literatures*, 54(1), 48-66. <https://doi.org/10.2979/ral.2023.a915639>**

### **Abstract**

Proverbs are normally classified as memorable statements that are full of insights, veracities, and scruples. They also embody traditional perceptions and sensitivities in a figurative, static, and easy to memorize format (Mieder, *Proverbs Are Never Out of Season*). Again, proverbs are philosophical products of careful observations. The aim is to examine and explore traditional portrayals of Akan women. Using nego-feminism, ten Akan proverbs about women are critically examined. The argument is advanced that though the specific contexts that necessitate the use of a particular proverb influence its meaning, careful scrutiny proves that Akans tend to present women as nego-feminist in some of their popular proverbs. Most of the proverbs can be interpreted as stating and implying the complementary role of the woman. The study reveals that women in traditional African societies are ascribed significant spheres of influence that cannot be undermined. This implies a recognition and appreciation of the role/place of women as worthy contributors to society. The conclusion is drawn that such representations of women belie the portrayal of the African woman as a beast of burden. The notion that nego-feminism is a theory that informs the lived experiences of the African woman is firmly established in these proverbs

**Danquah, G. (2023). In the castle of my skin: (Re)Inscribing an African “feminist” identity in changes and faceless. *Interdisciplinary Literary Studies*, 25(3), 271-292: <https://doi.org/10.5325/intelitestud.25.3.0271>**

### **Abstract**

This paper comparatively analyses the portrayal of ‘feminist’ identity in Aidoo’s *Changes* (1994) and Darko’s *Faceless* (2003). It is on the representation/description of ‘feminist’ identity as well as the dynamics that govern issues of dissent between the ‘old’ and the ‘new’ gendered discourses. In *Faceless*, the author delineates the point of divergence between the ‘older’ generation and the ‘younger’ generation. There seems to be an apparent deviation from ingrained gendered sensibilities. Such a situation leads to a subtle confrontation between the ‘old’ and the ‘new.’ The contemporary gendered formation is rife with both individualistic tendencies as well as the principles of Negofeminism. This theory thrives on the principles of negotiation, collaboration and inclusiveness. The issue of collaboration leads to a clash as there is the subversion of gendered roles. In *Changes*, the writer has an ambivalent vision as she vacillates between the portrayals of the ‘modern woman’ typified in Esi and the ‘traditional woman’ who seems hemmed in by traditional norms. Finally, the modern woman seeking to (re) inscribe new identity will not ‘survive. This is the very society with an ultimate aim to tag her with a new identity. The paper argues that the continual blissful existence and relevance of women can be achieved if they find a way to articulate and negotiate their needs within the ‘confines’ of their traditionally defined place. In other words, the quest for identity and significance should be firmly hinged on the tenets of the very society within which they seek to ‘find an identity.’



**Hamidu, A., Addae, A., Quarcoo, M. A., & Danquah, G. K. (2023). A corpus – based analysis of modality in the Covid – 19 addresses by President Akuffo Addo. *European Journal of Applied Linguistics Studies*, Vol. 6(2), 112 - 131. <https://doi.org/10.46827/ejals.v6i2.457>**

### **Abstract**

This study aims at investigating the most used modal verbs and their semantic implications on the COVID -19 addresses delivered by Nana Addo Dankwa Akuffo Addo, the president of the Republic of Ghana. In all, 96,784 running words were culled from thirty (30) presidential addresses to build a specialised corpus for the study. Using the Antconc corpus software, 3.5.9 version, five (5) modal auxiliaries, that is, epistemic, and non-epistemic (root) modal verbs were found to constitute the most frequently occurring modals in the presidential addresses. The analysis revealed five (5) thematic areas which these modal verbs covered - willingness, possibility, prediction, ability and probability. These thematic areas give an indication that the president showed more commitment to dealing with the pandemic. This was evidenced by the number of times the president used non - epistemic modal verbs which demonstrate ability, willingness and possibility in handling the coronavirus pandemic. Again, the corpus revealed that the president’s measures were on the back of some form of his existing knowledge in dealing with the pandemic.

### **Article(s)/Chapters in an Edited Book**

**Kholinar, A. (2024). Shakespeare pedagogy and twenty-first century multicultural sensibilities. In M. T. Sasser & E. K. Atwood (Eds.), *Teaching Shakespeare beyond the major*. Palgrave Macmillan. <https://doi.org/10.1007/978-3-031-24224-3>.**

**Nyarko, I. O., Angmor, R. G., & Tetteh, J. K. (2023). English language curriculum for the JHS student teacher. In Owu-Ewie, C., *English language curriculum for the JHS student teacher*. UEW, CoDeL, University of Education, Winneba, Ghana.**

### **Conferences/Workshops/Symposia/Seminars with Presentations**

**Quarcoo, M. A. B., & Kholinar, A. (2023, August 28 - 31). Anatomy of social media humour: A multimodal approach [Paper presentation]. Linguistics Association of Ghana (LAG), Takoradi, Sekondi – Takoradi.**

### **Abstract**

With engagement being a key driver of social media usage, more Ghanaians have taken diverse tools to interest and engage their audiences. One of such engagement mechanisms is humour. Most humour studies have concentrated on traditional texts like novels, drama and poetry with a focus on their linguistic perspective. This study examines humour discourse on social media, focusing on the different ways in which it is presented to elicit engagement using a multimodal approach. Data comprises 100 humorous posts selected from Facebook and WhatsApp from January to April, 2023. A qualitative approach was employed to describe how the posts were presented. The study adopted Kress & van Leeuwen’s (2006) theory of Visual Grammar with a focus on the representational meaning to analyse the different

modes that these humorous posts were presented in terms of texts, pictures, memes, colours, typography, font, etc. to attract the audience. Findings indicate that Ghanaian humour creators on Social Media space employed four modes i.e. (1) textual elements (linguistics) that combined emojis, (2) photographs, (3) memes and (4) cartoons with textual elements being the most used. It also found that English, Twi/English Codeswitching, Pidgin and Twi were the languages of engagement though English had an advantage over the others. The study also found that Ghanaian creators of humorous posts are mindful of the cultural and traditional norms that govern Ghanaian society and created contents around them to depict either the violation or otherwise of these norms. Again, it was observed that though some posts ridiculed characters as claimed by Ofori (2019) and Ofosu Marfo et. al (2021), most of the humorous posts revolved around concepts like relationships, cultural values, education, gender, etc. Finally, the study revealed that verbal elements are crucial in making visual elements relevant contrary to Kress & van Leeuwen's (2006) Visual Grammar that argues that the visual component of a text is independent and does not depend on the verbal text to convey meaning.

## Department of French Education

### Articles In Journal

**Antwi Kweku Yaya, D., Dovonou, F. S. F., Odonkor Asare, F., & Akatsi Heponou, L. (2024). De l'action dans Les Conquérants d'André Malraux et Vol de nuit d'Antoine de Saint-Exupéry. Cahiers de recherches en sciences du langage (CRSL), 2(1), 55–72. <https://www.asjp.cerist.dz/en/PresentationRevue/921>**

#### Abstract

Résumé: L'étude comparative des romans Les Conquérants d'André Malraux et Vol de nuit d'Antoine de Saint-Exupéry s'appuie sur la théorie existentialiste de J.P. Sartre pour explorer les fondements de l'action. Dans un contexte d'entre-deux-guerres marqué par l'absurdité, les deux auteurs cherchent à promouvoir de nouvelles valeurs à travers l'aventure. L'analyse vise à identifier les similitudes et les différences dans le processus d'accomplissement de l'action, considérant celle-ci comme l'ultime moyen pour les héros d'échapper à l'absurdité résultant de la décadence de la civilisation occidentale. Chez Malraux, l'action est une aventure révolutionnaire cherchant une forme de "puissance" et de force pour donner un sens à l'existence, tandis que chez Saint-Exupéry, elle se base sur une aventure professionnelle visant le dépassement de soi pour s'accomplir. Malgré ces différences, les deux auteurs prônent des valeurs héroïques telles que le courage et le sacrifice de soi dans l'accomplissement de l'action. Mots-clés: action, moyen, valeurs héroïques, révolution, métier

Abstract: The comparative study of the novels Les Conquérants by André Malraux and Vol de nuit by Antoine de Saint-Exupéry relies on Jean-Paul Sartre's existentialist theory to explore the foundations of action. In a between-the-wars context marked by absurdity, both authors aim to promote new values through adventure. The analysis aims to identify similarities and differences in the process of accomplishing action, considering it as the ultimate means for the heroes to escape the absurdity resulting from the decline of Western civilization. For Malraux, action is a revolutionary adventure seeking a form of "power" and strength to give meaning to existence, while for Saint-Exupéry, it is based on a professional adventure aiming for self-transcendence and fulfilment. Despite these differences, both authors advocate heroic values such as courage and self-sacrifice in the pursuit of action. Key-words: action, means, heroic values, revolution, profession

**Angmorterh, P. M., & Bakah, E. K. (2024). Progrès lexical chez les apprenants de FLE dans une université ghanéenne : une étude des adjectifs qualificatifs dans les textes descriptifs. Particip'Action, Vol 16(1), 201 - 222. <https://particip-action.com/2024/01/24/revue-semestrielle-volume-16-n1-janvier-2024/>**

#### Abstract/ Résumé

Cette étude part d'une perception générale selon laquelle la compétence linguistique des apprenants de langue s'améliore avec le temps. L'étude pose spécifiquement la question de savoir ce qui change en termes de progrès dans la compétence lexicale des apprenants de FLE à la fin d'une année à l'université. Le lexique de français étant un domaine très vaste, l'étude se limite aux adjectifs descriptifs. Ainsi, l'étude examine les progrès réalisés par les apprenants en termes de nombre d'adjectifs qu'ils utilisent dans des textes descriptifs. Le test est utilisé pour collecter les données et les analyses sont faites en s'inspirant des méthodes

qualitatives et quantitatives. L'analyse des données révèle que le progrès réalisé par les apprenants concernant les compétences lexicales à la fin d'une année d'études à l'université est largement négligeable. L'étude recommande des mesures pour développer la compétence lexicale chez les apprenants de FLE au niveau universitaire.

Mots clés : Progrès, rédaction, vocabulaire, adjectif, texte descriptif

## Abstract

This stems from a general perception that the linguistic competence of learners improves with time. The study specifically tries to find out the changes in terms of progress in the lexical competence of learners of FFL at the end of the first year of their studies at the University. As the French language lexicon is a very broad area, the study is limited to descriptive adjectives. Thus, the study investigates the progress learners make regarding the number of adjectives they use in descriptive essays. Data are collected using an essay test and analysed using qualitative and quantitative methods. The results show that the progress that learners of FFL make concerning their lexical competence at the end of the first year of their studies at the university is largely insignificant. The study recommends some measures for the development of the lexical competence of learners of FFL.

Keywords: Progress, essay writing, vocabulary, adjective, descriptive text

**Atonon, T. K., Angmorterh, P. M., & Obeng, P. (2023). Comparative analysis of varieties of the socioterminology *ɔ̀*, *dzi*, *ye* and *manger* in Ewe, Mfantse, Dangme and French. *Eureka-Ünilag*, 8, 217 - 234.**

## Abstract

Every language is characterised by its own linguistic values. African languages in general, and Ghanaian languages, are in most cases interconnected at different levels; phonologically, morphologically, semantically, etc. Generally, there are terminologies whose equivalents in other languages retain their expressive values. This study is a contrastive study of the socio-terminological varieties of „*ɔ̀*“ in Ewe, ‘*dzi*’ in Mfantse, ‘*ye*’ in Dangme and „*manger*“ in French. The study is based on an observation of the structure and uses of „*ɔ̀*“, „*dzi*“, „*ye*“ and *manger*“ in the four selected languages. The assumption is that these words express similar concepts and are used in similar contexts in the different languages. The focus of the study is to find out how this assumption plays out in the use of this common socio-terminology in the given languages. In this study, the semantic properties of the use of the four lexical items were compared and examined in various contexts. This comparison helped to conclude and confirm that these expressions have common behaviour patterns in different sociolinguistic contexts. Thus although these terms share the literal meaning “eat”, they acquire some other contextual meanings which may be present in one language or another but absent in others.

Keywords : Ghanaian languages, terminologies, contrastive study, semantic properties

## Résumé

Chaque langue se caractérise par ses propres valeurs linguistiques. Les langues africaines en général et les langues ghanéennes sont dans la plupart des cas interconnectées à différents niveaux ; phonologiquement, morphologiquement, sémantiquement, etc. Généralement, il existe des terminologies dont les équivalents dans d'autres langues conservent leurs valeurs expressives. Cette étude est une étude contrastive des variétés socio-terminologiques de “*ɔ̀*” en éwé, “*dzi*” en mfantse, “*ye*” en dangme et “*manger*” en français. L'étude est basée sur une observation de la structure et des utilisations de “*ɔ̀*”, “*dzi*”, “*ye*” et “*manger*” dans les

quatre langues sélectionnées. L'hypothèse est que ces mots expriment des concepts similaires et sont utilisés dans des contextes similaires dans les différentes langues. L'objectif de l'étude est de découvrir comment cette hypothèse joue dans l'utilisation de cette socio-terminologie commune dans les langues données. Dans cette étude, les propriétés sémantiques de l'utilisation de 'du, 'dzi, ye et manger' ont été comparées et examinées dans des contextes variés. Cette comparaison a permis de conclure et de confirmer que ces expressions ont des modèles de comportement communs dans différents contextes sociolinguistiques selon leur contexte.

Mots clés : langues ghanéennes, terminologies, étude contrastive, propriétés sémantiques

**Yaya Kwaku Antwi, D., Doyonou, F. S. F., Odonkor, F. A., & Akatsi, L. H. (2024). De l'action dans Les Conquérants d'André Malraux et Vol de nuit d'Antoine de Saint-Exupéry (1931): Une étude comparée. Cahiers de Recherche en Sciences du Langage, 2(1), 55–72. <http://www.asjp.cerist.dz/en/PresentationRevue/921>**

### Abstract

The comparative study of the novels *Les Conquérants* by André Malraux and *Vol de nuit* by Antoine de Saint-Exupéry relies on Jean-Paul Sartre's existentialist theory to explore the foundations of action. In a between-the-wars context marked by absurdity, both authors aim to promote new values through adventure. The analysis aims to identify similarities and differences in the process of accomplishing action, considering it as the ultimate means for the heroes to escape the absurdity resulting from the decline of Western civilization. For Malraux, action is a revolutionary adventure seeking a form of "power" and strength to give meaning to existence, while for Saint-Exupéry, it is based on a professional adventure aiming for self-transcendence and fulfillment. Despite these differences, both authors advocate heroic values such as courage and self-sacrifice in the pursuit of action. Key-words: action, means, heroic values, revolution, profession

**Atonon, T. K. (2023). Analyse d'erreurs en traduction des étudiants : Étude de cas à University of Education, Winneba au Ghana. Akofena, 3(10), 251–266. <https://doi.org/10.48734/akofena.n010v3.2023>**

### Abstract

This article examines translation errors made by students of French as a foreign language in a public Ghanaian University. In this study, we discussed translation errors in exam papers, as well as many critical reflections and questions that may have arisen from these errors. Exam papers from 100 third year students were used and sorted according to the degree of errors made. Those with captivating errors were targeted and the responses were analysed using exploratory research approach. The research has highlighted various errors as follows: misinterpretation, misleading, omissions, etc. These different errors are put into perspectives in terms of the level of comprehension and language competencies showcased in the responses. The analysis showed that these errors are mainly due to negative transfers and lexical interference with the spelling similarities between English and French words (false friends) and demonstration of inappropriate language use. In conclusion, language students need to be made aware of the fact that translation is not an automatic means of communication, but rather a systematic way of making sense in another language.

Keywords: error, translation, misinterpretation, misleading, omission

**Atonon, T. K., Angmorterh, P. M., & Obeng, P. (2023). Comparative analysis of varieties of the socio-terminology *du*, *dzi*, *ye* and *manger* in Ewe, Mfantse, Dangme, and French. *Eureka-Unilag*, 8(Special Edition in Honour of Unionmwan Edebiri), 217–234.**

### **Abstract**

Every language is characterised by its own linguistic values. African languages in general, and Ghanaian languages, are in most cases interconnected at different levels; phonologically, morphologically, semantically, etc. Generally, there are terminologies whose equivalents in other languages retain their expressive values. This study is a contrastive study of the socio-terminological varieties of „*du*“ in Ewe, ‘*dzi*’ in Mfantse, ‘*ye*’ in Dangme and „*manger*“ in French. The study is based on an observation of the structure and uses of „*du*“, „*dzi*“, „*ye*“ and *manger*“ in the four selected languages. The assumption is that these words express similar concepts and are used in similar contexts in the different languages. The focus of the study is to find out how this assumption plays out in the use of this common socio-terminology in the given languages. In this study, the semantic properties of the use of the four lexical items were compared and examined in various contexts. This comparison helped to conclude and confirm that these expressions have common behaviour patterns in different sociolinguistic contexts. Thus although these terms share the literal meaning “eat”, they acquire some other contextual meanings which may be present in one language or another but absent in others. Keywords : Ghanaian languages, terminologies, contrastive study, semantic properties



# FACULTY OF GHANAIAN LANGUAGES EDUCATION

## Department of Gur-Gonja Education

### Articles In Journal

**Abubakari, H., & Issah, S. A. (2024). Metaphorical Personal Names in Mabia Languages of West Africa. *Languages*, 9(5), Article 163. <https://doi.org/10.3390/languages9050163>**

#### Abstract

Cultural philosophies, belief systems and experiences serve as superordinate cultural concepts that are reconceptualised and expressed using metaphorical personal names in Mabia languages. Metaphorical personal names are ‘vehicles’ that transport the worldviews of speakers of Mabia languages to the target audiences. Every metaphorical personal name shares properties of a superordinate umbrella concept such that even newly created metaphorical names fall within an already existing cultural philosophy. This study argues that there is a corresponding relationship between a metaphorical personal name, the source domain, and its superordinate umbrella philosophical concept, the target domain. The study uses data from four Mabia ‘sister’ languages of West Africa: Dagbani, Kusaal, Likpakpaln, and Sisaali. The findings show that the source domains of these names include the name-bearer and the personal name itself, and the name-giver, whilst the target domains include flora and fauna terms, belief systems, innuendos and proverbs, experiences of name-givers, ‘death prevention’ labels, among others. The article also establishes that both sociocultural and ethnolinguistic factors influence the use of metaphorical personal names in the cultures under study. The Conceptual Metaphor Theory (CMT) is employed for the analysis of data in this research. The work uses the qualitative method and data are sourced from semi-structured interviews, from school registers and other previous studies on personal names in the selected languages

**Asitanga, S. A., Musah, A. A., & Issah, A. S. (2024). Phonological variation in Kusaal: A synchronic dialectological study. *Selected papers from the 53rd Annual Conference on African Linguistics*, 1, 103-123.**

#### Abstract

The aim of this chapter is to discuss, analyze, and motivate patterns of phonological variation in two dialects of Kusaal, a Mabia language spoken in north-eastern Ghana where, ostensibly, the Toende dialect is more innovative than the Agole dialect. The paper adopts a synchronic dialectological approach to investigate the observed patterns of phonological variation in the dialects. It assumes a qualitative dimension with primary data sourced through interviews, elicitations and native intuitions. Alternations involving consonants and vowels are discussed. Devoicing of stops is widespread word-finally, while debuccalization of /s/ occurs in postvocalic position. In addition, certain vowel sequences undergo deletion or coalescence in the Toende dialect.

**Abubakari, H. & Issah, A. S. (2023). Nominal classification in Mabia languages of West Africa. *Journal of Language Science*, 95, 1-17.**

### **Abstract**

The literature on the nominal classification system of Mabia languages reveals a consistent pattern where nominals are often classified based on their morphology, phonology and semantics. What has not received mention is the role of ethnolinguistics and linguistic anthropology in the classification of nominals in these languages. This study offers a comparative analysis of the nominal class systems of three Mabia languages: Dagbani, Kusaal and Mampruli. The main purpose is to examine the role of semantics from the angles of both ethnolinguistics and linguistic anthropology in the nominal classification system of these languages. The hypothesis is that the morphophonology of nominal classes in these languages is triggered by a shared semantic network and pragmatic association of member elements influenced by the beliefs, traditions and world views of speakers of these languages. The sameness or near sameness of beliefs, and world views of these people explains the observation of identical items from all the languages in specific groups. Nouns in the various categories behave the same morphologically, phonologically and semantically. Nouns are classified under 5 concepts: Human-beings and kin relationship, spirituality, protection, shape and Non-count nouns. This work is entirely qualitative

**Abubakari, H., Issah, A. S., Acheampong, O. S., Luri, D. M., & Napari, N. J. (2023). Mabia languages and cultures expressed through personal names. *International Journal of Language and Culture*, 10(1), 87-114.**

### **Abstract**

This paper is a comparative study of names and naming practice among the speakers of Dagbani, kusaal, Llkpakpaanl and Sisaali. we discuss in detail the ceremonies that accompany the naming of a newborn among speakers of these languages. By using the framework of ethnopragmatics, the study explores the culture-internal dynamics of personal names by comparing the typology of names in the four languages. it draws attention to the fact that personal names are not given randomly but rather influenced by the special circumstances surrounding the birth of the name bearer and also by the advise of a diviner. This study reveals how culture is crafted through language and transmitted from one generation to the other through personal names. it is also observed that speakers of these languages have a common perception or worldview evident in their traditional cultural practices.

**Issah, A. S. (2023). The structure of Dagbani sentential negation. *Studia Linguistica*, 77(2), 307-332.**

### **Abstract**

The goal of this paper is to provide an account of the syntactic expression of sentential negation in Dagbani, a Mabia, Niger-Congo language of West Africa. I show that Dagbani employs two strategies for the marking of sentential negation: negative markers/particles and negative verbs. The overtly expressed negative markers are ku/b<sub>1</sub> and d<sub>1</sub>, used for negating declaratives and imperatives, respectively. Besides, the inherently negative verb ka is used to negate possessive-locative-existential constructions. The paper further demonstrates that there is an incompatibility between the negative marker and the imperative morpheme in Dagbani and attempts to account for this empirical fact. In line with recent probe-based

Minimalist account of negation, I assume that the negative markers (heads) carry a [iNeg] feature, which is interpretable, and its interpretation triggers a negative polarity of the clause. I further offer a formal account for the incompatibility between the imperative negation marker *di* and the imperative morpheme

**Issah, S., Abubakari, H., Atintono, S., & Atibiri, S. (2023). Exploring euphemisms as taboo avoidance strategies in the Mabia languages. *Language Matters*, 54(2), 42–64. <https://doi.org/10.1080/10228195.2023.2251714>**

### **Abstract**

This article investigates the use of euphemisms in mitigating prohibited expressions in three Mabia (Gur) languages: Dagbani, Farefare (also known as Gurene) and Kusaal. In the daily interactions of the Mabia people, they avoid using certain expressions, which are unmentionable in most contexts. These include the expressions for snakes and snakebite, sexual intercourse and genitalia, and death. The mention of the explicit terms for these expressions is face-threatening in Mabia society and can incur various forms of negative social consequences. Thus, instead of using these taboo expressions, speakers employ euphemisms as taboo-avoidance strategies; these euphemistic expressions oil social cohesion and indicate speakers' communicative competence. The data used in this study were mainly gathered from primary sources. However, we augmented some of the primary data of Dagbani with some secondary sources drawn from N. A. Salifu's (2012) PhD thesis. We employ politeness theory and ethnography of communication as analytical lenses.

**Adongo, H. A., & Nsoh, A. E. (2023). Legislating Mother Tongue Education in Ghana. *Ghana Journal of Education and Teaching*, 2(1), 55 - 77.**

## Department of Ga-Dangme Education

### Articles In Journal

Caesar, R. O., & Sackitey, M. (2024). Elision in Dangme. *Universal Journal of Language*, 25(1), 1-38. <https://doi.org/10.22425/jul.2024.25.1.1>

#### Abstract

This paper examines elision in Dangme, a Kwa language spoken in parts of the Greater Accra, Eastern and Volta Regions of Ghana. The paper aims at accounting for vocalic, consonantal and syllabic deletions in Dangme. This study is formalized within the Autosegmental theoretical framework with tools like association lines linking segments to their CV tiers and also delinking tools showing segmental and syllabic deletions where applicable. The study shows that in Dangme, syllabic and segmental elision is realized within a lexical item, a morpheme or word boundary, and word finals. We further demonstrate that elision in Dangme is a morpho-phonological phenomenon as established in several other languages. Morphological factors that trigger elision in Dangme include compounding with specific reference to clause compounds, reduplication involving numerals and adjectival elements, and nominalization. Some specific pronominal objects and postpositions at morpheme finals also trigger segmental deletion. Elision in Dangme could be leftward or rightward at morpheme boundaries where either V1 or V2 could undergo elision depending on the contexts. The study also shows that syllable deletion is realized in some compound names where either CV1 or CV2 may undergo elision. Compensatory lengthening is realized when CV1 undergoes the elision process in such contexts.

### Published Proceedings of Conferences/Workshops/ Symposia/Seminars

Caesar, R. O., Yakub, M., & Akrobettoe, R. T. (2024). Metaphors and metonyms of ti and yi 'HEAD' expressions in Nzema and Dangme. In Y. Huang, N. H. Kaldhol, J. J. Lim, S. Rose, & A. Struthers-Young (Eds.) *ACAL in SoCAL: Selected papers from the 53rd Annual Conference on African Linguistics, 53rd Annual Conference Language and Science Press, Berlin*. <https://doi.10.5281/zenodo.11210454>

#### Abstract

The study examines how ti and yi 'head' is conceptualised physically and metaphorically in Nzema and Dangme, two Kwa languages of Ghana. It highlights the similarities and differences based on socio-cultural experiences and conceptualisation patterns of the Nzema and Dangme people. In this study, we position our scholarship on metaphors and metonyms of 'head' among the Nzema and the Dangme as culturally constructed. In Nzema and Dangme, the head serves as a container for conceptualisations of intelligence and wickedness. Phenomena like fortune, insanity and death are construed in terms of cognitive representation of the head. Hardwork, unity, trust, and transparency are virtues that are communicated through head-related expressions in Nzema and Dangme.

## Conferences/Workshops/Symposia/Seminars with Presentations

Ollennu, Y. A. A. (2023, June 3-5). *A morphophonological and sociolinguistic analysis of linguistic variations among Gas* [Paper presentation]. 54 Annual Conference on African Linguistics, Connecticut, Connecticut.

## Department of Akan-Nzema Education

### Articles In Journal

Diabah, G., & Ofori, V. (2024). Making light of the burden of economic hardship: A socio-pragmatic analysis of humour in Ghana's post-COVID economic crises. *Legon Journal of the Humanities*, 35(1), 1-36. <https://doi.org/10.4314/ljh.v35i1.1>

#### Abstract

Ghana experienced worsening economic crises following the COVID-19 pandemic, but this was expected since the country was already facing economic difficulties prior to the pandemic. To deal with the increasing crises, the government sought support from the International Monetary Fund (IMF) in July 2022. This sparked ridicule since they had criticised the previous government for seeking an IMF bailout. This study, therefore, offers a socio-pragmatic analysis of the humour surrounding this political discourse on Ghana's post-COVID economic crises. By analysing linguistic and paralinguistic features from an under-studied context, i.e. humour research in Ghana and on crisis, we examine how netizens used humour to lighten the burden of the economic hardship and, more importantly, as a tool to critique political actors for their alleged roles in the country's socio-economic challenges. Data was gathered from Facebook and Twitter. With reference to the bifurcation of the play frame, which distinguishes between serious and non-serious framing, we argue that the political humour that characterised Ghana's economic crisis goes beyond 'this is play' and highlights citizen's frustrations and loss of faith, not only in the current government, but also in political leaders in general. Thus, behind the veil of humour, Ghanaians reiterate the endemic nature of the problems, something which goes beyond what an IMF bailout can solve.

Caesar, R. O., & Sackitey, M. (2024). Elision in Dangme. *Journal of Universal Language*, 25(1), 1-38. DOI: <https://doi.org/10.22425/jul.2024.25.1.1>

#### Abstract

This paper examines elision in Dangme, a Kwa language spoken in parts of the Greater Accra, Eastern and Volta Regions of Ghana. The paper aims at accounting for vocalic, consonantal and syllabic deletions in Dangme. This study is formalized within the Autosegmental theoretical framework with tools like association lines linking segments to their CV tiers and also delinking tools showing segmental and syllabic deletions where applicable. The study shows that in Dangme, syllabic and segmental elision is realized within a lexical item, a morpheme or word boundary, and word finals. We further demonstrate that elision in Dangme is a morpho-phonological phenomenon as established in several other languages. Morphological factors that trigger elision in Dangme include compounding with specific

reference to clause compounds, reduplication involving numerals and adjectival elements, and nominalization. Some specific pronominal objects and postpositions at morpheme finals also trigger segmental deletion. Elision in Dangme could be leftward or rightward at morpheme boundaries where either V1 or V2 could undergo elision depending on the contexts. The study also shows that, syllable deletion is realized in some compound names where either CV1 or CV2 may undergo elision. Compensatory lengthening is realized when CV1 undergoes the elision process in such contexts.

**Yakub, M. (2024). 'Refuse dump, hurry up': A cognitive onomastic and cultural metaphor perspective of Nzema death-prevention names. *Languages*, 9, 1-18.**

**Yakub, M. (2023). Ethnopragmatic implications of food and consumption-related proverbs in Nzema. *Journal of West African Languages*, 50(1&2), 157-174.**

**Yakub, M. (2023). A contextual-ethnographic study of Nzema proverbs related to some 'medical conditions'. *Proverbium - Yearbook*, 40(1), 223-247.**

**Yakub, M. (2023). 'You can only see their teeth': A pragma-linguistic analysis of allusive personal names among the Nzema of Ghana. *Nomina Africana: Journal of African Onomastics*, 37(1), 37-57.**

**Yakub, M., & Owu-Ewie, C. (2023). A cultural-conceptual analysis of plant-related proverbs in Nzema. *Journal of African Languages and Literatures*, 4, 50-72.**

**Akuamah, A., & Odoom, J. (2023). Phonological adaptation of Arabic names in Atebubu (Bono East Region, Ghana). *Studies in African Languages and Cultures*, 57(1), 175-192. <https://doi.org/10.32690/SALC57.8>**

## **Abstract**

This paper discusses the phonological processes embedded in some nativised Arabic personal names in Atebubu, in the Bono East Region of Ghana. The study shows that the main phonological processes entrenched in the nativisation process include segment deletion, vowel insertion, prothesis, substitution, consonant deletion, hypocorism, and free variation. These phonological processes are employed as a mitigation strategy to conform to the phonotactics of Akan. Moreover, the study shows that the Bono speakers usually substitute the consonants [ʃ, z, q, dʒ] with [ɛ, s, k, dʒ], respectively. Data for the study was gathered from both primary and secondary sources.

**Nyarko, I., & Odoom, J. (2023). Phonological Processes of the Non-Native Speakers of Akan. *Journal of Linguistics Association of Nigeria (JOLAN)*, 26(2), 106-127.**

## **Abstract**

This paper seeks to investigate the phonological processes embedded in the phonology of native Ewe speakers of Akan. This study has become necessary because Akan is a lingua franca in Ghana where most people have some level of speaking and comprehension competence. However, at the early production or pre-advanced phase of L2 acquisition, the Ewe speakers of Akan encounter numerous segmental and prosodic challenges which trigger various phonological processes as resolution strategies. Therefore, this study bridges this gap in language acquisition by examining the phonological processes entrenched in the phonology of Ewe speakers acquiring Akan as their L2. The challenges usually arise from phonological dissimilarities between the L1 source phonology and the L2 target. The paper argues that



the inadequacies in L2 acquisition at the pre-advanced phase trigger some phonological processes such as vowel raising and lowering, anteriorization, and de-stridentization among others as phonological simplification strategies to resolve challenging native Akan forms. The study employs focus group discussion as a data collection approach and it is formalized within the Perceptual Assimilation Model of second language learning (PAM- L2) (cf. Best 1993; Best & Tyler2007).

**Nyarko, I., Odoom, J. & Adomako, K. (2023). Assessing the phonological processes in Akan child language. *Ghana Journal of Linguistics*, 12(1), 24-47. <http://dx.doi.org/10.4314/gjl.v12i1.2>**

### **Abstract**

This paper seeks to examine the phonological processes embedded in the speech errors of child phonology in Akan, a Niger-Congo (Kwa) language. The study has become necessary because cross-linguistically, several works have been undertaken on child language acquisition but very little or no attention has been given to that of Akan. Most of these works on African languages have centered on the acquisition processes with little on the phonological processes underpinning child language. Therefore, this study bridges the gap by providing a discussion of some phonological processes that underline the acquisition of Akan children. In the course of the phonological development of the Akan child as part of language acquisition, these processes occur as phonological simplification strategies to resolve relatively challenging natural adult forms of Akan expressions. This is either due to an articulatory accident or a defect in the speech organ. It is against this backdrop that Fromkin (1973) opines that a slip of tongue is evidence of a phonological process in action. Hence, this paper concludes that the inadequacies in child language acquisition trigger various phonological processes such as vocalization, stopping, de-affrication, anteriorization, fronting, cluster reduction, reduplication as a phonological simplification strategy in the acquisition of Akan.

**Odoom, J. (2023). Hybridisation strategies in anglicisation: The case of Akan personal names. *Nomina Africana: Journal of African Onomastics*, 37(1), 59-71. <https://doi.org/10.2989/NA.2023.37.1.5.1376>**

### **Abstract**

Several Akan personal names are losing their sociocultural meaning due to the process of anglicisation. Anglicisation affects the orthography, segments, pronunciation, and sometimes the original meanings of some personal names in Akan. We, however, know that personal names are not just arbitrary labels, but sociocultural tags that have sociocultural functions and meanings as well as linguistic and typological information cultures. This study, therefore, seeks to discuss hybridisation strategies employed in anglicising some personal names in Akan. This is a descriptive qualitative study. The data for this study were collected from both primary and secondary sources. Sixty students from the University of Education, Winneba, with an age range of 30–50 years old were consulted. The study shows that hybridisation processes employed in anglicising personal names in Akan include hybridised names with “-son”, hybridised names with “-ful”, innovative hybridised names and semantic translation of the original names, among others. Except for semantic translated names, all the revealed hybridisation strategies ultimately erode the sociocultural meaning of the affected names. This article, therefore, contributes to the study of anthroponymy and the onomasiology of Akan.

**Odoom, J., & Adomako, K. (2023). Nasalisation and Nasal Assimilation in Akan. Ghana Journal of Languages, Linguistics and Literature (GJoLLL), 1(1), 1-24. <https://journals.uew.edu.gh/index.php/gjoll/article/view/8>**

### **Abstract**

This paper discusses nasalisation and nasal assimilation in Akan, a Kwa (NigerCongo) language. The paper demonstrates that nasalisation and nasal assimilation in Akan can be local, homorganic (partial), or total. The underlying voiced alveolar nasal /n/ surfaces with the initial consonant of the following stem to be realised as a homorganic or nasal sound. The paper shows that among the three major dialects of Akan (Fante, Asante, and Akuapem), Fante exhibits only place (homorganic) assimilation, while Asante and Akuapem demonstrate both places (homorganic) and manner assimilation. Moreover, the paper establishes that nasalisation and nasal assimilation in Akan is adjacent, partial, complete (total), bidirectional, and either regressive or reciprocal. Nasalisation and nasal assimilation in Akan occur mainly in the domains of stems, compound words, plural formation, negation, imperative, and reduplicative constructions. This paper therefore contributes to the typology of consonant-consonant (C-C) assimilations that occur in Akan: nasal place assimilation and consonant nasalisation. We formalise our discussions within the theoretical framework of Feature Geometry (FG) Phonology

**Amoh S., Nyame, J., Nyarko, I., & Eshun, B. (2023). Consonant mutation in Nzema and Esahie. *Linguistik online*, 122(4), 1-12.**

### **Abstract**

This study examines consonant mutation particularly in Esahie and Nzema. The reason for the study arises from the mutuality in the two languages. Again, previous studies have superficially treated this subject in the separate languages. However, the subject of consonant mutation is common in the above languages, yet the prevailing characteristics of the phenomenon are similar and dissimilar in the languages. Thus, this study compares and contrast consonant mutation in the two related languages to establish a correlation. In this vein, it discusses the mutational pattern, directionalities and voicing. Data for this study are assembled from four native speakers of each of the languages and literature of the respective languages. The data are analysed within the purview of Distinctive Feature Theory. The study identifies evidence to the relational effect that, the phonological environments in which the various realizations of mutation occurs also results in a harmony system. However, they differ in their mutational domains. The featural agreement normally forges between the vowel-consonant. Again, it is observed in Nzema and Esahie that, the common feature responsible for mutation in the alternant pairs, [k/x] and [k/g] is [dorsal]; [d/l] and [d/n] is [coronal]; [tʰ/ɕ] is [+strident] and [b/m] is [labial]. In both languages, harmonic assimilation is bidirectional.

**Nyame, J., Adomako, K., Yakub, M., Taiba, I. R., Wiafe-Akenten, N. A. E. (2023). Nzema idiomatic expressions as indirection strategy: A politeness theoretical perspective. *Journal of Language and Literature*, 23(1), 209 – 223. <https://e-journal.usd.ac.id/index.php/JOLL/index>**

### **Abstract**

The paper explores Nzema idiomatic expressions used as indirection strategy. Figurative devices such as proverbs and euphemisms have received quite an appreciable amount of study in connection with verbal indirection in Nzema. Little or no attention however has been given to idioms, particularly as indirection devices in the language. This paper therefore focuses on idioms which incorporate body parts such as head/brain, eyes, nose, mouth, teeth, hands, legs, heart/chest, stomach and body/skin that are used to avoid any straightforward language that seeks to undermine and threaten the face of an addressee. Data were gathered from both primary and secondary sources. The primary data comprise recordings of traditional ceremonies such as marriage contraction and arbitration, where the use of idioms as indirect expressions was pervasive. Authors' native speaker intuition was also brought to bear on the analysis of data. Interviews with competent indigenous speakers of Nzema were conducted for useful information and clarification on the data gathered. The secondary data were sourced from two Nzema literary texts. The paper finds that, these culturally constructed body parts related idioms are deliberately employed as both face saving and as politeness devices in the language.

**Amoh, S., Nyame, J., Nyarko, I. & Eshun, B. (2023). Consonant mutation in Nzema and Esahie. *Linguistik Online*, 122, 1 - 12.**

### **Abstract**

This study examines consonant mutation particularly in Esahie and Nzema. The reason for the study arises from the mutuality in the two languages. Again, previous studies have superficially treated this subject in the separate languages. However, the subject of consonant mutation is common in the above languages, yet the prevailing characteristics of the phenomenon are similar and dissimilar in the languages. Thus, this study compares and contrast consonant mutation in the two related languages to establish a correlation. In this vein, it discusses the mutational pattern, directionalities and voicing. Data for this study are assembled from four native speakers of each of the languages and literature of the respective languages. The data are analysed within the purview of Distinctive Feature Theory. The study identifies evidence to the relational effect that, the phonological environments in which the various realizations of mutation occurs also results in a harmony system. However, they differ in their mutational domains. The featural agreement normally forges between the vowel-consonant. Again, it is observed in Nzema and Esahie that, the common feature responsible for mutation in the alternant pairs, [k/x] and [k/g] is [dorsal]; [d/l] and [d/n] is [coronal]; [tʃ/ɕ] is [+strident] and [b/m] is [labial]. In both languages, harmonic assimilation is bidirectional.

**Nyarkoh, I, Amoh, S. & Agyekum, N. O. (2023). The Syntax and Semantics of Akan Ideophones. *Ghana Journal of Linguistics*, 12(3), 65 - 98. <https://dx.doi.org/10.4314/gjl.v12i3.4>**

### **Abstract**

This paper examines the syntax-semantics of Akan ideophones. As part of the syntactic characteristics of ideophones, the study discusses the word class dynamism in Akan ideophones. Additionally, it looks at the verbal polarity and the group of ideophones that co-occur based on the polarity of the verb. This has become necessary because unlike other parts of speech, not much have been done on Akan ideophones in the literature. Therefore,

aside from the contribution that this paper makes to the discussion on the syntactic dynamism in Akan ideophones, it also looks at the sensitivity of ideophones to the polarity of the verb in a sentence. This is against the backdrop that Saah (1995), Bodomo (2006) and Agyekum (2008) have dilated on the morpho-phonological and pragmatic characteristics of ideophones but not much on the syntax and semantics characteristics of Akan ideophones, especially its polarity sensitivity. Hence, this study examines the polarity sensitivity of Akan ideophones towards the categorization of ideophones into two, namely Affirmative Polarity Ideophones (API) that only collocate with positive verbs and Negative Polarity Ideophones (NPI) that only collocate with negated verbs. It shows that Negative Polarity Ideophones (NPI) collocate with negated verbs irrespective of the tense aspect mood. Progovac's (1993) theory of Entailment and Binding is employed to account for the polarity sensitivity of ideophones while the syntactic dynamism in the ideophones is tested on the X-bar theory.

**Amoh, S., Nyame, J., Nyarko, I., & Eshun, B. (2023). Consonant mutation in Nzema and Esahie. *Linguistik online*, 122(4), 3-12. <http://dx.doi.org/10.13092/lo.122.10218>**

### **Abstract**

This study examines consonant mutation particularly in Esahie and Nzema. The reason for the study arises from the mutuality in the two languages. Again, previous studies have superficially treated this subject in the separate languages. However, the subject of consonant mutation is common in the above languages, yet the prevailing characteristics of the phenomenon are similar and dissimilar in the languages. Thus, this study compares and contrast consonant mutation in the two related languages to establish a correlation. In this vein, it discusses the mutational pattern, directionalities and voicing. Data for this study are assembled from four native speakers of each of the languages and literature of the respective languages. The data are analysed within the purview of Distinctive Feature Theory. The study identifies evidence to the relational effect that, the phonological environments in which the various realizations of mutation occurs also results in a harmony system. However, they differ in their mutational domains. The featural agreement normally forges between the vowel-consonant. Again, it is observed in Nzema and Esahie that, the common feature responsible for mutation in the alternant pairs, [k/x] and [k/g] is [dorsal]; [d/l] and [d/n] is [coronal]; [tʰ/e] is [+strident] and [b/m] is [labial]. In both languages, harmonic assimilation is bidirectional.

**Owu-Ewie, C., Eshun, B., & Wiafe-Akenten, E. N. A. (2023). Indirectness in contemporary Ghanaian music: A look at avoidance strategies from the speaking theory perspective. *International Journal of Language, Literacy and Translation (IJoLLT)*, 6(1), 1-19.**

### **Abstract**

Language is a prime vehicle for communication. As language is used for communication, there is the need to avoid certain linguistic items in order not to break communication. In daily communication, speakers use language that ensures good relationships with others to avoid embarrassment, misunderstanding and friction (Zhang & You, 2009). This helps save one's face in communication (Goffman, 1955). Many contemporary Ghanaian music feature subjects that demand the use of words that the Ghanaian culture disallows to be rendered in plain language. Many of these are words related to sexual relationship. To avoid face threatening, artists employ various avoidance strategies such as the use of homophones, metaphor, pronouns and ideophones. This paper takes a look at the works of two afro pop artists; Wendy Shay and Ebony Reigns to see how they employ indirectness to communicate explicit sexual content. In the analysis, the SPEAKING Theory by Hymes (1974) is

applied. We show that, the artists are successful with the use of indirectness to conceal the unmentionables in Akan. However, the intent of the artists in communicating sexual content to the listener is clearly expressed through gestures. We conclude that, communicating sexual content through gestures is easier than to communicate same using words or language.

**Nyame, J., Adomako, K., Yakub, M., Ibrahim, R. T., & Wiafe-Akenten, N. A. (2023). Nzema idiomatic expressions as indirection strategy: A politeness theoretical perspective. *Journal of language and Literature*, 23(1), 209-223.**

## **Books**

**Adomako, K., Obeng Agyekum, N., Odoom, J., & Sackitey, M. (2024). *Twi akyerɛw mmara ne ne nhyehyɛɛ (Akuapem)* [Principles and rules of writing Twi (Akuapem)] (1st ed.). Yasode Publication.**

**Odoom, J. (2023). *Mfantse mɔfɔlɔgyi na sentase (Morphology & syntax of Fante)* (1st ed.). Yasode Publication.**

### **Abstract**

This book discusses the morphology and syntax of the Mfantse (Kwa group member of the Akan) language. The book is written in Mfantse with the main aim of promoting Mfantse word forms and structures of sentences.

**Adomako, K., Agyekum, N. O., Odoom, J., & Sackitey, M. (2023). *Twi atwerɛ mmara ne ne nhyehyɛɛɛ (Asante)* [Principles and rules of writing Twi (Asante)]. Adonai**

**Agyekum, N. O., & Amoh, S. (2023). *Akan kasasua no fa bi (Mfantse)* (1st ed.). Yasode Ventures.**

**Amoah, B., & Amoh, S. (2023). *Twi mɔfɔlɔgye ne sentase ho adesua (Studies in the morphology and syntax of the Twi language)* (1st ed.). Adonai Publications.**

### **Abstract**

Saa nwoma yi kyerekyerɛ sedɛɛ nsemfua nhyehyɛɛɛ tɛɛ wɔ Twi (Asante ne Akuapem) mu. Kasasua wɔ afa ahodoɔ pii. ɛbi yɛ Fɔnɔlɔgyi, Semantese ne ade. Nwoma yi de yɛn wura kasasua fa a ɛyɛ Mɔfɔlɔgye ne Sentase a ɛwɔ Twi mu no mu. Nwoma yi ho abɛhia pa ara ɛsiane se se ɛba no Mɔfɔlɔgye ne Sentase a wɔde Twi kasa no atwerɛ a, ɛho nwoma nnɔso. Mɔfɔlɔgye ne Sentase ho adesua nwoma dodoo no ara wɔ Borɔfo mu. Yɛabɔ mmɔden ahyehyɛ nsem ti ne ɛmu nsem no wɔ ɔkwan sononko koraa so a ɛbɛma adesuafoɔ ne akyerɛkyerefoɔ nyinaa ate aseɛ. Saa ara nso na nhwɛsoɔ ahodoɔ pii wɔm a ɛboa ma nwoma no nteaseɛ nye den. Yɛwɔ awerɛhyɛmu se akenkanfoɔ ani bɛgye nwoma yi ho na wɔbenya Twi Mɔfɔlɔgye ne Sentase ho nimdeɛ a ɛse fata.

## **Published Proceedings of Conferences/Workshops/ Symposia/Seminars**

Odoom, J., & Adomako, K. (2024). Anglicization of personal names: The case of Akan. In Y. Huang, N. H. Kaldhol, J. J. Lim, S. Rose, & A. Struthers-Young (Eds.), *ACAL in SoCAL: Selected papers from the 53rd Annual Conference on African Linguistics* (pp. 27–52). Language Science Press. <https://doi.org/10.5281/zenodo.11210444>

### **Abstract**

Akan personal names are losing their cultural or ethnopragmatic values and meanings through anglicization. Anglicization affects the form, structure, pronunciation, and original meanings of some indigenous Akan personal names. Personal names are not merely arbitrary labels but sociocultural tags that have sociocultural functions and meanings and provide linguistic information about the Akan culture. This study seeks to examine orthographic changes identified in some anglicized Akan personal names and their implication for the Akan language and culture. This is a descriptive qualitative study. The data for this study were collected from university records of written Akan personal names. The paper shows that when Akan personal names are anglicized, they undergo orthographic modifications such as vowel replacement and consonant replacement. Two prosodic processes such as resyllabification and tone alterations were also observed in the anglicized names. The paper concludes that these processes have affected the meanings of the names by eroding their cultural or ethnopragmatic values.

## **Article(s)/Chapters in an Edited Book**

Ofori, V., Hammond, C., Wiafe-Akenten, E. N. A., & Obeng, A. N. (2023). “Kwabena-19” and “Sohyia Deskansere”: An analysis of humour on the COVID-19 pandemic in Ghana. In Nancy Henaku, G. Edzordzi Agbozo and Mark Nartey *Communicative Perspectives on COVID-19 in Ghana: At the Intersection of Culture, Science, Religion and Politics*. Routledge. <http://dx.doi.org/10.4324/9781003330042-18>.

### **Abstract**

This chapter examines the rhetoric of humour as a benign element of communication about the COVID-19 pandemic during the period of the partial lockdown in Ghana. It specifically examines how the humorous discourses are used as a vehicle to share valuable information on the nature of the novel virus, its symptoms and how to contain its spread. The study explores jocular soundbites from Peace FM, a radio station in Accra, comical videos from WhatsApp, YouTube and TikTok platforms, and semi-structured telephone interviews with ten purposively sampled participants from Kwabenya in the Ga East Municipality of Ghana. The findings show that through the on-air jocular conversations on the COVID-19 pandemic and its related issues, consumers of the media shared their bottled-up socio-cultural experiences on religion, politics, parenting, ethnic relations, and infidelity using humorous episodes on the media as the basis for such discussions. Thus, the comical effects of the soundbites and jocular conversations during the pandemic helped to reduce the audiences’ fear and possibly lowered their levels of anxiety. The study recommends consumers of such media messages be intentional in accessing the embedded information on the COVID-19 pandemic.

# FACULTY OF HEALTH, ALLIED SCIENCES AND HOME ECONOMICS EDUCATION

## Department of Health, Physical Education, Recreation and Sports

### Articles In Journal

**Srem-Sai, M., Agormedah, E. K., Hagan, J. E. Jr., Gbordzoe, NI., & Sarfo, J. O. (2024). Gender-based biopsychosocial correlates of truancy in physical education: A national survey among adolescents in Benin. *Social Sciences*, 13(5), 257. <https://doi.org/10.3390/socsci13050257>**

#### Abstract

Truancy among in-school adolescents has long been established as a major issue that negatively impacts educational attainment or goals and mental health-related issues. However, research on subjects such as physical education (PE) truancy and its correlates is somewhat limited. This study estimated the prevalence of PE and assessed the factors associated with PE truancy in Benin among in-school adolescents. The 2016 Benin's Global School-Based Health Survey (GSHS) data from a sample of in-school adolescents ( $n = 2496$ ; 13–17 years) were used for data analysis. The overall prevalence of past 30-day truancy in PE class was 15.4%, with female adolescents reporting a higher prevalence of PE truancy than their male counterparts. Stratified by gender, the regression analyses showed that males in 3rd–6th grade ( $aOR = 0.69$ ,  $CI = 0.50–0.96$ ) experiencing hunger ( $aOR = 0.51$ ,  $CI = 0.32–0.81$ ) and having suicidal ideations ( $aOR = 1.64$ ,  $CI = 1.07–2.53$ ) predisposed adolescents to PE truant behaviour. For female in-school adolescents experiencing hunger ( $aOR = 1.75$ ,  $CI = 1.15–2.65$ ), drinking alcohol ( $aOR = 0.62$ ,  $CI = 0.44–0.87$ ), having sedentary lifestyles ( $aOR = 0.62$ ,  $CI = 0.40–0.96$ ), and being physically attacked ( $aOR = 0.53$ ,  $CI = 0.33–0.87$ ) were significantly associated with PE truancy. However, understanding and supportive parents [ $aOR = 0.61$ ,  $95\% CI = 0.41–0.91$ ] was a protective factor against PE truancy. The present findings suggest the design of gender-sensitive school-based interventions to help minimise or prevent PE truancy among in-school adolescents in Benin based on the predisposing factors while emphasising the protective influences.

**Agormedah, E. K., Ankomah, F., Srem-Sai, M., Nugba, R. M., Quansah, F., Hagan, J. E., Jr., Okan, O., Dadaczynski, K., & Schack, T. (2024). Effects of gender and age interaction on sense of coherence and subjective well-being of senior high school students in Northern Ghana. *Education Sciences*, 14(178), 1–3. <https://doi.org/10.3390/educsci14020178>.**

#### Abstract

Though several studies have established the effect of gender and age on the sense of coherence (SoC) and subjective well-being (SWB) among diverse populations, findings have been varied and inconclusive. These inconsistencies have been attributed to the differences in sample characteristics, methodological and cultural disparities. Thus, the present study assessed the following: (1) gender and age effect on SoC, (2) gender and age effect on SWB, and (3) moderating roles of gender and age in the link between SoC and SWB. Through a stratified sampling technique, 724 selected high school students from secondary schools



in Northern Ghana completed the World Health Organization-5 Well-Being and Sense of Coherence instruments. The results showed that female students exhibited higher levels of SoC compared to their male counterparts. Whereas younger male and female students showed no significant difference in SWB levels, older female students, compared to older males, exhibited high levels of SWB. Age significantly moderated the relationship between SoC and SWB. With the same level of SoC, younger students were more likely to exhibit higher SWB compared to older ones. The findings call for sustainable gender-and age-based interventions because students subjectively develop SoC mechanisms for improving their well-being.

**Amoadu, M., Agormedah, E. K., Obeng, P., Srem-Sai, M., Hagan, J. E., Jr., & Schack, T. (2024). Gender differences in academic resilience and well-being among senior high school students in Ghana: A cross-sectional analysis. *Children*, 11(5), 512. <https://doi.org/10.3390/children11050512>**

### **Abstract**

Senior high school (SHS) students are at risk of stress and other adverse exposures that may negatively affect their well-being and possibly cause attrition. The concepts of academic resilience and well-being share commonality as psychological attributes linked to positive functioning among students. Despite this connection, there seems to be limited research exploring these concepts across genders among SHS students in developing regions. This study examined the gender difference in academic resilience and well-being among SHS students in Ghana. Using a cross-sectional survey design, 190 SHS students in three schools from Kwahu North and South district (i.e., Afram Plains) of Ghana's Eastern Region completed the Academic Resilience Scale (ARS-30) and College Student Subjective Well-being Questionnaire (CSSWQ). The sample consists of 102 males and 88 females, with a mean age of 17.83 years. The data were analyzed using independent samples t-tests and hierarchical regression. The study established that students have a moderate level of academic resilience and a higher level of well-being, with no statistically significant variation in students' academic resilience ( $t = 0.718$ ;  $p = 0.474$ ) or well-being ( $t = -1.596$ ;  $p = 0.112$ ) across gender. Further, the study discovered that resilience significantly predicted academic well-being ( $B = 0.425$ ;  $SE = 0.050$ ;  $t = 8.50$ ;  $p < 0.001$ ). This study highlights the importance of promoting gender-sensitive intervention strategies that enhance the academic resilience and well-being of SHS students and help boost their educational attainment.

**Quansah, F., Agormedah, E. K., Ankomah, F., Srem-Sai, M., Nugba, R. M., Hagan, J. E., & Schack, T. (2024). Revalidation of teachers' sense of efficacy scale using Ghanaian in-service teachers: Multidimensional item response theory with factor analyses. *Psychology in the Schools*, 61(5), 1789–1807. <https://doi.org/10.1002/pits.23137>**

### **Abstract**

Teachers' Sense of Efficacy Scale (TSES), since its development, has gained much popularity because of its adequate psychometric properties. Yet, scholarly information on the soundness of this instrument in the African context has not been documented. Besides, the previous validation studies on the TSES have yielded mixed results with different factor structures, calling for further studies to test its utility and use across different cultures. The purpose of this study was to revalidate the TSES in Ghana using item response theory (IRT) complemented by factor analyses. Through a validation study approach, 693 basic school teachers were purposively sampled to participate in the research by responding to the Teacher

Efficacy Scale. The between-item and within-item multidimensional IRT analyses combined with factor analysis were performed to understand how the items functioned with intentions to propose a well-fit instrument within the Ghanaian context. The outcome of this research revealed that the original TSES with a three-factor structure, 24 items measured on a 9-point scale did not provide an optimal measure of teachers' self-efficacy within the Ghanaian context. Rather, a three-structure scale with 18 items and a 6-point scale offered a maximal measure of teachers' self-efficacy. The practical implications of the findings are discussed.

**Quansah, F., Srem-Sai, M., Agormedah, E. K., Ankomah, F., Hagan, J. E., & Schack, T. (2024). Moderated moderation modelling of subjective social status, pocket money and depressive symptoms of university students in Ghana. *Frontiers in Public Health*, 12, 1-12. <https://doi.org/10.3389/fpubh.2024.1325441>**

### **Abstract**

**Introduction:** Although the relationship between subjective social status and depression in university students has been well-established, this association could be seen as a spurious one. Previous studies have shown that key variables like financial resources and age could play key roles in explaining the variances in social status and mental health outcomes. In this research, we assessed the complex interrelationships between subjective social status, financial resources at their disposal and depressive symptoms among university students within their young and middle adulthood stages.

**Methods:** A cross-sectional survey was conducted in a university in Ghana to sample 1134 university students through accidental sampling. The McArthur Scale and WHO-5 Well-being measure were used for the data collection.

**Results:** The results revealed that higher levels of subjective social status were associated with lower levels of depression. It was further found that the interaction between students' pocket money and age played unique roles in the relationship between subjective social status and depression.

**Conclusion:** The study findings call on stakeholders in education to explore funding opportunities and to examine ways of empowering parents (financially) to adequately support the students. Health educationists and promoters, including psychologists, school counselors and parents could compliment these efforts by helping to train and empower students through self-regulation or management skills to help improve their well-being. Continuous efforts are required to improve the financial status and mental health of students.

**Srem-Sai, M. (2024). Cognitive appraisals of organizational stressors and coping styles of football coaches and players in Ghana. *Advances in Social Sciences Research Journal*, 11(3), 464-482. <https://doi.org/10.14738/assrj.113.16632>**

### **Abstract**

The study assessed how football coaches and players appraised and coped with stressors they experienced or encountered. Specifically, the study assessed the following: (1) stress appraisal mechanisms employed by coaches and players, (2) coping mechanisms adopted by coaches and players, and (3) association between stress appraisals and coping styles among coaches and players in the Ghana national football league. Employing the descriptive survey design, census sampling was used to select 424 footballers and 44 coaches who answered the Stress

Appraisal Measure (SAM) and the Modified Coping Orientation to Problems Experienced (MCOPE) inventories. Descriptive statistics (means and standard deviation) and multivariate multiple regression were used to analyze the data. The findings showed that football coaches and players reportedly used more controllable-by-self and challenge appraisals and employed more problem-focused coping styles (increasing effort, active coping, and planning) than emotion-focused coping styles (seeking social support for emotional reasons, venting of emotions, and self-blame) during stressful situations. Further, those who used facilitative appraisal mechanisms adopted functional coping mechanisms and vice versa. Sport psychologists are encouraged to organize regular psychological training workshops on a variety of functional coping styles (e.g., cognitive restructuring, planning, increasing effort and active coping) to help football coaches and players deal with the demands associated with competitions to enhance their psychological well-being.

**Srem-Sai, M., Ankomah, F., Agormedah, E. K., Quansah, F., Hagan, J. E. Jnr., Okan, O., Dadaczynski, K., & Schack, T. (2024). Investigating age-related COVID-19 digital health literacy and sense of coherence among adolescents and young adults in schools across Northern Ghana. *BMC Digital Health*, 2, 7. <https://doi.org/10.1186/s44247-024-00063-2>**

## **Abstract**

**Introduction** The empirical link between digital health literacy (DHL) and sense of coherence (SoC) has been extensively discussed in the literature. Yet, there seems to be limited evidence regarding the roles of age and depression status in the link between DHL and SoC of adolescents and young adults (AYAs), especially during the COVID-19 crises. This study investigated the interplay between age, DHL, SoC and psychological distress. Particularly, the study examined the following: (1) relationship between DHL and SoC, (2) moderating role of age in the relationship between DHL and SoC as well as (3) moderating role of depression in the relationship between DHL and SoC.

**Methods** The study used a cross-sectional survey to select 998 AYAs in secondary schools in Northern Ghana through questionnaire administration using a stratified sampling procedure.

**Results** Findings reveal that age was positively and significantly related to DHL and SoC. However, age failed to moderate the relationship between DHL and SoC. With the same level of DHL, students who exhibited depressive symptoms compared to those without, had lower levels of SoC regardless of their age.

**Conclusions** Although AYAs' DHL are likely to differ across different age brackets, this gap does not affect their rates of SoC and depression. Nonetheless, there is a need to improve DHL through regular standard training on internet search using basic audio-visual materials like laptops, smart phones, tablets, and lab computers for adolescent and young adult students. Additionally, school authorities, in collaboration with other stakeholders should develop student-centred cognitive-behavioural strategies aimed at reducing depressive symptoms in secondary school students who are at risk of depression in Northern Ghana.

**Srem-Sai, M., Quansah, F., Agormedah, E. K., Hagan, J. E. Jr., & Schack T. (2024). Evaluating teachers' workplace climate and anxiety response during the covid-19 pandemic: The role of information seeking platforms. COVID, 4(3), 378-390. <https://doi.org/10.3390/covid4030025>**

### **Abstract**

The COVID-19 disease affected the school workplace climate for teachers and led to psychological consequences. However, it is not clear how the workplace climate affected the anxiety levels of teachers. This study assessed the connection between workplace climate and COVID-19-related anxiety among senior high school (SHS) teachers during the COVID-19 pandemic. This study further examined the moderating role of professional and social media platform use on the relationship between workplace climate and COVID-19-related anxiety among teachers. Through a cross-sectional survey design, 395 high school teachers were conveniently sampled from various schools in the Central Region of Ghana. A questionnaire was used to survey participants, and the obtained data were analysed using descriptive statistics as well as simple linear regression and moderation analyses with Hayes' PROCESS. This study revealed a negative association between workplace climate and anxiety. The relationship between workplace climate and anxiety was contingent on social media use but not professional platform use. Therefore, the consumption of unscrutinised COVID-19-related information on social media heightened fear and anxiety among teachers, even in the midst of a safe workplace environment. An effective strategy against teachers' COVID-19-related anxiety required the provision of accurate science-driven information about the virus. School counseling psychologists, school welfare officers, and school health coordinators are encouraged to collaborate towards designed interventions that promote a safe working environment and the mental health of teachers.

**Agormedah, E. K., Quansah, F., Srem-Sai, M., Ankomah, F., Hagan, J. E., Jr, & Schack, T. (2023). Reproducibility of the brief religious coping inventory with African athletes' sample using ordinal factor analytical approach. Frontiers in Psychology, 13, 1038202. <https://doi.org/10.3389/fpsyg.2022.1038202>**

### **Abstract**

**Background:** Previous studies have revealed that religious coping strategy is common among athletes due to the stressful experiences before and during competitions as part of the mental preparations they go through, the uncertainty of sporting outcomes, and other organizational issues they encounter. This research assessed the reproducibility of the Brief Religious Coping (RCOPE) instrument in an African setting using athletes' samples from different countries. Particularly, the research sought to assess the (1) factor structure of Brief RCOPE with an African sample, (2) construct validity of the RCOPE measure, and (3) measurement invariance of the RCOPE instrument based on gender and nationality.

**Methods:** The study surveyed a convenient sample of 300 athletes, including 164 male and 136 female athletes, from 3 African countries (Benin, Ghana, and Nigeria) who participated in the 2018 West African University Games. The Brief RCOPE instrument was administered to the athletes for validation purposes before the competition. Exploratory and confirmatory factor analyses were conducted using the ordinal factor analytic approach.

**Results:** This validation study confirmed the two-factor dimension (positive and negative religious coping) of the Brief RCOPE measure. Further, all items for each of the dimensions of the inventory contributed significantly to the measure of the Brief RCOPE domains. The

positive and negative religious coping dimensions contributed more than half of the variance of their respective indicators. Measurement invariance across gender and nationality was confirmed.

Conclusion: Sufficient evidence was gathered to support the interpretation and use of the Brief RCOPE measure. Coaches and sports psychologists could adopt the Brief RCOPE measure to understand the mental or thought patterns of religious athletes based on existential concerns or stress accrued from impending competitions to inform appropriate religious coping interventions. This notwithstanding, the Minimum Clinical Important Difference (MCID) of the Brief RCOPE should be further investigated to enhance the utility of the instrument for use in intervention-based studies.

**Amoako, I., Srem-Sai, M., Quansah, F., Anin, S., Agormedah, E. K., & Hagan, Jnr, J. E. (2023). Moderation modelling of COVID-19 digital health literacy and sense of coherence across subjective social class and age among university students in Ghana. BMC Psychology, 11(1), 337. <https://doi.org/10.1186/s40359-023-01334-9>**

## **Abstract**

**Background** The study assessed the moderation modelling of digital health literacy and sense of coherence across subjective social class and age among university students in Ghana during the COVID-19 pandemic.

**Methods** A total of 1160 students were conveniently sampled from two universities namely, the University of Education, Winneba and University of Cape Coast, using the descriptive cross-sectional survey design. Preliminary analysis was performed using descriptive statistics, whilst multivariate multiple regression and moderation analyses (Haye's Model) were employed to analyze the main data.

**Results** The study revealed that COVID-19 digital health literacy is directly and positively associated with sense of coherence among university students. Further, higher subjective social class positively and strongly moderated the relationship between COVID-19 digital health literacy and sense of coherence among university students. Additionally, the relationship between COVID-19 digital health literacy and sense of coherence was indirectly prominent among relatively older university students than younger ones.

**Conclusions** The findings have implications for university management/authorities and public health agencies to organize effective orientation and self-management training programmes for university students.

**Azaiez, F., Tannoubi, A., Selmi, T., Quansah, F., Srem-Sai, M., Hagan, J. E. Jr., Azaiez, C., Bougrine, H., Chalghaf, N., Boussayala, G., Ghaimi, I., Lami, M. I., Dawood, M., Al-Hayali, A., Mazyed, A. W., Al-Rubaiawi, S., Muttalak, N., & Al-Sadoon, N. (2023). Uncovering cognitive distortions in adolescents: Cultural adaptation and calibration of an Arabic version of the “How I Think Questionnaire”. *Psych*, 5(4), 1256-1269. <https://doi.org/10.3390/psych5040083>**

### **Abstract**

This study adapted and validated the How I Think Questionnaire (HIT-Q), intending to develop an Arabic version of the measure. The study assessed the (a) factorial structure of the Arabic version of the How I Think Questionnaire (A-HIT-Q), (b) construct validity evidence of the A-HIT-Q based on the internal structure of the scale, and (c) criterion validity evidence, highlighting how the cognitive distortions measure relates to some key theoretical variables such as depression. This study involved 762 Tunisian students aged 15-22 years, using a non-probabilistic sampling method. The students were boys (n = 297) and girls (n = 465). They completed self-report forms on Arabic-HIT-Q, depression (HADS), sleep (ISI), and physical activity participation, adhering to all relevant ethical considerations. Exploratory analysis revealed four factors which accounted for 73.46% of the variations in the distortion measure. Reliability analysis showed good internal consistency ( $\alpha = 0.915$ ) and temporal stability ( $r = 0.879$ ). Criterion validity evidence showed cognitive distortion Psych 2023, 5, 1256-1269. <https://doi.org/10.3390/psych5040083> [https://www.mdpi.com/journal/psych\\_Psych](https://www.mdpi.com/journal/psych_Psych) Psych 2023, 5 1257 (as measured with the A-HIT-Q) was significantly associated with physical activity participation, anxiety, depression, and insomnia. However, no significant relationship has been observed between cognitive distortion, age, gender, and study levels. The evidence gathered supports the utility of the A-HIT-Q. Thus, the instrument demonstrates high efficacy in assessing the levels of cognitive distortions among adolescent students residing in Arabic-speaking regions.

**Britwum, F., Anin, S. K., Agormedah, E. K., Quansah, F., Srem-Sai, M., Hagan, J. E., & Schack, T. (2023). Assessing internet surfing behaviours and digital health literacy among university students in Ghana during the COVID-19 pandemic. *COVID*, 3(3), 405-417. <https://doi.org/10.3390/covid3030030>**

### **Abstract**

This study assessed the internet surfing behaviours and digital health literacy (DHL) among university students in Ghana during the COVID-19 pandemic. The research was guided by three major objectives: (1) examine the online information searching behaviours of university students during the COVID-19 pandemic, (2) investigate the thematic areas university students searched during COVID-19, and (3) examine the DHL level of university students. The study conveniently sampled 1014 university students to solicit their responses through questionnaire administration. Using frequency and percent counts, multiple response analysis, as well as mean and standard deviation, the study revealed that the predominant platforms university students used were search engines (n = 954, 94.1%), social media (n = 950, 93.7%), and WhatsApp (n = 950, 93.7%). Predominant themes among the thematic areas university students searched during COVID-19 were symptoms of COVID-19 (n = 701, 81.7%), COVID-19 vaccines (n = 689, 80.3%), and transmission routes of the coronavirus (n = 664, 77.4%). Further, other results showed that students enrolled in health-related programmes showed significantly higher levels of DHL compared to those in non-health-related programmes. The findings suggest the need to implement health education measures to strengthen students' health literacy capacities and their DHL ability. This finding requires governments and health authorities to implement evidence-informed health communication



strategies to provide valid and reliable health information concerning the COVID-19 pandemic and support individuals to make health-promoting decisions.

**Hagan, J. E. Jr., Quansah, F., Frimpong, J. B., Agormedah, E. K., Nugba, R. M., Srem-Sai, M., & Schack, T. (2023). Gender digital health literacy gap across age: A moderated moderation effect on depression among in-school adolescents in Ghana during COVID-19. *Psychology in the Schools*, 6(9), 1–17. <https://doi.org/10.1002/pits.22942>**

### **Abstract**

The COVID-19 pandemic amplified the need for digital health literacy aimed at reducing the psychological distress levels of people, including in-school adolescents. Available evidence suggests the presence of a gender health literacy gap among adolescents in schools in Ghana and beyond. Previous literature has established the role of age in digital health literacy levels. What is unknown is how gender and age interact with digital health literacy levels to influence the levels of depression. This research assessed how gender digital health literacy gap across different age groups relates to the depression levels of adolescents during the COVID-19 pandemic. A cross-sectional survey was conducted using 942 students from secondary schools in Ghana who were sampled using the stratified sampling technique. Study participants completed the digital health literacy scale and World Health Organization (WHO-5) well-being index. Results from the two-way analysis of variance revealed a non-significant interaction between age and gender on digital health literacy, with significant main effects for gender and age. Further analysis from the moderated moderation analysis revealed that gender and age interact to moderate the relationship between digital health literacy and depression. The findings of this research stress the need for gender-age-specific intervention programs on digital health literacy to moderate depression levels during pandemics and other stressful situations.

**Hagan, J. E. Jr., Quansah, F., Ankomah, F., Agormedah, E. K., Srem-Sai, M., & Schack, T. (2023). Evaluating the moderating role of information seeking platforms on university students' risk perception and anxiety during the COVID-19 pandemic in Ghana. *Frontiers in Communication*, 8, 1-11. <https://doi.org/10.3389/fcomm.2023.1035593>**

### **Abstract**

**Introduction:** The emergence of COVID-19 resulted in heightened usage of online information seeking platforms among students aimed at obtaining information about the virus. This situation further increased the levels of risk perception and anxiety levels as students managed to stay safe. This study examined the roles of information seeking platforms; specifically, social media and professional platforms as moderators of the link between risk perception and anxiety among university students in Ghana. **Methods:** Participants were recruited from two universities in Ghana; namely, University of Education, Winneba (UEW) and University of Cape Coast (UCC) through a survey approach. The study conveniently sampled 778 participants who completed a set of questionnaires. **Results:** The study results revealed that COVID-19 risk perception was positively related to anxiety. Further, the use of specific online information platforms significantly moderated the link between risk perception and anxiety. Specifically, social media platforms significantly moderated the relationship between COVID-19 risk perception and anxiety level. Primarily, students who utilized social media as a COVID-19 information source reported high anxiety levels in the presence of high-risk perception compared to those who did not use social media. Additionally, professional



platform usage acted as a buffer in the positive link between COVID-19 risk perception and anxiety levels. In the presence of high risk perception, students who used professional platforms, compared to those who did not use professional platforms, showed significantly low anxiety levels. Conclusions: The findings suggest the key role social media and professional platforms played in shaping students' perceptions of COVID-19. These outcomes call for the swift scrutiny of health-related information obtained from social media platforms. Both users and disseminators of health-related information on social media platforms have the responsibility of verifying the credibility of whichever information they post and/or access. Risk perception should also be an integral part of effective risk communication planning in educational institutions during outbreak of diseases.

**Obeng, P., Sambah, F., Sarfo, J. O., Srem-Sai, M., Gbordzoe, N. I., Sorkpor, R. S., & Hagan, J. E. (2023). Prevalence and Predictors of Alcohol Use among School-Going Adolescents in Panama: A Population-Based Cross-Sectional Study. *Children*, 10(5), 891. <https://doi.org/10.3390/children10050891>**

### Abstract

This study investigated the prevalence and predictors of alcohol use among school-going-age adolescents in Panama. Using a national school-based cross-sectional survey, data from a proportionate sample of school-going adolescents aged 13–17 years were obtained from the 2018 Panama Global School-based Student Health Survey [GSHS]. Data were analysed with a Pearson's Chi-square test and weighted binary logistic regression. The results were reported with their corresponding adjusted odds ratio (AOR) at a 95% confidence interval (CI) and level of significance set at  $p < 0.05$ . The prevalence of alcohol use among adolescents in Panama was 30.6%. The odds of alcohol use were lower among adolescents in a lower grade than those in upper grades, and lower in those who did not eat from a restaurant than those who ate from a restaurant. Further, the likelihood of alcohol use was significantly high among those who engaged in physical fights, were seriously injured, were mostly worried, and whose parents used any form of tobacco. Other results showed that the odds of alcohol use were high among sedentary respondents, those who had multiple sexual partners and those who used amphetamines. Based on the present findings, a collaborative approach (i.e., stakeholders- the Ministry of Social Development and the Ministry of Education- community-individual levels) towards the development and adherence of appropriate interventions aimed at reducing alcohol use is required in Panama. Specific preventive interventions would be fundamental in promoting a positive school climate to help reduce adolescents' alcohol use and, perhaps, other anti-social behaviours (e.g., physical fights and bullying).

**Quansah, F., Agormedah, E. K., Hagan, J. E. Jr., Frimpong, J. B., Ankomah, F., Srem-Sai, M., Dadaczynski, K., Okan, O., & Schack, T. (2023). Subjective social status and well-being of adolescents and young adults in Ghanaian schools: Conditional process analysis. *BMC Psychology*, 11(1), 122. DOI: <https://doi.org/10.1186/s40359-023-01158-7>**

### Abstract

Background: With the growing concern and interest in the mental health and well-being of adolescents and young adults (AYAs) including those in schools, many studies have explored the bivariate relationship between subjective social status (SSS) and AYAs' subjective well-being (SWB). Acknowledging the spurious nature of this relationship, we assessed the relationship between SSS and SWB of AYAs in schools within Northern Ghana, focusing on the conditional indirect effect of monetary resource (MR) and sense of coherence (SoC).

**Methods:** We utilised a cross-sectional descriptive design to survey 1096 senior high school students from two regions in Ghana's Northern zone through a stratified sampling method. A questionnaire consisting of a number of calibrated standardized measures was used for the data collection. The data were processed using SPSS and PROCESS Macro and analysed using Hayes' conditional process analysis. **Results:** The results revealed that students' MR significantly moderated the relationships between SSS and SoC as well as SSS and SWB. A significant moderated mediation effect of MR and SoC on the relationship between SSS and SWB was found. Particularly, AYAs who reported higher levels of MRI, SSS and SoC reported a better SWB. **Conclusion:** The findings underscore the relevance of providing sufficient financial support for students in secondary schools in Ghana; thus, highlighting the sheer relevance of economic capital as a leading factor for better well-being. The findings also place much emphasis on building students' personal coping mechanisms as a key variable in explaining how the students' SSS and MR translate into having positive mental health outcomes.

**Quansah, F., Ankomah, F., Agormedah, E. K., Ntumi, S., Hagan, J. E. Jr., Srem-Sai, M., Dadaczynski, K., Okan, O., & Shack, T. (2023). A cross-sectional study of university students' pocket money variance and its relationship with digital health literacy and subjective well-being in Ghana. Health Science Reports, 6, e1095. <https://doi.org/10.1002/hsr2.1095>**

## Abstract

**Background** Mental health concerns of university students are gaining more attention since the emergence of the coronavirus disease. Consequently, scholars in education, health and psychology-related fields have attributed the dwindling subjective well-being (SWB) of students to their low levels of digital health literacy (DHL). However, little attention has been paid to an important variable like pocket money (PM) which might serve as a buffer against reduced levels of SWB. In this study, we explored the dynamics of PM and its linkage with DHL and SWB among university students in Ghana.

**Methods** With a cross-sectional design, a convenient sample of 1160 students was obtained from the University of Education, Winneba, Ghana. The COVID-DHL and WHO-5 Well-being instruments were used for the data collection for a 2 months period (February–March, 2021). Chi-square test, multivariate regression, simple linear regression, and PROCESS mediation analyses were performed with the use of SPSS software version 25.

**Results** The study found that while most of the students were financially supported by their parents ( $n=715$ , 61.6%), a larger proportion of them reported that their PM was either less sufficient or not sufficient ( $n=550$ ; 76.9%). Findings revealed a positive relationship between PM and SWB ( $B=-36.419$ ,  $p<0.001$ ;  $B=-13.146$ ,  $p=0.012$ ;  $B=-10.930$ ,  $p=0.043$ ), with this relationship mediated by DHL ( $B=-1.139$ , confidence interval [CI]  $[-2.073, -0.263]$  vs.  $-2.300$ , CI  $[-4.290, -0.532]$  vs.  $-8.366$ , CI  $[-14.863, -1.908]$ ).

**Conclusions** Students with little to insufficient PM were vulnerable to mental health problems, although this could be buffered by the high DHL levels. In practical terms, not only should the PM of university students be increased, but the sources of PM should be complemented since the sufficiency level of PM was associated with the source of finance. More importantly, parents should be empowered through job creation so that sufficient levels of PM can be provided to university students.

**Sambah, F., Quansah, F., Srem-Sai, M., Frimpong, J. B., Agormedah, E. K., Ankomah, F., & Hagan, J. E., Jr. (2023). Assessing secondary school students' digital health literacy, information searching behaviours, and satisfaction with online COVID-19 information in Northern Ghana. *Heliyon*, 9(7), e17936. <https://doi.org/10.1016/j.heliyon.2023.e17936>**

## **Abstract**

Available evidence suggests that managing the complexities of health information and the behaviours associated with information search call for adequate digital health literacy (DHL). Students' ability to judge the relevance of health-related information largely affects their level of satisfaction with the information. The study assessed DHL, information searching behaviours, and the link between DHL and COVID-19 information. The cross-sectional study utilised the multi-stage sampling technique in the selection of 1392 secondary school students in the Northern Region of Ghana. A DHL questionnaire was used to survey the students. The students displayed inadequate level of DHL concerning the relevance of online information. Predictably, most of them had not searched for information in the past four weeks prior to the data collection. Search engine portals, websites of public bodies, and news portals were the predominant platforms used for information search. Majority of the participants reported not being satisfied with the information they found on the internet about coronavirus. A significant association between DHL levels and utilization of COVID-19 information platforms was identified, such that students who showed high levels of DHL used platforms which had reviewed/professional content compared to those with low levels of DHL. Advanced DHL may serve as a disincentive to the consumption of information from sources which are not credible. There is an urgent call for collaboration among the ministries/agencies responsible for education and health, telecommunication networks, and civil society organisations for interventions aimed at integrating DHL in schools.

**Tannoubi, A., Ouergui, I., Srem-Sai, M., Hagan, J. E., Quansah, F., & Azaiez, F. (2023). Effectiveness of video modeling in improving technical skills in young novice basketball players: A quasi-experimental study. *Children*, 10(4), 687. <https://doi.org/10.3390/children10040687>**

## **Abstract**

(1) Objective: This is a quasi-experimental study that investigated the effect of four weeks of training sessions using video modeling (VM) on individual and collective technical skills in young novice basketball players. (2) Method: 20 players were equally assigned to either a control group (CG,  $n = 10$ ;  $12 \pm 0.7$  years) or a video modeling group (VMG,  $n = 10$ ;  $12.5 \pm 0.5$  years; visualizing videos before each session) were assessed before and after the four-week training period using the Basketball Skill Test of the American Alliance for Health, Physical Education, Recreation and Dance for individual techniques and three vs. three small-sided games for collective aspects. (3) Results: For the passing test, VMG induced higher performance than CG ( $p = 0.021$ ;  $d = 0.87$ ). For offensive balls post-intervention, higher values were recorded for VMG compared to CG ( $p = 0.003$ ;  $d = 1.81$ ). In addition, the number of attack balls index post-intervention was higher for VMG compared to CG ( $p = 0.001$ ;  $d = 0.28$ ). For losing the ball, VMG induced lower values than CG after the training intervention ( $p < 0.001$ ;  $d = -3.23$ ). The efficiency index was higher post-training compared to pre-training for VMG ( $p = 0.013$ ;  $d = 1.24$ ). (4) Conclusion: The study highlighted the importance of using video modeling as an effective strategy to improve technical skills and collective performance in novice young basketball players.

**Tannoubi, A., Quansah, F., Hagan, J. E. Jr., Srem-Sai, M., Bonsaksen, T., Chalghaf, N., Boussayala, G., Azaiez, C., Snani, H., & Azaiez, F. (2023). Adaptation and validation of the Arabic version of the university student engagement inventory (A-USEI) among sport and physical education students. *Psych, 5(2)*, 320-335. <https://doi.org/10.3390/psych5020022>**

## **Abstract**

The present study validated the University Student Engagement Inventory (USEI) in the Arabic language (A) by assessing its factor structure, construct validity, reliability, and concurrent validity. A total of 864 Tunisian Physical Education and Sport students provided data which was used to perform exploratory and confirmatory factor analyses, using samples comprising 366 (aged 19–25 years) and 498 (aged 19–26 years) students, respectively. The A-USEI, grade-point average (GPA), and Physical Education Grit (PE-Grit) scales were completed via online surveys. The exploratory factor analysis revealed that the A-USEI had three dimensions. The confirmatory factor analysis indicated that the second-order model was more suitable than the first-order multi-factor model. Using the indicators for the second-order model, the three factors showed good reliability, with their average variance extracted (AVE) values reflecting sufficient validity. The correlation analyses between the two scales' scores and the A-USEI scores showed a moderate correlation, confirming the adapted scale's concurrent validity. The study concludes that A-USEI is a valid tool for assessing student engagement among Arabic students. In addition, the practical implications and directions for future research are discussed.

**Tannoubi, A., Quansah, F., Magouri, I., Chalghaf, N., Bonsaksen, T., Srem-Sai, M., Hagan, J. E., Handrianto, C., Azaiez, F., & Bragazzi, N. L. (2023). Modelling the associations between academic engagement, study process and grit on academic achievement of physical education and sport university students. *BMC Psychology, 11*, 418. <https://doi.org/10.1186/s40359-023-01454-2>**

## **Abstract**

**Objective:** The present study examined the impact of academic engagement, study processes, and grit on the academic achievement of physical education and sport university students. **Methods:** An internet-based survey recruited 459 university students aged 19-25 years ( $M = 21 \pm 1.3$ ) in physical education and sports (PES) to fill out questionnaires on Physical Education-Study Process Questionnaire (PE-SPQ), Physical Education-Grit (PE-Grit), academic engagement (A-USEI), and Grade Point Average (GPA). A path analysis was carried out to understand variable relationships. **Results:** Data from each variable exhibited symmetrical and normal distribution, as indicated by the skewness and kurtosis values. The model's fit indices showed sufficient Comparative Fit Index ( $CFI = 0.92$ ), Tucker-Lewis Index ( $TLI = 0.90$ ), Goodness of Fit Index ( $GFI = 0.99$ ) and Normed Fit Index ( $NFI = 0.90$ ) and showed acceptable levels. The results indicated a statistically significant positive impact of engagement ( $\beta = 0.299$ ,  $p < 0.001$ ) and study processes ( $\beta = 0.397$ ,  $p < 0.001$ ) on academic achievement. However, the effect of grit on achievement was non-significant. **Conclusions:** Academic engagement as well as study processes are two important factors predicting academic achievement while grit seems to be not a major predictor. Hence, physical education and sport faculty and university administrators should prioritize student engagement as a determinant of academic outcomes by reforming or redesigning physical education and sport curriculum modules that can facilitate engagement.

**Acheampong, E. Y. (2024). Analysis of African athletes give-back behaviours as cultural identity or popularity. *African Identities*, 1–23. <https://doi.org/10.1080/14725843.2024.2373236>**

### **Abstract**

This study explores how male Ghanaian migrant players utilise Give-back behaviours to demonstrate their connectedness and sense of belonging to their communities. The literature provides theoretical insights for understanding player behaviour from the perspectives of personal values, objectives, conceptions, or economic interests, all of which can define a person’s cultural identity. Players’ actions may either determine a return on investment to their families, relatives and the community or strengthen the relationship with their local communities. Qualitative interviews with 20 former and current professional Ghanaian players contribute to explaining how their economic and non-economic investments in their communities are influenced by cultural identity. Findings reveal that Ghanaian players’ give-back behaviours are not only based on social norms and cultural values but also cement their cultural affiliation in the communities. The study can provide valuable information for African governments to congeal the African diaspora’s shared identity and history via socioeconomic investments to promote local and national development.

**Acheampong, E. Y., Akwaa-Sekyi, E. K., & Frimpong, R. (2024). Identification of sport talents through leisure activity: a pathway for achieving football commercialization. *Leisure/Leisure*, 1–29. <https://doi.org/10.1080/14927713.2024.2420128>**

### **Abstract**

The study identifies how the sport talents of young people are identified through leisure activity, which supports them to achieve professional status. Through recreational specialization and network support, we understand how amateur athletes’ leisure participation evolved through realizing their professional sports dreams. Leisure and recreational specialization studies contribute to explaining players’ progression from their street football activity in communities. Semi-structured interviews and interactions with 19 former African professional players reveal that they relied mostly on networks of recreational intermediaries (e.g. agents, scouts) to reach their recreational specialization, offering them professional sports careers abroad. Former players experienced some challenges through their involvement in leisure behaviour as they sought to commercialize their leisure activity of football for socioeconomic benefit. This paper presents valued evidence for recreational managers or recreational intermediaries to support children’s leisure pursuits in identifying their talents and prospects for development to enhance their livelihood and well-being in the future.

**Frimpong, R., & Acheampong, E. Y. (2024). “If you don’t arrange your bets well you will still lose”: Gambling strategies of visually impaired students. *Journal of Gambling Studies*, 2024, 1-22. <https://doi.org/10.1007/s10899-023-10279-y>**

### **Abstract**

in gambling activities. However, people with visual impairments’ energetic participation in sports betting activities is unexplored. This article highlights sports betting strategies of visually impaired students to understand how their motives affect their gambling behaviours as an alternative to their survival. Six male adults aged between 27 and 40 years participated using semi-structured interviews, which were conducted face-to-face, recorded, transcribed, and thematically analysed with the Braun and Clarke model. Findings show that sports

betting prevails in communities fostering peer persuasion including family relations serving as an inducer for visually impaired students. Their strategies are varied including the fewer the better concept based on teams' selection dynamics. While they are inspired by potential economic gains, some recognise it as acquiring entrepreneurial skills because of risk-taking, thus asymmetry and disconnected. The article recommends stakeholders' education to provide better policies that can remind them to bet for leisure or desist from gambling.

**Acheampong, E. Y., Akwaa-Sekyi, K. E., & Peprah-Yeboah, A. (2023). Investments in sport: Fans impressions of Qatar 2022. *Journal of Sport & Tourism*, 2023, 1-19. <https://doi.org/10.1080/14775085.2023.2252405>**

### **Abstract**

Qatar's hosting of the FIFA World Cup (WC) was met with criticism and mixed-feelings, especially certain journalists from the Global North. Others acknowledged that it was going to boost economic activities and deepen the sports-tourism nexus. The overarching aim of this paper is to analyse fans' impressions of Qatar 2022 regarding their lived experiences in the city of Doha, which helps to understand and clarify some negative perceptions held before and during the World Cup. Interviews with 31 participants arbitrarily sampled from different countries reveal that Qatar 2022 brought fans imaginable excitement and indelible lived experiences. According to some, it will take decades for successive host countries to match those lived experiences, spectacular displays, smooth commutations and excellent organisation. Some tag it "the best FIFA world cup ever". Results show that Qatar 2022 inspired, gingered and spurred fans on albeit, other mixed-feelings associated with the tournament. We report that there is a perceived image-rebranding strategy that worked successfully for the host nation. The fans further recommend that FIFA revisit its ticketing processes and systems to make them more accessible and fluid without difficulties. Fans suggest that subsequent hosts of the World Cup could be confined to 'one city' only so that they can watch two matches a day as experienced in Qatar. However, fans have concerns about the WC event becoming more expensive for an average supporter in the future.

**Anim, S., Sarpong, E. O., Apaak, D., Opoku-Antwi, E., & Kwakye, J. A. (2024). Impact of morphological variables on throwing ability: A gender-driven exploration among athletes in Cape Coast Metropolis, Ghana. *International Journal of Sports Science and Physical Education*, 9(1), 7–14. <https://doi.org/10.11648/j.ijsspe.20240901.1>**

### **Abstract**

This study represents a comprehensive exploration of the intricate interplay between morphological variables and throwing ability, specifically examining gender-specific variations among athletes in Cape Coast Metropolis, Ghana. In the pursuit of an understanding, data were collected from a diverse sample of 420 athletes, comprising 210 males and 210 females, aged between 16 and 22. The investigation illuminated that athletes within the Cape Coast Metropolis possess not only well-developed body dimensions but also an adequate level of fitness, both integral to overall athletic performance. This insight was substantiated by the statistical analysis, which demonstrated that morphological features accounted for a substantial 64% to 73% of the variance in throwing ability. The study employed predictive equations tailored for male and female athletes, further illustrating the influential role of specific morphological characteristics. For male athletes, the equation  $TB = -12.53 + .577handspan + .053Body\ weight + .109Total\ Arm\ Length - .055thigh\ girth + .053Chest\ Circumference\ Expiration - .094Triceps\ Skin\ Fold$  encapsulates the predictive model. On the



other, the equation  $TG = -8.11 + .597\text{Handspan} + .068\text{Upper Arm Length} + .013\text{Body Weight} + .021\text{Thigh Girth}$  encapsulates the model for female athletes. These equations provide practical tools for forecasting throwing proficiency within the local athletic community in Cape Coast Metropolis. This research contributes significantly to the field, emphasizing the pivotal role of morphological variables in shaping athletic performance. The findings underscore the importance of training programs and talent identification processes based on an individual's morphological characteristics, with the potential to enhance overall athletic development in the Cape Coast Metropolis region.

**Aloko, E. A., Ansah, W. E., Apaak D., Sarpong, E. O., Munkaila, S., & Sorkpor, R. S. (2023). Mediating effect of physical activity on relation between cardio-respiratory fitness and physical function capacity of older adults. *British Medical Journal*, 2(1), 1-20. <https://doi.org/10.1101/2023.06.06.23291026>**

### Abstract

The ageing process is normally accompanied by several physiological changes like a decline in physical function and increased risk of chronic health conditions. In older adults, maintaining physical function and cardiovascular health is essential for maintaining independence and quality of life. Cardio-respiratory fitness and physical functional capacity (PFC) are two important indicators of physical health in older adults. This study aims to investigate the mediating effect of physical activity (PA) on the relationship between CRF and PFC in older adults. Using quantitative cross-sectional design, we employed a multistage sampling strategy to recruit 998 older adults from Navrongo for this study. The senior fitness test battery, international physical activity questionnaire (IPAQ) short form for elderly, weighing scale and tape measure were used to collect the data. The findings revealed that, 53.4% and 53.9% of these older adults had reduced PFC and CRF respectively. It was also found that PA partially mediates the relationship between CRF and PFC of the older adults with an indirect effect of CRF on PFC as  $\beta = .0030$ ,  $t = 1.579$   $p < .05$ , with a direct effect of CRF on PFC,  $\beta = .867$ ,  $t = 42.954$ ,  $p < .05$ , and the total effect,  $\beta = .872$ ,  $t = 43.110$ ,  $p < .05$ . We concluded that physical activity partially mediates the relationship between CRF and PFC among older adults in Navrongo. Therefore, there is the need for evidenced-based intervention to promote PA among these older adults to improve their PFC and quality of life.

**Aloko, E.A., Munkaila, S., Apaak D., Sarpong, E.O., Sorkpor, R. S., & Ansah, W.E. (2023). Body weight and cardio-respiratory fitness: Predictors of physical function capacity among older adults. *British Medical Journal*, 1(1), 1-23. <https://doi.org/10.1101/2023.06.05.23291006>**

### Abstract

Ageing is an inevitable part of human life, thus, everyone may grow and become old. The ageing process is characterized by reduced physical activity, accumulation of fat and loss of muscle mass resulting in weight gain and reduced cardio-respiratory function that leads to loss of physical function capacity. Therefore, the purpose of this study was to determine the extent to which body weight and cardio-respiratory endurance predict physical functional capacity of older adults in Navrongo, Ghana. This study employed quantitative cross-sectional design, using a multistage sampling method with 998 aged (60yrs+) participants. The senior fitness test battery, international physical activity questionnaire (IPAQ) short form for elderly, weighing scale and tape measure were used to collect the data. The independent t-test and multiple regression were applied to analyse the data. The results indicated that physical activity levels were generally minimal among both men and women, but women were more overweight, had



reduced cardio-respiratory function and physical function capacity. It is concluded that, body mass index and cardio-respiratory endurance are significant predictors of physical function capacity among older adults in Navrongo. It is recommended that, education on the health benefits is provided and regular participation in physical activity is done to promote regular exercise among these older adults. A longitudinal study is needed to explore the moderation-mediation role of physical activity on the relation of cardio-respiratory function and physical function capacity among older adults.

**Luguterah, A. W., Mohammed S. M., Apaak, D. & Abieraba, R. S. K. (2024). The capabilities of sports as an option for poverty reduction strategy. *Journal of Community & Applied Social Psychology*, 34(4), 1-17. <https://doi.org/10.1002/casp.2834>**

### **Abstract**

When implemented strategically, sports can address various socio-economic challenges and contribute to improving the well-being of individuals and communities. This study explores the perceptions of citizens on the capabilities of sports in its present state in Ghana as an option for poverty reduction strategy. The researchers combined both qualitative and quantitative approaches, methodologies and techniques in this study. The researchers made use of questionnaires and interviews to gather data for this study. The study implored the integration of data methods by using sequential approach, and the six steps of thematic analysis proposed by Braun and Clarke (2012, Thematic analysis, American Psychological Association) in the data analysis. The research recognised that participation in sports can improve one's health, give one life skills and foster a sense of community togetherness. However, given the weak foundation for sports development in Ghana, the current situation of sports in the country cannot be used as a strategy for reducing poverty.

**Seibu, M. (2023). Influence of perceived prevalent mentors' mentoring characteristics on University of Education, Winneba physical education student-interns' career development in Ghana. *Educational Justice Journal*, 1, 1-14. <https://edjusticejournal.org/>**

### **Abstract**

This study assessed the perceived prevalent mentors' mentoring characteristics on University of Education, Winneba physical education student-interns' career development in Ghana. A descriptive cross-sectional survey design and census sampling technique guided the development and selection of participants for the study. A self-developed and validated questionnaire with a reliability co-efficient of .74 was used for data collection from 122 PE student-interns. Mean, Standard Deviation and Multiple Linear Regression were used to analyse the Data. The findings indicated that pedagogical content knowledge and satisfaction of mentoring were the least ranked variables for knowledge and psycho-social characteristics respectively. Also, mentors mentoring characteristics accounted for 27% prediction of intern-students career development. It is therefore recommended that Institute of Teacher Education and Continuous Professional and Department of Health, Physical Education, Recreation and Sports UEW should consider mentors' mentoring characteristics in selecting, training and assigning mentors to student-interns for effective career preparation and development. Keywords: Career development, Ghana, knowledge characteristics, mentoring characteristics, psychosocial characteristics, student-interns

**Seibu, M., Ansah, E. W., Amissah-Essel, S., Pufaa, H. A. Jnr., & Ofori, P. K. (2023). Interpretative phenomenological analysis of physical education student-interns' experiences: Challenges and the role of mentors. International Journal of Scientific Engineering and Science, 7(2), 31-39.**

### **Abstract**

The study explored lived experiences of physical education (PE) student interns' experiences, challenges and the role of mentors during internship. The participants were 12 PE students and nine mentors who completed four months (one semester) internship in Ghana. These participants were purposively sampled and interviewed using semi-structured interview guide. The conversations were audio-taped, transcribed, member checked and peer reviewed. The data were analysed using Interpretative Phenomenological Analysis (IPA). The findings showed revealed: (1) most student interns did not get the chance to observe their mentors within the first three mandatory weeks, (2) student interns' lesson plans were not regularly vetted, (3) mentors seldom gave student interns constructive feedback, (4) logistic challenges, (5) institutional challenges, (6) technical challenges, (7) psychological challenges, (8) most student interns needed further mentoring in career development. It is recommended that teacher education institutions give mentors regular training and orientation to better equip them for effective mentoring of PE student interns. Keywords— Challenges, feedback, Ghana, internship, pedagogical skills, phenomenological analysis.

### **Conferences/Workshops/Symposia/Seminars with Presentations**

**Acheampong, E. Y. (2024, January 29-30). Expert Group Meeting [Paper presentation]. United Nations (IOM) Networks on Migration organised by Mission 89 NGO at the London Campus of Loughborough of University, London.**

**Acheampong, E. Y. (2024, January 24-26). Panel member [Paper presentation]. Creating a level playing field: Building sustainable and regular migration pathways for African athletes, Noon Hotel-Abidjan Plateau.**

**Aboagye, E., Acheampong, E. Y., Frimpong, R., & Fraser Carson, F. (2023, December 15-16). Understanding elite female football coaches' experiences and reflections in a male-dominated environment in Ghana [Paper presentation]. The Role of Sport in Society: Women, Sport, and Social Changes, Zagreb.**

### **Abstract**

The rationale of this study is to examine the career experiences of elite female football coaches in Ghana. More importantly, we focus on their motives, the challenges of football coaching and their experiences along their career paths. The study draws from literature on female coaches in football to understand their experiences and reflections in their chosen careers. The findings of the study relied on in-depth semi-structured interviews with five elite female football coaches aged between 28 and 50 years. Participants' responses reveal that both intrinsic and extrinsic motives drive them into football coaching including learning experiences from overseas, a strong desire to break the gendered hegemony of coaching in Ghana, serving as role models, enjoyment, satisfaction and passion for their chosen careers. Results indicate that they encountered sociocultural, organisational, personal and interpersonal challenges. Also, they experience gender stereotyping, limited career mobility,

sexism and marginalisation, which prevent them from becoming elite coaches. The study provides useful data for stakeholders including Ghana Football Association (GFA) to use effective strategies (e.g., special incentives for women coaches) to attract and retain women in the football coaching space.

**Acheampong, E. Y. (2023, March 22–25). Young African athletes: Challenges and constraints of the ‘unknown’ career abroad [Paper presentation]. 38th Annual Gwendolen M. Carter Conference and 14th Sports Africa Network Meeting at the University of Florida Campus, Florida, Florida.**

### **Abstract**

Scholars have documented certain reasons behind African footballers’ migration to leagues in the Global North. These include economic potential, insensitivity to players’ welfare, lack of professionalism and opportunities at home, unavailability of sporting facilities, and the influence of families in shaping the decision of players to play sports particularly, football. The African youth can face migration barriers because of a lack of information, knowledge and understanding of their host country. This paper hopes to provide a supportive mechanism for migrant African youth athletes to adapt and cope with the ‘unknown’ while plying their trade abroad. Interviews with a score of African professional players through their experiences and the literature on football migration contribute to understanding how young players can acclimatise and cope, as they pursue their international football dreams. Findings show that young players must prepare to deal with challenges such as cultural shock, racism and discrimination, unexpected injury and changes in team management by coping in order to achieve their professional dreams. Results indicate that players should have an understanding of the ‘transitional experience analysis’ which can support them to become successful while coping with those challenges without difficulty. The paper recommends that young players have access to information and awareness of supportive programmes and mechanisms (e.g., linguistic and cultural mediators) to assist their migrant integration with the team and into society. Again, professional clubs “hiring” and/or “sending” and intermediaries (e.g., agents, club officials) of these players should commit to preparing and supporting their settlements in their new environment.

**Acheampong, E. Y., & Frimpong, R. (2023, June 1-2). Migration Experience Analysis of African Footballers: A model for survival in leagues abroad [Paper presentation]. SiNAFE Final Conference-Transgressing Boundaries: Migration and Sport Conference, Istanbul.**

**Frimpong, R., & Acheampong, E. Y. (2023, August 14-17). Gambling strategies of students with visual impairments: A sociological perspective [Paper presentation]. ISSA World Congress 2023, Ottawa.**

### **Abstract**

Few studies have focused on people with hearing loss and intellectual disabilities engaging in gambling activities. Less is known about people with visual impairments and their sports betting activities in the non-Western context. This study employs a sociological approach to analyse sports betting among students with visual impairments to understand how social structures and institutions may have failed them resulting in their active engagement in gambling as an alternative to their survival. Seven male adults aged between 27-34 years participated using semi-structured interviews, which were conducted face-to-face, recorded, transcribed and thematically analysed with the Braun and Clarke model. Findings show that sports betting prevails in communities fostering peer persuasion and family relations serve as

an inducer for students with visual impairments due to it becoming an institutionalised norm among university students. While some are attracted by wins, others bet to demonstrate their passion for football and leagues by experimenting with their entrepreneurial skills. The study recommends stakeholders' education, providing better policies and constantly reminding them to bet responsibly for leisure or desist from gambling.

## **Article(s)/Chapters in an Edited Book**

**Acheampong, E. Y., & Frimpong, R. (2024). Students with visual impairments and sports betting: The role of the media. In U. S. Akpan (Ed.), Discourses in Sport Communication in Africa and the African Diaspora Book Discourses in Sport Communication in Africa and the African Diaspora. Routledge (Taylor & Francis Group), London. <https://doi.org/10.4324/9781003462156>.**

### **Abstract**

With many groups at-risk of gambling, some scholars have recommended research into people with hearing loss and others with similar disabilities. Yet, people with visual impairments (VIs) and their sports betting activities have eluded scholarship. Drawing on interdisciplinary studies and interviews with six student–teachers with VIs contributed to analyzing their engagement in betting activities, using mass media and discussions on sports, particularly football. Despite media being a possible influencer on their betting research, the students mostly depend on pundits' discussions of sporting events from different media outlets, which inform their final choices to stake their sports bet. Findings show that beyond their usual financial attraction, those visually impaired fancy the “bragging rights” of satisfying their supremacy over the sighted people into sporting betting on campus. Results indicate they strongly rely on sports pundits' discussions alongside the specialized app on their mobile phones to make informed decisions on their bets. The study is fascinating as it explains the strategies of the students by constantly relying on multiple media information to facilitate their sports betting activities as they mostly win more than the sighted.

**Acheampong, E. Y., Darko, A. R., & Frimpong, R. (2024). Conceptualising social contributions through football: Analysis of women football managers in West Africa. In B. Graeff, S. Šafaříková, & L. C.Sambili-Gicheha (Eds.), Routledge handbook of the global south in sport for development and peace. Routledge (Taylor & Francis Group), London. <https://doi.org/10.4324/9781032667805>.**

### **Abstract**

Some women have made notable progress in leadership in corporate businesses and institutions, yet females managing male football teams in West Africa are under-researched. In Ghana, managing a football team is a preserve of men only in the communities. By exploring further, this study provides the rationale behind women managers of Colts football (entirely young boys) and understands how they deal with challenges at the level of youth football management. The literature on youth football management and interviews with six female managers revealed exciting perspectives in the sector. Findings show that women managers' behaviour is based on social contributions towards supporting boys' wandering in the communities. However, they face challenges such as parental attitudes, lack of governmental support, little or no sponsorship and no social recognition from football associations and the local authorities as a barrier to females managing male football. The study recommends that stakeholders in the football industry support enthusiastic and committed women managers, using football as a social tool to promote and unearth talent for development, which can

help reduce social vices among boys in West Africa while shedding light on the gendered dynamics, they face in the setting up of grassroots football sport for development and peace (SDP) programmes.

**Acheampong, E. Y., & Frimpong, R. (2023). Globalization and digitisation v in sport promotion and development in Ghana: Sport journalists' perspectives. In Akpan (Ed.), U.S African media space and globalization. Springer Nature Switzerland, Palgrave Macmillan. [https://doi.org/10.1007/978-3-031-35060-3\\_18](https://doi.org/10.1007/978-3-031-35060-3_18).**

## **Abstract**

This chapter investigates sport journalists' perspectives of stakeholders' usage of digitisation in sport promotion and development via the media space. In addressing this, knowledge of sport journalists on digitisation is analysed through their movements across nations, borders and continents that can shape or reshape the sport industry in Ghana. The literature on globalisation and digitisation complements interviews with nine prominent Ghanaian Sport media industry representatives in order to shed light on their experiences and practices regarding digital transformation in sport. Findings show that stakeholders including the sport ministry, national sport authority, federations or associations and sporting clubs must adapt and embrace digitalisation to promote their sport brands and use them as marketing communication strategies. Sport journalists reiterate certain challenges they encounter with stakeholders after criticising them for avoiding digitisation to reach their sport fans and society. The study recommends better policies to enforce sport organisations to incorporate digitisation into their communication structure.

**Acheampong, E. Y., Darko, R. A., & Frimpong, R. (2024). Conceptualising social contributions through football: Analysis of women football managers in West Africa. In B. Graeff, C. S. Gicheha, & S. Simona, Routledge handbook of the global south in sport for development and peace (Eds.). Routledge.**

**Donkor, S. K., Nkrumah, A. A., Osei, C. A., Darko, R. A., Adenyoh, C. K., Asare, M., & Ocansey, R. (2024). Investigating institutional barriers and frequency of teaching the schools' physical exercise and sports programme in public primary schools of three selected districts in Ghana. In J. Eyisi, B. Ogunleye, A. Ukwueze, A. Mac-Ozigbo, S. Olatunji, J. Eyisi Jr., & E. Nwafor (Eds.), Excellence in Nigeria education system: A Festschrift for Professor Patrick Eke Eya. National Open University of Nigeria.**

## **Books**

**Seibu, M., & Darko, R. A. (2023). Handball manual for teachers and coaches. Frimpression.**

# Department of Health Administration and Education

## Articles In Journal

**Adoma, P. O. (2024). Promoting maternal and child health outcomes through patronage of family planning services: Evidence from Ghanaian rural women of fertility age. EC Gynaecology, 13(3), 1-7. <https://eicon.net/ecgy/promoting-maternal-and-child-health-outcomes-through-patronage-of-family-planning-services-evidence-from-ghanaian-rural-women-of-fertility-age>**

### Abstract

**Introduction:** Family planning services (FPS) are widely acknowledged as an important intervention to reduce maternal and child mortality. Patronising family planning services has gone up over the past few years in Ghana. However, patronage of the service still remains low to attain the target set by the country's Ministry of Health and global partners by 2030. Therefore, this study assessed the promotion of maternal and child health (MCH) outcomes through the patronage of FPS among rural women of fertility age (WiFA) at Sunyani West Municipality, Ghana. **Methods:** The study was a retrospective cross-sectional study conducted among rural WiFA. A multistage sampling technique was used to recruit a sample of 413 participants. Descriptive statistics and related Pearson bivariate correlation and linear multiple regression were deployed in making meanings from the data collected at a significance level of 0.05. **Results:** Results indicated that of all the FPS, it was contraceptive services (94.9%) and pregnancy testing and counseling (80.1%) that were frequently available. A larger number (71.0%) of respondents preferred taking FPS at the pharmacy/chemical shops, indicating a positive high correlation between pharmacy/drug shop and availability of FPS (.81). In the study, respondents have several perceived benefits of FPS on MCH outcomes; however, the most perceived benefits were the prevention of unwanted pregnancies (86.4%) and maternal and child mortality (84.5%). The multiple linear regression analysis established that cultural factors were significant predictors of patronage of FPS [ $F(9, 404) = 11.160, p = 0.000$ ], explaining the variability of FPS ( $R^2 = 0.741$ ). **Conclusion:** Family planning services could be an effective way of ensuring better MCH outcomes. Commitment via ensuring the availability of FPS, its accessibility at effective outlets, and efforts towards removing cultural barriers and education could enhance its successful implementation in Ghana and close geopolitical region.

**Adoma, P. O., Amponsah, A. S., Ankrah, T. A., Acquah, F., Amu., H., Agjei, R. O., & Hanson, R. (2024). Health risk assessment of heavy metals in lettuce and spring onion on human health in Kumasi, Ghana. Environmental Health Insight, 18, 1-8. <https://doi.org/10.1177/11786302241285737>**

### Abstract

**Introduction:** The demand and consumption of vegetables are significantly increasing worldwide, which has resulted in urban farming on anthropogenic sites. This study assessed the concentrations of some selected heavy metals in lettuce and spring onion in line with the WHO/FAO required standard and its implications on human health. **Methods:** The study was carried out in Kumasi, within moist semi-deciduous forest vegetation, Ghana. The digested samples were analyzed for heavy metals (Cu, Cr, Fe, Mg, Ni, and Zn) using atomic absorption

spectrophotometer (AAS Model AA 400p). Analysis of variance was used to test the level of significance at  $\alpha = .05$ . Results: The study found mean concentrations of chromium and iron in lettuce and spring onion to be below detection level (BDL) in all study sites based on WHO/FAO permissible level. Also, while copper in lettuce was BDL at all the sites, there were higher mean concentration of copper in spring onion at BSGS ( $131.5 \pm 0.31$  mg/kg) and BSG ( $120.8 \pm 0.01$  mg/kg). The mean concentration of nickel in lettuce ( $137.15 \pm 0.0231$ ) and spring onion ( $173.55 \pm 0.02$  mg/kg) at BSGS were higher than WHO/FAO permissible level. Mean concentration of zinc in both lettuce and spring onion were higher than WHO/FAO permissible level in all the study sites, except zinc in spring onion at KT. The ANOVA test statistics showed no significant difference among the concentrations of heavy metals in all sites, except zinc in lettuce and nickel in spring onion. The study found cancer risk factor for nickel, which exceeded the benchmark of  $1 \times 10^{-6}$  for both lettuce and spring onion, indicating that long-term consumption could increase the risk of cancer in consumers. Conclusion: The study's findings call for strict regulation and regular monitoring of heavy metals in vegetables cultivated at anthropogenic sites in urban areas to ensure food safety and consumer health.

**Anaman, S., Douglas, M., Ngmenkpieo, F., Amenuvegbe, G. K., Adoma, P. O., & Manu, E. (2024). Challenges associated with coronavirus (COVID-19) related self-quarantine in Ghana. Lessons for future self-quarantine interventions. Pan African Medical Journal, 47, 5. <https://doi.org/10.11604/pamj.2024.47.5.41064>**

## **Abstract**

Introduction: self-quarantine was one of the key public health interventions in halting the spread of the coronavirus disease (COVID-19) in Ghana. Despite its success, self-quarantine was bridled with challenges across the country, including in the Eastern Region. Consequently, it was pertinent to ascertain these challenges to inform future self-quarantine interventions in the region and the country. The study aimed to ascertain challenges faced by COVID-19 self-quarantined persons in the Eastern Region of Ghana to inform future policies on self-quarantine in the region and the country in general. Methods: thirty-five (35) participants were interviewed in both Twi and English. Following the thematic content analysis approach, Atlas. ti software was used to analyse the data. Relevant quotes were extracted from the transcripts to back the various sub-themes in presenting the results. Results: three global themes emerged from the analyses: socio-economic challenges of self-quarantine (lack of access to essential goods and services, loss of income, and poor housing conditions), health-related challenges (sedentary lifestyle, non-supply of essential personal protective equipment such as face masks, development of oedema and weight gain), and psychological challenges (loneliness, boredom, and anxiety). Conclusion: COVID-19-related challenges self-quarantined persons faced in the Eastern Region of Ghana were multifaceted, ranging from socio-economic, and health to psychological ones. Consequently, emergency preparedness for future pandemic control using self-quarantine as a tool should bring on board various stakeholders to ensure challenges identified in this study are holistically addressed and do not recur.



**Atta-Doku, F., Abekah-Nkrumah, G., Nkrumah, J., & Adoma, P. O. (2024). Literacy-related factors and knowledge of patient rights charter: evidence from nurses in selected hospitals in Ghana. *BMC Nursing*, 23(1), 60. <https://doi.org/10.1186/s12912-024-01739-w>**

## **Abstract**

**Background** Systems of across the world have developed and implemented patient rights policies to protect and improve the provider-patient relationship. The Patient Charter of Ghana was developed in 2002 to improve service quality and protect patients' rights. However, it is not yet known whether those at the frontline of healthcare delivery can read and understand the contents of the charter. While studies have explored the socioeconomic and institutional level factors related to awareness and knowledge of the Patient Rights Charter, there is a lack of literature on its readability and comprehensibility among nurses. This study assesses nurses' knowledge of the Patient Rights Charter and associated literacy-related factors. **Method** An exploratory cross-sectional design and quantitative methods were used to collect data on knowledge, comprehension, and readability of the Patient Rights Charter. 205 nurses from four district hospitals in the Central Region were recruited using proportional and total enumeration sampling. Data were collected using structured questionnaires and were processed using SPSS (version 26) and an online text readability consensus calculator (version 2.0). Descriptive and inferential statistical analyses were performed, and data were presented using simple frequencies, readability statistics, and regression output. **Results** The results show the charter is written at a higher reading grade level; Flesch-Kincaid Grade Level (13.36), Simple Measure of Gobbledygook (11.57), and Coleman-Liau Readability Index (14.2). The average reading grade level score was 14. The Gunning Fox Index (15.40) and the Flesch Reading Ease Score (34%) show the patient charter is difficult to read and will require at least 14 years of education to be able to read. 87.3% of nurses were able to read and comprehend the charter. Very few (8.3%) read at frustration level. Nurses' actual comprehension of the charter was the only significant predictor of knowledge of the charter. **Conclusion** Comprehension of the patient charter is an important predictor of its knowledge. The results emphasize the need to enhance the readability and comprehensibility of the charter for providers. Hospitals can stimulate nurses' knowledge of the charter by simplifying the charter's language and deliberately educating nurses on its content.

**Botchwey, C. O-A., Boateng, A. A., Ahimah, P. O., Acquah, F., Adoma, P. O., Kumah, E., Boakye, D. S., Boahen, E. A., Kruh, V., & Koomson, J. B. K. (2024). Patient safety culture and satisfaction in Ghana: A facility-based cross-sectional study. *BMJ Open*, 14(1), e073190. <https://doi.org/10.1136/bmjopen-2023-073190>**

## **Abstract**

**Background:** Globally, one of the measures of high performing healthcare facilities is the compliance of patient safety culture, which encompasses the ability of health institutions to avoid or drastically reduce patient harm or risks. These risks or harm is linked with numerous adverse patient outcomes such as medication error, infections, unsafe surgery and diagnosis error. **Objectives:** The general objective of this study was to investigate into the impact of patient safety culture practices experienced on patient satisfaction among patients who attend the Kwesimintsim Government Hospital in the Takoradi municipality. **Methods:** This study was a descriptive cross-sectional study and a consecutive sampling technique was used to select 336 respondents for the study. Data was collected using a structured questionnaire and processed using Statistical Package for Social Sciences, V.21. Both descriptive and inferential statistics were carried out and result were presented using figures and tables.

Results: The study found that the overall patient safety compliance level observed by the respondents was poor (29.2%). The prevalence of adverse events experienced among the respondents was high (58%). The leading adverse events mentioned were medication errors, followed by wrong prescriptions and infections. The consequences of these adverse events encountered by the respondents were mentioned as increased healthcare costs (52%), followed by hospitalisation (43%), worsening of health conditions (41%) and contraction of chronic health conditions (22%). Patient safety cultural practices such as teamwork ( $\beta=0.17$ ,  $p=0.03$ ), response to error ( $\beta=0.16$ ,  $p=0.005$ ), communication openness ( $\beta=0.17$ ,  $p=0.003$ ) and handoffs and information exchange ( $\beta=0.17$ ,  $p=0.002$ ) were found to positively influence patient satisfaction. Conclusion: The poor general compliance of the patient safety culture in the facility is unfortunate, and this can affect healthcare outcomes significantly. The study therefore entreats facility managers and various stakeholders to see patient safety care as an imperative approach to delivering quality essential healthcare and to act accordingly to create an environment that supports it.

**Issahaku, A., Adoma, P. O., & Sidiqqe, B. G. (2024). Hygienic and sanitary practices among street food vendors - Sagnarigu Municipality of Northern Region, Ghana, 2020. European Journal of Science, Innovation and technology, 4(2), 190-221. <https://www.ejsit-journal.com/index.php/ejsit/article/view/407>**

## Abstract

Street food vending is a popular income generation activity in developing countries, especially in most cities and towns. Street food vendors normally operate under conditions that could expose consumers to foodborne illnesses. The main objective of the study was to assess sanitary and hygiene practices of street food vendors in the Sagnarigu Municipality. A descriptive cross-sectional study was adopted, questionnaire and multistage sampling technique used, involving purposive and simple random sampling techniques to arrive at a sample size of 270 street food vendors. SPSS was used for data analysis. Univariate and bivariate analyses were conducted. Majority (94.1%) of respondents were females, 32.6% had no formal education, and 39.6% were in the business for 2-3 years. About 81.9% of vending sites were located by the road side, 60.9% close to open gutters, 98.9% of the participants held money with bare hands as well as food. Most of the participants (95.2%) were not wearing face masks, no apron used (90.0%). Also, about 65.2% did not have professional training, no periodic medical examinations (75.9%), no medical certificate to show (83%), and 98.5% had no food safety manual available. Level of respondents' education showed a significant relationship with location of vending site, waste bin availability at site, frequency to which water used to wash utensils was changed, handling money with bare hands when handling food, provision of veronica bucket at vending site, professional training and licensed to operate as food vendor. The study recommends that Environmental Health Officers may have to consider conducting regular visits to street food vending sites to ensure that high food safety standards were upheld. The study further recommends that the Ghana Education Service (GES) increases school enrolment and girls in particular so as to have more educated people in the future in the food business.

**Kumah, E., Amponsah, J-M., Adoma, P. O., Boakye, D. S., Boateng, R., Botchwey, C. O-A., & Afari-Baidoo, M. (2024). Turnover intention and associated factors among health workers in Christian Health Association of Ghana hospitals: An institution-based cross-sectional study. *International Journal of Healthcare Management*, 1-9. <https://doi.org/10.1080/20479700.2024.2323854>**

## Abstract

**Background:** Identifying the key factors that may be associated with turnover intention could enable organizations to proactively identify the major determinants of actual turnover and design strategies to reduce voluntary turnover. The aim of this study was to assess turnover intention and its associated factors among health professionals working in Christian Health Association of Ghana (CHAG) affiliated hospitals. **Methods:** An institution-based cross-sectional study was conducted among 630 health workers in 30 CHAG hospitals from April to September 2022. A structured questionnaire was used to collect data on the respondents' socio-demographic variables, turnover intention, and organizational and job-related factors predicting their turnover intention. Multiple logistic regression analysis was conducted to identify significant predictors of turnover intention. **Results:** The overall turnover intention rate was 67.4%. Being younger increased the odds of turnover intention among the health professionals. On the other hand, being male, having a high level of organizational commitment, perceiving organizational support to be high, being satisfied with one's job, and being autonomous at work decreased the health professionals' intention to leave their current place of work. **Conclusions:** This study provides valuable information that could inform policy decisions and strategies aimed at improving health worker retention in CHAG affiliated hospitals in Ghana.

**Kushitor, M. K., William, J., Larbi-Sarpong, D. E., Amponsah, M. A., Adoma, P. O., Brightson, K. T. C., & Kushitor, S. B. (2024). Primary Health Care response to noncommunicable diseases: An assessment of wellness clinics in Ghana. *BMC Health Services Research*, 24, 794. <https://doi.org/10.1186/s12913-024-11264-w>**

## Abstract

**Background:** Globally, there is a significant unmet need for the rapidly growing burden of Non-Communicable Diseases (NCDs). Ghana has adopted and implemented Wellness Clinics (WC) nationwide to respond to the rising burden of NCDs. Regrettably, very little is known about WCs, including their structure and the services they offer. This study explores the concept of WC, their structure, position within the hospital environment, and services from the perspectives of healthcare providers and clients. **Methods:** An exploratory qualitative study was conducted with health professionals (n=12) and clients (n=26) of Wellness Clinics in two district hospitals and one regional hospital in a deprived region of Ghana where NCDs are rising. Using the WHO-PEN approach, an interview guide was purposely designed for this study. The data were analysed thematically using Atlas.ti. **Results:** All three Wellness Clinics were sub-units under the outpatient department. The WC was created by the facilities to respond to the increase in NCDs and to meet annual performance review requirements. The Wellness Clinics provided NCD diagnosis, counselling, and treatment services to approximately 300 clients per week at the facility level. Only one of the WCs provided NCD prevention services at the community level. Integrated NCD care was also provided at the WC, despite the health system and individual-level challenges reported by the health workers and clients. **Conclusion:** The implementation of the Wellness Clinic demonstrates the government's commitment to addressing the increasing burden of NCDs in Ghana through the primary health system. To maximise the impact of the wellness clinics, we recommend developing best practices, providing logistics, and addressing health insurance challenges.

**Manu, E., Acquah, F., douglas, M., Akitty, E., Zanu, E. P., Ampomah, M. A., & Adoma, P. O. (2024). Betting high, feeling low: A cross-sectional examination of gambling severity and psychological distress among Ghanaian youth. BMC Public Health, 24, 2032. <https://doi.org/10.1186/s12889-024-19550-2>**

### **Abstract**

Background Little is known about the nexus between online gambling and psychological distress among youth, especially in Ghana. This study aimed to investigate the effects of online sports betting on psychological distress, focusing on depression, anxiety, and stress among young individuals in the Volta region of Ghana. Methods: A cross-sectional study was carried out at various betting centers in the Volta region of Ghana. Four hundred and three (403) participants were selected using a multi-stage sampling method. The study used a standardized questionnaire to assess psychological distress with the Depression, Anxiety, and Stress Scale (DASS 21) and problematic gambling with the Problem Gambling Severity Index (PGSI). The analysis included both descriptive and inferential methods. These include the implementation of the bootstrap technique within multiple regression models using the current versions of Jeffreys's Amazing Statistics Program (JASP) [0.18.2], Statistical Package for the Social Sciences (SPSS) [29.0.2], and Microsoft Excel (2019). Results: The study found a prevalence of 40% for problematic gambling and 44% for moderate gambling problems among participants, resulting in an overall gambling prevalence of 84%. Regarding psychological distress, the estimated prevalence of depression among participants was 43.6%, with stress reported at 31.1% and anxiety at 68.8%. The overall prevalence of psychological distress was 48%. When analyzing the link between gambling and psychological distress, the study noted that males were more prone to gambling-related psychological distress than females ( $\beta=2.036$ ,  $p=0.025$ ). Furthermore, individuals with problem gambling showed the highest probability of experiencing more significant psychological distress compared to other groups ( $\beta=9.228$ ,  $p=0.002$ ), followed by those with moderate gambling levels ( $\beta=3.283$ ,  $p=0.002$ ). Conclusion: We recommend that the mental health unit of the Ghana Health Service, in collaboration with the Gaming Commission of Ghana, should develop youth-friendly interventions to address the prevalence and onset of problematic gambling among the youth, especially males. This could, in turn, reduce the prevalence of psychological distress among youth engaged in online gambling in Ghana.

**Manu, E., Sumankuuro, J., Douglas, M., Aku, Y. F., Adoma, P. O., & Kye-Duodu, G. (2024). Client-reported challenges and opportunities for improved antiretroviral therapy services uptake at a secondary health facility in Ghana. Heliyon, 2024, e35788. <http://doi.org/10.1016/j.heliyon.2024.e35788>**

**Saansong, A. O. A., Adoma, P. O., Nkrumah, J., & Gbagbo, F. Y. (2024). Experience and perceived impact of anxiety and depression on quality of life following emergency caesarean section among women in Ghana: A qualitative study. BMJ Open, 14, e086069. <https://doi.org/10.1136/bmjopen-2024-086069>**

### **Abstract**

Objective: This study explored the experiences of women who have undergone emergency caesarean section (EmCS) and how they perceived anxiety and depression to impact their quality of life. Design: A qualitative study grounded in the biopsychosocial model was conducted among Ghanaian women diagnosed with anxiety and depression following EmCS. Semistructured interviews were used to collect data on the psychosocial impact of EmCS on women's lives. Thematic analysis was used to identify key themes from the interviews, using Nvivo V.14 Software. Setting: A hospital in Effutu Municipality, Central Region of

Ghana. Data were collected from August 2022 to September 2023. Participants The study included 25 Ghanaian women who had undergone an EmCS, had clinically diagnosed and treated anxiety and/or depression and had recovered within the last 6 months. Women with pre-existing mental health conditions were excluded. Results: The major themes identified from the thematic analysis of results included emotional distress, daily life challenges and disrupted social relationships. Conclusions: There is an urgent need for targeted mental health interventions and culturally sensitive postpartum support to address the psychological needs of women following EmCS in Ghana.

**Acquah, F., Botchwey, C. O-A., Adoma, P. O., & Kumah, E. (2023). Lesbian, gay, bisexual, transgender, intersex, and its legalisation in Africa: Insights from tertiary-level students in Ghana. PLoS ONE, 18(7), e0287726. <https://doi.org/10.1371/journal.pone.0287726>**

## Abstract

**Introduction:** Lesbian, gay, bisexual, transgender, and intersex (LGBTI) and related activities have been a topic of debate and discussion among policymakers and stakeholders, as well as common citizens in the African region, especially in Ghana. The current anti-LGBTI-related bill being put before Ghana's Parliament signifies the intensity of the issue. Even though some studies have looked at some aspects of the issue, no study presently has explored people's opinion on the passage of any future anti-LGBTI and related legislations in Ghana. **Aim:** This study examined the perspective of tertiary-level students on the passage of anti-LGBTI legislation, as well as the non-physical factors that influence support for the passage of anti-LGBTI and related legislation in Ghana. **Methods:** The study employed a quantitative cross-sectional design using 1,001 tertiary-level students. The study used convenience sampling technique with an online closed-ended, structured survey questionnaire as the main data collection instrument. The data was then analysed using Statistical Package for the Social Sciences, version 29 at a 5% significance level. **Results:** The results of the study indicated that majority of the respondents (81%) were in support of the passage of anti-LGBTI and related legislations. Their reasons included the health implications of LGBTI and related activities (63%), cultural and societal values (62%), religious reasons (54%), and western culture (25%). Also, almost half of the respondents (49%) held that health related perceptions about LGBTI have little or no empirical basis. The inferential analysis, further, revealed that even when age and sex assigned at birth are controlled, perceived health implications of LGBTI ( $\beta = 0.247, p = < .001$ ), religious beliefs ( $\beta = 0.189, p = < .001$ ), and cultural values ( $\beta = 0.218, p = < .001$ ) positively predict the support for passage of anti-LGBTI legislation. **Conclusions:** People's level of support for the passage of anti-LGBTI legislation is influenced by several factors including religious beliefs, cultural values, and the perceived health implications of LGBTI. There is, however, the need for policy makers and other stakeholders to create awareness and educate the public about the various perceptions about LGBTI and related activities that are not scientifically legitimate.

**Adoma, P. O., Ansah, E. W., Apaak, D., Agjei, R. O., Kumah, E., Boateng, R., & Tarkang, E. E. (2023). Coping with hypertensive treatment at Bono Regional Hospital in Sunyani, Ghana: A prospective observational cohort study. *Pan African Medical Journal*, 45, 185. <https://doi.org/10.11604/pamj.2023.45.185.39994>**

## **Abstract**

Introduction: the stress associated with hypertension treatment makes using coping strategies inevitable. However, most patients with hypertension apply inefficient coping strategies, leading to uncontrolled blood pressure (BP). The study analyzed coping strategies associated with hypertension treatment and determined how these coping strategies predicted the current BP of patients with hypertension. Methods: the study was a prospective observational cohort conducted between January and December, 2020. Consecutive sampling technique was used to enumerate 508 patients who consistently sought treatment at the healthcare facilities. A sphygmomanometer was used to measure BP to determine controlled and uncontrolled BP based on Ghana Health Service standards. A questionnaire was adapted from Coping Inventory for Stressful Situations-2 to measure patients' coping strategies. Descriptive statistics, cut off percentage and multiple linear regression were applied in analyzing the data at a 0.05 level of significance. Results: females were two-thirds (74%) of the study population and the mean age was  $58.40 \pm 11.72$ . All patients with hypertension used the three coping strategies: emotion-oriented coping (EOC), task-oriented coping (TOC) and avoidance coping (AC). However, EOC was highly used (61.2%), followed by TOC (58.5%) and AC (46.2%). Also, the study found coping with treatment regimens to be relatively poor since it was only physical exercise (79.5%) that they effectively observed. The multiple linear regression results revealed that the three coping strategies were significant predictors of current BP levels [ $F(3, 117) = 12.390$  at  $p < 0.001$ ]. Thus, AC, TOC, and EOC explained 37.4% of the variability of current BP status ( $R^2 \text{ adj} = 0.374$ ). Specifically, patients who use TOC (66.3%) were more likely to have a controlled BP than those using EOC (53.7%) and AC (35.8%). Conclusion: patients' coping strategies were inadequate for hypertension treatment since treatment regimens were poorly observed. Meanwhile, EOC is most likely to negatively affect a patient's treatment, leading to uncontrolled BP. Our study recommends the need to encourage patients to combine their EOC with TOC to enable them control their BP better.

**Adoma, P. O., Yeboah Snr, C. A., Nantomah, B., Manu, E., & Kushitor, K. K. (2023). Experiences of care-seeking behaviour for sexually transmitted infections among gay and bisexual men: A phenomenological study. *African Journal of Reproductive Health*, 27(7), 1-9. <https://doi.org/10.29063/ajrh2023/v27i7.7>**

## **Abstract**

Gay and bisexual men (GBM) are stigmatized in the Ghanaian society and that negatively affect their care-seeking behaviour. We sought to understand the experiences of care-seeking behaviour (CSB) for STIs among gay and bisexual men in Sunyani, capital of Bono Region, Ghana. A respondent-driven sampling was used to collect data from 17 gay and bisexual men in Sunyani based on phenomenological qualitative approach. The data were thematically analysed using the Atlas.ti software. Results were presented under various themes with appropriate accompanying excerpts. Two broad themes emerged from the data - personal and health system experiences of treating STIs. Personal experiences such as economic conditions, knowledge on STI, marital experiences and bisexual's partner awareness of sexual orientation had influences on CSB. Experience with cost of treatment, stigmatisation by health care workers (HCW) and perceived quality healthcare were the health system factors found to influence CSB. To help improve STIs care-seeking behaviour, government need to encourage and economically empower GBM, while at the same time, improving their



knowledge on STI prevention and control. The National Health Authority should intensify and monitor the implementation of the national health insurance at the private healthcare sectors without favour and discrimination for gay and bisexual men.

**Agyemang, E., Esia-Donkoh, K., Boateng Adu-Gyamfi, A., Douri, J. B., Adoma, P. O., & Achampong, E. K. (2023). Assessing the efficient use of the lightweight health information management system for health service delivery in Ghana. *BMJ Health Care Informatics*, 30(1), e100769. <https://doi.org/10.1136/bmjhci-2023-100769>**

### **Abstract**

**Background:** In achieving the WHO's Universal Health Coverage and the Global Developmental Agenda: Sustainable Development Goal 3 and 9, the Ministry of Health launched a nationwide deployment of the lightweight health information management system (LHIMS) in the Central Region to facilitate health service delivery. This paper assessed the efficient use of the LHIMS among health professionals in the Central Region. **Methods:** A non-interventional descriptive cross-sectional study design was employed for this research. The study used stratified and simple random sampling for selecting 1126 study respondents from 10 health facilities that use the LHIMS. The respondents included prescribers, nurses, midwives and auxiliary staff. Descriptive statistics (weighted mean) was computed to determine the average weighted score for all the indicators under efficiency. Also, bivariate ( $\chi^2$ ) and multivariate (ordinal logistic regression) analyses were conducted to test the study's hypotheses. **Results:** Findings revealed that the LHIMS enhanced efficient health service delivery. From the bivariate analysis, external factors; sex, educational qualification, work experience, profession type and computer literacy were associated with the efficient use of the LHIMS. However, training offered prior to the use of the LHIMS, and the duration of training had no association. At the multivariate level, only work experience and computer literacy significantly influenced the efficient use of the LHIMS. **Conclusion:** The implementation of LHIMS has the potential to significantly improve health service delivery. General computing skills should be offered to system users by the Ministry of Health to improve literacy in the use of computers. Active participation in the use of LHIMS by all relevant healthcare professionals should be encouraged.

**Boateng, R., Boateng, A. A., Aboagye, G., Kumah, E., Adoma, P. O., & Botchwey, C. O-A. (2023). Training motivation and post training turnover intention: Reifying the narrative in a community health nursing training institution in Ghana. *Journal of Economics & Management Research*, 4(3), 1-5. <https://www.onlinescientificresearch.com/articles/training-motivation-and-post-training-turnover-intention-reifyingthe-narrative-in-a-community-health-nursing-training-institut.pdf>**

### **Abstract**

This paper seeks to reify the narrative on the linkages between training motivations of community health nurses and their consequent post training turnover intentions, focusing on selected community health nursing trainees. This study relied on a combination of secondary and primary data sources to investigate the causal relationship between training motivation and post-training turnover intentions among selected community health nursing trainees in College of Community Health Nursing Training, Winneba, Ghana. A representative sample of 211 trainee respondents was determined based on Cochran's formula. In all, 150 respondents, representing 71% response rate, took part in the study. A questionnaire ad hoc was developed for the collection of primary data from the sampled respondents in June to



July 2021. The data from the study was subsequently analysed through a causal path analysis after the descriptive analysis. The alternative path model established after the attainment of a Good Fit Index was employed to conduct an analysis which centred on the level of effect, critical ratio, and p value. The measured items for training motivation demonstrated varied levels of contribution within the antecedent construct as shown by Critical Ratio (CR) ranging from 2.31 to 6.82 and the resultant statistically significant values of <0.001 to 0.021. The main causal link established to ascertain the effect of training motivation on post training turnover intention proved to be significant with an effect level of 0.18, CR of 2.11 and p value of 0.035. Individual level factors such as willingness to learn, self-confidence in knowledge acquisition in the training process, and the preparedness to invest towards the community health profession constituted some major elements for measuring training motivation. Thus, the study provides managers of community health training institutions with parameters for recruiting and selecting trainees, benchmarks for developing trainee centred and responsive modules for training and deploying community health nurses, and analytical tools for examination of trends in future human resource needs for primary healthcare in Ghana.

**Olaleye, S., Agjei, R. O., Jimoh, B., & Adoma, P. O. (2023). Evaluation of usability in Moodle learning management system through analytics graphs: University of Applied Sciences teacher's perspective in Finland. International Journal of Education and Development using Information and Communication Technology (IJEDICT), 19(3), 85-107. <https://doi.org/10.56855/ijcse.v2i3.766>**

### **Abstract**

Learning English as a second language poses challenges for students worldwide, and this holds true for students studying at boarding Islamic schools as well. This research aims to analyze the difficulties faced by students in acquiring English language skills within the unique context of boarding Islamic schools. By identifying the specific challenges encountered by these students, educators and policymakers can develop targeted strategies to enhance English language learning in this educational setting. The study utilizes a qualitative research approach, involving interviews, observations, and document analysis to gather data from students and teachers. The findings highlight common difficulties faced by students in learning English skills, including linguistic barriers, limited exposure to English outside the school environment, curriculum constraints, and lack of resources. The research concludes with recommendations for addressing these challenges and improving English language learning outcomes in boarding Islamic schools.

**Sofyan, S., Widiantoro, A., & Adoma, P. O. (2023). Analysis of Students' Difficulties in Learning English Skills at Boarding Islamic Schools. International Journal of Contemporary Studies in Education (IJ-CSE), 2(3), 223-241. <http://dx.doi.org/10.56855/ijcse.v2i3.766>**

### **Abstract**

Learning English as a second language poses challenges for students worldwide, and this holds true for students studying at boarding Islamic schools as well. This research aims to analyze the difficulties faced by students in acquiring English language skills within the unique context of boarding Islamic schools. By identifying the specific challenges encountered by these students, educators and policymakers can develop targeted strategies to enhance English language learning in this educational setting. The study utilizes a qualitative research approach, involving interviews, observations, and document analysis to gather data from students and teachers. The findings highlight common difficulties faced by students in

learning English skills, including linguistic barriers, limited exposure to English outside the school environment, curriculum constraints, and lack of resources. The research concludes with recommendations for addressing these challenges and improving English language learning outcomes in boarding Islamic schools

**Aggrey-Bluwey, L., & Abekah-Nkrumah, G. (2024). Determinants of vaccination decisions and lived experiences of Ghanaians with the COVID-19 pandemic: A qualitative study. *Vaccine X*, 17(100463), 1-8. <https://doi.org/10.1016/j.jvaxx.2024.100463>.**

### **Abstract**

**Background:** Two years after the WHO declared a state of emergency as a result of the rapid spread of the COVID-19 virus from Wuhan, China, the rate of new infections experienced intermittent flare-ups globally, with vaccinations still ongoing in countries such as Ghana. One year after the implementation of Ghana's COVID-19 vaccine deployment program, Ghanaians have had the opportunity to reflect on their vaccination decisions, albeit the initial vaccine hesitancy. **Objectives:** The current paper examined the knowledge and lived experiences of Ghanaians during the COVID-19 pandemic, and the factors influencing their vaccination decisions, one year after COVID-19 vaccinations commenced in Ghana, with special focus on the social and geographical histories which influenced their vaccination decisions. **Methodology:** A qualitative approach using a case study design was used to conduct in-depth interviews among 25 respondents who were 18 years and above, not pregnant, and willing to participate in the study, between 5th and 23rd September 2022. Data was collected in 5 hotspot areas in Ghana with the highest cumulative case counts. A semi-structured interview guide was used to collect data which was analyzed using a thematic approach. **Findings:** Respondents demonstrated a good level of knowledge on COVID-19 and related vaccines. Fear, panic, and anxiety were some of the experiences lived by respondents during the pandemic. The factors influencing vaccination decisions included conspiracy theories about COVID-19 and related vaccines, subjective notions about the COVID-19 disease, and subjective notions about the vaccine. The type of community one lived in, taboos, and previous successful vaccination programs in the community were geographic factors that informed respondents' decision to vaccinate or not. Social circles, religion, opinion leaders, and media-based campaigns were the social factors that influenced respondents' decision to vaccinate or not.

**Obu, R. N., Aggrey-Bluwey, L., Somanadhapai, S., I., Nugbemado, I. N., & Pandit, M. (2023). The effect of IMBOOST Herbal Mixture on diabetic foot ulcer: A case report. *Africa Development and Resources Research Institute Journal, Ghana*, 32, 1-9.**

### **Abstract**

IMBOOST Herbal Mixture has been found to have a wound-healing effect on a diabetic foot ulcer in the Ghanaian media. We report the case of a woman aged 55 years who came to the Nyarkotey University College of Holistic Medicine & Technology clinic, Ashaiman, Ghana, with a report of a diagnosed diabetic foot ulcer from a government hospital. The patient is a known diabetic. She has no known family history of diabetic foot ulcers. She started the treatment in two government hospitals in the Greater Accra region of Ghana. She also resorted to homeopathic treatment. Due to the frustration and unsuccessful treatment outcomes with the pharmaceutical drugs and homeopathic remedies, she visited the College's clinic in anticipation of a breakthrough for a natural treatment. She was prescribed IMBOOST Herbal

Mixture, a natural product formulated by SharpHerbs, a Ghanaian-based herbal producer in the Ashanti region, as an immune booster. The College's clinic has a natural pharmacy with a stock of natural products. IMBOOST Herbal Mixture is one of the many natural products in the College's Pharmacy and was administered 60 ml or 4 tablespoons – 3 times daily and follow-up observations were continued for 4 weeks. We opted for IMBOOST Herbal Mixture as compared to the many other natural products in the college's Pharmacy due to the much hearsay evidence in the media on the efficacy of the product on diverse medical conditions. Encouraging results were seen after the patient used this product.

**Opoku, R., Appiah, N. E., Dwumfour- Asare, B., Agrey- Bluwey, L., Ackah, M., Acquah, F., Fordjour, P., Abdul- Aziz, Issaka. (2023). Prevalence of self-medication in Ghana: a systematic review and meta- analysis. *BMJ Open*, 13, 1-11. <https://doi.org/10.1136/bmjopen-2022-064627>**

### **Abstract**

**Objectives:** This study estimates the prevalence of self-medication and provides an understanding of the reasons for self-medication in Ghana through the synthesis of relevant literature. **Methods:** A comprehensive search was conducted in PubMed, Science Direct and African Journals Online to identify observational studies published from inception to March 2022. Google scholar and institutional websites were searched for grey literature. We included studies reporting primary data on the prevalence and/or reasons for self-medication in Ghana. Random-effects meta-analysis was used to estimate the prevalence of self-medication. Subgroup analysis was performed with the study population (pregnant women, patients and students), geopolitical zone (coastal, middle and northern) and study setting (rural and urban). Using inductive thematic analysis, reasons for self-medication were classified and tallied under key themes. **Results:** Thirty studies involving 9271 participants were included in this review. The pooled prevalence of self-medication in Ghana was 53.7% (95% CI 46.2% to 61.0%;  $I^2=98.51\%$ ,  $p<0.001$ ). Prevalence of self-medication was highest among pregnant women (65.5%; 95% CI 58.1% to 72.5%;  $I^2=88\%$ ), in the middle belt of the country (62.1%; 95% CI 40.9% to 82.0%;  $I^2=98\%$ ;  $p<0.001$ ) and in rural settings (61.2%; 95% CI 36.5% to 84.5%;  $I^2=98\%$ ;  $p<0.001$ ). The most cited reasons for self-medication included long waiting time at health facilities (73.3%), previous use of drugs (66.7%) and the perceived unseriousness of diseases (53.3%). **Conclusion:** This study has revealed that self-medication is still an unresolved public health challenge in Ghana, with a high prevalence estimate. Self-medication is influenced by inconveniences associated with accessing healthcare coupled with poor health seeking behaviours. There is the need for improved access to quality healthcare and the promotion of appropriate health-seeking behaviours.

**Ameyaw, E. K., Woytowich, D., Gbagbo, F. Y., & Amoah, P. A. (2024). Assessing geographical variation in ovulatory cycle knowledge among women of reproductive age in Sierra Leone: Analysis of the 2019 Demographic and Health Survey. *PLoS One*, 19(4), 1-9.**

### **Abstract**

**Background:** Sierra Leone has poor indicators of reproductive health and a high prevalence of unintended pregnancies. To date, no study has explored determinants of ovulatory cycle knowledge in Sierra Leone. We investigated geographic region to determine where the needs for improved ovulatory cycle knowledge are greatest in Sierra Leone. **Methods:** This is a cross-sectional study of women of reproductive age ( $n = 15,574$ ) based on the 2019 Sierra Leone Demographic and Health Survey. Geographic region and sociodemographic covariates

were included in a multivariate logistic regression model predicting the odds that participants possessed an accurate knowledge of when in the ovulatory cycle pregnancy initiation is most likely. Results: In Sierra Leone, 39.8% (CI = 37.4–40.9) of 15-49-year-old women had accurate knowledge of the ovulatory cycle. Women in the Northern and Southern regions possessed the highest prevalence of correct knowledge (46.7%, CI = 43.1–50.3 and 45.1%, CI = 41.9–48.2, respectively). Women from the Northwestern (AOR = 0.29, CI = 0.22–0.38), Eastern (AOR = 0.55, CI = 0.41–0.72), and Western regions (AOR = 0.63, CI = 0.50–0.80) had significantly lower odds of accurate ovulatory cycle knowledge compared to others. Women aged 15–19, those with a primary school education, and participants with a parity of none all had the lowest odds of correct ovulatory cycle knowledge as well. Conclusion: Less than four in ten women in Sierra Leone had accurate knowledge of when in the ovulatory cycle pregnancy is most likely to occur. This suggests that family planning outreach programs should include education on the ovulatory cycle and the importance of understanding the implications of its timing. This can reduce the risk of unintended pregnancies throughout Sierra Leone and can have an especially positive impact in the Northwestern, Eastern, and Western regions, where ovulatory cycle knowledge was significantly lower.

**Gbagbo, F. Y., Opoku, R., & Quarcoo, R. (2024). Towards prevention of new COVID-19 infections in institutions of higher education: factors influencing compliance with mask-wearing among public university students in Ghana. *BMC Infectious Diseases*, 24(1), 236.**

### **Abstract**

**Background:** Ghana’s mask-wearing compliance with COVID-19 prevention protocols has not been as impressive among the general population. In this study, we examined factors influencing compliance with mask-wearing among public university students in Ghana to make recommendations for the prevention of new COVID-19 infections in public universities. **Methods:** We conducted this Census in a public university in Ghana between January and December 2022. The study design was an exploratory-cross-sectional and online survey. Structured questionnaires developed by the authors were used to collect data from 3,272 students. Data were analyzed with Jeffreys’s Amazing Statistics Program (JASP). Frequency distributions were used to summarize the data into tables and graphs whilst logistic regression analysis was done to examine the factors influencing compliance with mask-wearing among participants as well as their mask-wearing behaviors in school. **Results:** Compliance with mask-wearing measures was high with 85.9% of the students wearing a nose mask always or often. Agreeing that the reusable masks do not last long was associated with a reduced chance of non-compliance (OR = 0.70, 95% CI = 0.57, 0.86). However, agreeing with some challenges was associated with increased chances of non-compliance. These included concerns that it is boring to mask after wearing makeup or having a haircut (OR = 1.71, 95% CI = 1.37, 2.14), and that masking is burdensome because it has to be removed when talking (OR = 1.26, 95% CI 1.01, 1.57), and that it is difficult to hear while masked (OR = 1.36, 95% CI = 1.04, 1.79). **Conclusion:** Cost-benefit analyses, opinions about one’s look, and communication difficulties are the key factors influencing students’ non-compliance with mask-wearing regulations. To encourage student compliance with mask-wearing regulations at Ghana’s public universities, we recommend innovation in nose mask manufacture.

**Tesema, G. A., Gbagbo, F. Y., Okeke, S. R., Ameyaw, E. K., & Yaya, S. (2024). Is sexual autonomy a protective factor against intimate partner violence? Evidence from 27 sub-Saharan African countries. PLoS ONE, 19(7), 1-19.**

### **Abstract**

Background: Though women in sub-Saharan Africa have increased risk of intimate sexual violence, research on the association between sexual autonomy and intimate partner violence among this population has not received the requisite attention. Consequently, we investigated if sexual autonomy is a protective factor against intimate partner violence among women in sub-Saharan Africa. Methods: Secondary data analysis was conducted based on the Demographic and Health Surveys (DHSs) of 27 sub-Saharan African countries from 2008 to 2021. A total of 104,523 married or cohabitating women were included in the study. We applied a multilevel Poisson regression model with robust variance to identify associated factors. Variables with a p-value <0.2 in the bi-variable multilevel Poisson regression analysis were considered for the multivariable analysis. The Adjusted Prevalence Ratio (APR) with its 95% confidence interval (CI) was reported, and variables with a p-value >>0.05 were included in the multivariable analysis. Results: The prevalence of intimate partner violence and sexual autonomy among women in SSA were 32.96% [95%CI:32.68%,33.25%] and 88.79% [95%CI:88.59%, 88.97%], respectively. Women in Sierra Leone had the highest prevalence of IPV (52.71%) while Comoros had the lowest prevalence of IPV (8.09%). The prevalence of sexual autonomy was highest in Namibia (99.22%) and lowest in Mali (61.83%). The MOR value in the null model was 1.26. We found that women who had sexual autonomy are 1.28 times [APR =1.28,95%CI: 1.17, 1.40] more likely to experience IPV than women who had no sexual autonomy. Conclusion: This study has demonstrated that sexual autonomy is significantly associated with intimate partner violence, however, it does not necessarily act as a protective factor. The study suggests the need for more education on intimate partner violence targeting women's partners. This can help secure the commitment of the perpetrators to rather become proponents of anti-intimate partner violence and further offer women the necessary support for them to attain their full fundamental rights in all spheres of life.

**Gbagbo, F. Y. (2023). Should Institutional Review Boards for Research Ethics be held accountable for retracted publications from Academia and Industry? The Global Health Network Collections, 1, 1.**

### **Abstract**

In recent times there has been evidence of many publications across academia and industry being retracted for various ethical violations in research including data Fabrication, Manipulation, Falsification, and Plagiarism despite the widespread Institutional Review Boards (IRBs) to uphold Research Ethics from conceptualizing a study, publication of results and implementation of findings. Although the structure and membership composition of IRBs may vary globally, they all have converging guidelines. This study tackles research misconduct by holding Institutional Review Boards accountable for retracted articles, employing interest analysis and principle-based idea analysis in critically reviewing my concerns. Based on the evidence from the literature on the increasing numbers of retracted papers that have had ethical clearance, I argued that, if IRBs are doing their job correctly, research misconduct should be minimal. Further, if research misconduct resulting in retracted publications becomes a spreading problem that attracts sanctions, then IRBs must be considered as part of the problem and should suffer sanctions too.

**Gbagbo, F. Y., & Ameyaw, E. K. (2023). Examining the relationships between contraception and fertility rate in Ghana: Evidence from the 1988 to 2014 Ghana Demographic and Health Surveys. *F1000Research*, 12, 1176.**

**Abstract**

Background: There have been some discrepancies between the Contraceptive Prevalence Rate (CPR) and Total Fertility Rate (TFR) in Ghana over the years which we examined in this study. Methods: We adopted a repeated cross-sectional study design to examine the relationship between Ghana's CPR and TFR using data from 1988 to 2014 Ghana Demographic and Health Surveys (GDHS). Results: Our findings show that TFR declined from 6.4 to 4.2 births per woman between 1988 and 2014. Bivariate models fitted revealed that between 1988 and 2014, women using contraceptives had higher prospects of bearing more children than women not using contraceptives. This manifested in 1988 (IRR=1.16, 95% CI=1.11, 1.22) and 2014 (IRR=1.20, 95% CI=1.12, 1.29). The multivariable Poisson regression models also showed the same patterns in all the surveys including the 1988 GDHS (IRR=1.12, 95% CI=1.09,1.19) and 2014 (IRR=1.13,95% CI=1.09,1.17). Contrary to earlier studies reports, and common perceptions held by stakeholders in family planning that there is an inverse relationship between CPR and TFR in Ghana, we did not find any such inverse relationship between CPR and TFR in Ghana during the period under review. Conclusions: Based on our findings we believe, that contraception alone does not guarantee low fertility in Ghana, hence we recommend a qualitative study to further investigate the plausible factors behind our results/observations from this current study to inform policy and program decisions.

**Gbagbo, F. Y., & Ameyaw, E. K. (2023). Stakeholders' perceptions of the trends in contraceptive prevalence rate and total fertility rate in Ghana. *PLoS One*, 18, 7.**

**Abstract**

Background: Studies in Ghana have reported discrepancies between trends in Total Fertility Rate (TFR) and Contraceptive Prevalence Rate (CPR). Yet, there is limited empirical literature on stakeholders' perceptions on the trends in CPR and TFR in Ghana. We, therefore, examined the perceptions of key stakeholders about the documented trends in CPR and TFR in Ghana. Methods We adopted an exploratory (qualitative) research design with a qualitative approach to data collection from stakeholders in Ghana, focusing on the trends of the TFR and CPR. The Consolidated Criteria for Reporting Qualitative Studies (COREQ) checklist provided additional guidance for reporting the study results. We employed the Theory of Planned Behavior (TPB) as a theoretical framework/construct to explain and predict individual changes in health behaviors resulting in trends in CPR and TFR from stakeholders' perspectives and analyzed the data using a framework analysis approach. Results: Two main themes emerged from the data: contraceptive prevalence and total fertility ratio, with five sub-themes identified: barriers to contraception, motivations for contraception uptake, unmet need for family planning, induced abortion, and effectiveness of planning programs. Specifically, participants indicated that there is a discrepancy between the trends of CPR and TFR based on the Ghana Demographic and Health Survey, conducted between 1988 and 2014. The high unmet needs for contraceptives were attributed to CRP trends, whilst abstinence, infertility, and high demands for induced abortions were identified to impact the TFR trends significantly. Conclusion: The findings show that an extensive quantitative inquiry into the exact relationships between Ghana's CPR and TFR, as well as the contributions of abstinence, infertility, and induced abortion, are worth considering.



**Gbagbo, F. Y., Mensah, K. L., & Gbagbo, J. A. (2023). Toward contraception education in basic schools: Teachers' knowledge, perceptions, and attitudes regarding contraceptive use by basic school pupils in a Ghanaian Municipality. *SAGE Open Medicine*, 11, 20503121231200414.**

**Abstract**

**Objectives:** We examined teachers' knowledge, perceptions, and attitudes regarding contraception by basic school pupils in a Ghanaian Municipality. **Methods:** This was an explorative, analytical cross-sectional study using the mixed-method approach. Participants comprised 183 public and private basic school teachers and 20 school health coordinators in the study area. The statistical tests carried out were in two folds. Quantitative data were analyzed with a statistical package for social sciences version 20 to generate tables. A logistic regression model was used to examine associations between the predictor and the binary response variables. Adjusted odds ratio accounted for other predictor variables in the model. For the qualitative data, recorded interviews were transcribed and content analysis was done to identify themes, subthemes, and results presented as participants' direct quotations/paraphrased statements. Knowledge, perceptions, and attitudes were assessed using 3-Likert scale-type questions developed by the author. **Results:** Participants' sociodemographic characteristics were associated with perceptions and attitudes toward contraception in basic schools. At 95% confidence intervals, the p-values were not significant for any of the variables tested. However, the adjusted odds ratio (aOR) showed positive perceptions among participants aged 35–39 (aOR = 7.24; p = 0.35), women (aOR = 4.22; p = 0.25), higher educated (aOR = 4.32; p = 0.56), work experience between 16 and 20 years (aOR = 6.65; p = 0.96), four or more children (aOR = 6.35; p = 0.96); divorcee (aOR = 10.12; p = 2.92); intrauterine contraceptive device (IUD) (aOR = 5.02; p = 2.43); or condoms users (aOR = 7.09; p = 0.32). Negative perceptions were noted among affiliates of other religions compared to Christians (aOR = 0.19; p = 0.01) and subject teachers (aOR = 0.39; p = 0.01). Participants' perceptions were directly influenced by attitudes toward contraception and knowledge (p = 0.081). The qualitative findings showed mixed feelings about contraceptive education in basic schools. **Conclusions:** Basic school teachers have challenges with contraceptive education which have implications for comprehensive sex education in Ghanaian basic schools. We recommend a similar study among parents of the pupils and a nationwide study to examine this concept further.

**Gbagbo, F. Y., Morhe, R. A. S., & Morhe, E. K. S. (2023). Availability of Safe Second-Trimester Abortion Services in Health Facilities in Accra, Ghana. *Maternal and Child Health Journal*, 27(5), 850-860.**

**Abstract**

**Background:** We examined providers, methods employed, cost, and other determinants of availability of second-trimester abortion services in health facilities in Accra, Ghana in 2019 to inform policy and program decisions. **Methods:** A two-stage mixed quantitative and qualitative study designs were employed in the conduct of the study. The first stage was a short interaction of the mystery client with a clinical care provider to identify health facilities that provide second-trimester induced abortion, the cost, and referral practices, where the facility did not have the service. The second stage was in-depth interviews of second-trimester abortion care providers and non-providers in various health facilities. For internal validity, it also explored the procedure cost, referral, and other practices at the health facilities included in the study, independent of what was captured in the mystery client survey. **Results:** Second-trimester abortion services in Accra, Ghana are widely unavailable even in most facilities that provide abortion services. Referral policies and practices indicated by the service providers



at various facility levels were inadequate. Criminalization of the procedure, social stigma, and fear of complications are the main factors that adversely influence the availability of second-trimester abortion in health facilities in Accra. Conclusion Albeit increasing demand for second-trimester abortion in health facilities in Accra, services are not readily available due to the ambiguity of the law, its interpretation, and the limited flow of accurate information on providers. Policies and programs that limit access to Second-trimester abortions in Ghana are amendable to ensure safe services.

**Gbagbo, F. Y., Rockson, G. N. Y., Quansah, F., & Ameyaw, E. K. (2023). Sexual coercion and harassment of students with disabilities in a public university in Ghana. *Journal of Sex & Marital Therapy*, 49(7), 798-815.**

### **Abstract**

here is limited literature on sexual coercion/harassment of university students with disabilities, hence we, explored this phenomenon in Ghana, using a sequential explanatory-mixed method design that involved 119 (62 males and 57 females) students with various disabilities in the quantitative study and 12 (7 females and 5 males) students in the qualitative phase using questionnaire and interview guide for data collection respectively. We found that participants were not aware of the university's sexual coercion/harassment policy nor involved in its formulation/dissemination. Persistently asking for sexual relationships, pressurized for outings, attempted/forced kissing, being sexually looked at, engaging in uncomfortable sexual conversations, and sexually provocative touch were common. The main perpetrators of these acts included physically able people (24.4%), colleagues with disabilities (14.3%), and Lecturers/Administrative staff (10.9%). We recommend policies and programs' strengthening to protect students with disabilities from such unwarranted acts.

**Kareem, Y. O., Abubakar, Z., Adelekan, B., Ameyaw, E. K., Gbagbo, F. Y., Goldson, E., & Yaya, S. (2023). Prevalence, trends, and factors associated with teen motherhood in Nigeria: An analysis of the 2008–2018 Nigeria Demographic and Health Surveys. *International Journal of Sexual Health*, 35(2), 248-262.**

### **Abstract**

Background: Teen pregnancy and childbearing are common in Nigeria, and understanding the complexities, such as sociodemographics and economic factors including sexual and reproductive health knowledge and awareness among adolescents over time can trigger innovative approaches and interventions. This study intends to capture the patterns and associated factors of teen motherhood among sexually active adolescents (15–19 years) between 2008 and 2018. Methods: The study data was extracted from 2008, 2013, and 2018 Nigeria Demographic and Health Surveys. Descriptive analysis was presented using frequencies and percentages; multivariable analysis was conducted using log-binomial logistic regression at a p-value <0.05. All analyses were performed using Stata 15.0, weighted and adjusted for the complex survey design and population size. Results: The prevalence of teen motherhood increased between the three successive survey waves (50.9% vs. 52.4% vs. 55.2%) from 2008, 2013, and 2018. Although, the pooled adjusted analysis revealed no significant change over the 10-year period. Knowledge of modern contraceptive methods, primary education, non-Catholic Christians, residing in the South-South region, and those currently or formerly married were associated with increased risk of teen motherhood. There was an inverse relationship between teen motherhood and wealth status; lower wealth status

was associated with high adolescent pregnancy and childbearing. Conclusion: This study revealed an increase in the proportion of teen pregnancy and childbearing in Nigeria. Notably, there exist variations across age groups, geographic location, educational level, religious belief, marital and economic status. Interventions that ensure comprehensive sexuality education, girl child education, and economic empowerment especially for school dropouts are advocated to reduce teen motherhood.

**Atta-Doku, J. F., Abekah-Nkrumah, G., Nkrumah, J., & Adoma, P. O. (2024).** Literacy-related factors and knowledge of patient rights charter: evidence from nurses in selected hospitals in Ghana. *BMC Nursing*, 23(60), 1-9. <https://doi.org/10.1186/s12912-024-01739-w>

**Boateng, R. (2024).** Sociodemographic and contextual variables as predictors of men's health insurance enrolment in Ghana: Evidence from a micro indicator cluster survey. *Advances in Medicine, Psychology, and Public Health*, 1(2), 62-73. <https://doi.org/10.5281/zenodo.10637403>

**Boateng, R. (2024).** Micro level analysis on health insurance enrolment among selected women in Ghana: Barriers and predictors. *Journal of Health Statistics Reports*, 3(1), 3-5. [https://www.researchgate.net/profile/Richard-Boateng-8/publication/377852947\\_Micro\\_Level\\_Analysis\\_on\\_Health\\_Insurance\\_Enrolment\\_among\\_Selected\\_Women\\_in\\_Ghana\\_Barriers\\_and\\_Predictors/links/65bd00091e1ec12eff6cd940/Micro-Level-Analysis-on-Health-Insurance-E](https://www.researchgate.net/profile/Richard-Boateng-8/publication/377852947_Micro_Level_Analysis_on_Health_Insurance_Enrolment_among_Selected_Women_in_Ghana_Barriers_and_Predictors/links/65bd00091e1ec12eff6cd940/Micro-Level-Analysis-on-Health-Insurance-E)

**Kumah, E., Amponsah, J. M., Owusu Adoma, P., Boakye, D. S., Boateng, R., Owusu-Aduomi Botchwey, C., & Afari Baidoo, M. (2024).** Turnover intention and associated factors among health workers in Christian Health Association of Ghana hospitals: An institution-based cross-sectional study. *International Journal of Healthcare Management*, 1, 1-9. <https://doi.org/10.1080/20479700.2024.2323854>

**Adoma, P. O., Ansah, E., W., Apaak, D., Agjei, R. O., Kumah, E., Boateng, R., & Tarkang, E. E. (2023).** Coping with hypertensive treatment at Bono Regional Hospital in Sunyani, Ghana: a prospective observational cohort study. *Pan African Medical Journal*, 45(185), 1-13. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10656584/>

**Boateng, A. A., Botchwey, C. O. A., Adatorvor, B. A., Baidoo, M. A., Boakye, D. S., & Boateng, R. (2023).** A phenomenological study on recurrent teenage pregnancies in Effutu Municipality-Ghana. The experiences of teenage mothers. *BMC Public Health*, 23(1), 1-10. <https://link.springer.com/article/10.1186/s12889-023-15074-3>

## Abstract

Background Generally, recurrent teenage pregnancies are public health menaces that impede the quality of life of teenage mothers, their offspring, and society as a whole. However, there is paucity of information regarding factors influencing this social issue especially, in developing countries where Ghana is no exception. Moreover, this menace has been least investigated from the perspective of the teenager with multiple pregnancies. Hence, this study aimed at identifying the factors influencing recurrent teenage pregnancies and the

challenges confronted by these teenage mothers. **Method** This study is a phenomenological qualitative study that was conducted in the Effutu Municipality in the Central Region of Ghana. Employing convenience and snowball sampling, 40 participants who were residents of the study area, had a child each, and were pregnant at the time of the study were included. Other participants included teenage mothers who had at least two (2) children. A face-to-face in-depth interview with the help of an interview guide was conducted. Proceedings were recorded, transcribed, and analysed using thematic analysis. Quotations were used in the result presentation. **Results** The results of the study revealed that factors influencing recurrent teenage pregnancies are multifactorial. It includes peer pressure, parental neglect, poverty, living with a partner, and inadequate knowledge of family planning. The teenager with recurrent pregnancy is confronted with financial difficulties and is faced with stigmatisation in the society where she finds herself. **Conclusion** To this effect, it is important to intensify education on family planning and good parental practices among parents with teenage mothers while providing a similar form of sensitization for members of the society about the harmful effects of stigmatisation on the teenage mother and her children. Again, a social support network for teenagers with recurrent pregnancies could be formed to help curb this public health menace. **Keywords** Recurrent teenage pregnancy, Causes, Teenage mothers, Challenges

**Acquah, F., Botchwey, C. O.-A., Adoma, P. O., & Kumah, E. (2023). Lesbian, gay, bisexual, transgender, intersex, and its legalisation in Africa: Insights from tertiary-level students in Ghana. PLoS ONE, 18(7), e0287726. <https://doi.org/10.1371/journal.pone.0287726>**

## Abstract

**Introduction:** Lesbian, gay, bisexual, transgender, and intersex (LGBTI) and related activities have been a topic of debate and discussion among policymakers and stakeholders, as well as common citizens in the African region, especially in Ghana. The current anti-LGBTI-related bill being put before Ghana's Parliament signifies the intensity of the issue. Even though some studies have looked at some aspects of the issue, no study presently has explored people's opinion on the passage of any future anti-LGBTI and related legislations in Ghana. **Aim:** This study examined the perspective of tertiary-level students on the passage of anti-LGBTI legislation, as well as the non-physical factors that influence support for the passage of anti-LGBTI and related legislation in Ghana. **Methods:** The study employed a quantitative cross-sectional design using 1,001 tertiary-level students. The study used convenience sampling technique with an online closed-ended, structured survey questionnaire as the main data collection instrument. The data was then analysed using Statistical Package for the Social Sciences, version 29 at a 5% significance level.

**Results** The results of the study indicated that majority of the respondents (81%) were in support of the passage of anti-LGBTI and related legislations. Their reasons included the health implications of LGBTI and related activities (63%), cultural and societal values (62%), religious reasons (54%), and western culture (25%). Also, almost half of the respondents (49%) held that health related perceptions about LGBTI have little or no empirical basis. The inferential analysis, further, revealed that even when age and sex assigned at birth are controlled, perceived health implications of LGBTI ( $\beta = 0.247, p < .001$ ), religious beliefs ( $\beta = 0.189, p < .001$ ), and cultural values ( $\beta = 0.218, p < .001$ ) positively predict the support for passage of anti-LGBTI legislation.

**Conclusions** People's level of support for the passage of anti-LGBTI legislation is influenced by several factors including religious beliefs, cultural values, and the perceived health

implications of LGBTI. There is, however, the need for policy makers and other stakeholders to create awareness and educate the public about the various perceptions about LGBTI and related activities that are not scientifically legitimate.

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Huang, Y., Jiang, S., & Kumah, E. (2024). China and the WHO pandemic treaty: a dive into stance, underpinnings, and implications. *Frontiers in Public Health*, 12, 1-9. <https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2024.1335751/full>

Kumah, E., Asana, Y., Agyei, S. K., Kokuro, C., Ankomah, S. E., & Fusheini, A. (2024). Does health insurance status influence healthcare-seeking behavior in rural communities? evidence from rural Ghana. *Health Policy Open*, 6(3), 1-9. <https://www.sciencedirect.com/science/article/pii/S2590229624000042>

## Abstract

**Introduction:** National health insurance programs are considered important mechanisms for ensuring equity in access to and utilization of healthcare services by removing financial barriers associated with seeking treatment in healthcare facilities. Although studies on health insurance schemes in many low-and-middle-income countries (LMICs) have demonstrated a significant relationship between health insurance status and healthcare-seeking behavior, data on the influence of this health financing policy on the decision to seek formal healthcare among rural inhabitants remains limited. Underpinned by the Andersen-Newman behavioral model of healthcare use, this study examined the influence of health insurance status on healthcare-seeking behavior among rural dwellers in Ghana. **Methods:** A community-based cross-sectional study was conducted among 460 rural residents in Ghana from 8th September to 5th December 2022. Chi-square tests were used to study the significance level and association between healthcare-seeking behavior and selected independent variables. A multiple logistic regression model was fitted to test the association between health insurance status and healthcare-seeking behavior, introducing other selected explanatory variables as controls. **Results:** The mean age of the respondents was  $29.6 \pm 6.8$  years. A little above half (53.1 %) disclosed having insurance, whereas 46.1 % stated they were without coverage. Regarding healthcare-seeking behavior, the most commonly chosen treatment source was traditional healers (37.2 %), followed by the public healthcare system (28.3 %) and self-treatment (18.2 %). The private healthcare system was the least preferred, with only 16.3 % opting for it. While the bivariate analysis demonstrated a significant relationship between health insurance status and healthcare-seeking behavior ( $p=0.001$ ), the logistic regression model results showed that health insurance status was not an independent predictor of healthcare-seeking behavior ( $p = 0.069$ ). **Conclusion:** It could, therefore, not be concluded that the respondents with health insurance coverage were more likely than the uninsured to use formal healthcare providers as their most frequent source of treatment during illness. This study provides vital information for policymakers aiming at increasing access to and utilization of facility-based formal care in rural and remote settings.

Acquah, F., Botchwey, C. O. A., Adoma, P. O., & Kumah, E. (2023). Lesbian, gay, bisexual, transgender, intersex, and its legalisation in Africa: Insights from tertiary-level students in Ghana. *PLOS ONE*, 18(7), 1-9. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0287726>

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## Abstract

Background: Identifying the key factors that may be associated with turnover intention could enable organizations to proactively identify the major determinants of actual turnover and design strategies to reduce voluntary turnover. The aim of this study was to assess turnover intention and its associated factors among health professionals working in Christian Health Association of Ghana (CHAG) affiliated hospitals. Methods: An institution-based cross-sectional study was conducted among 630 health workers in 30 CHAG hospitals from April to September 2022. A structured questionnaire was used to collect data on the respondents' socio-demographic variables, turnover intention, and organizational and job-related factors predicting their turnover intention. Multiple logistic regression analysis was conducted to identify significant predictors of turnover intention. Results: The overall turnover intention rate was 67.4%. Being younger increased the odds of turnover intention among the health professionals. On the other hand, being male, having a high level of organizational



commitment, perceiving organizational support to be high, being satisfied with one's job, and being autonomous at work decreased the health professionals' intention to leave their current place of work. Conclusions: This study provides valuable information that could inform policy decisions and strategies aimed at improving health worker retention in CHAG affiliated hospitals in Ghana.

**Ansah, E. W., Addae, J., Hagan, J. E. Jr., & Baidoo, M. A. (2023). Assessing Stress Levels, Predictors and Management Strategies of Inmates at Ankaful Prison Complex in the Central Region, Ghana. Behavioral Sciences, 13(3), 201. <https://doi.org/10.3390/bs13030201>**

### **Abstract**

Background: Stress among prison inmates is a neglected psychological health issue, but this phenomenon seems worse in Ghana's prisons. This study examined the stress levels, predictors and management strategies utilized among inmates at Ankaful Prison Complex. Method: This survey sampled 1160 inmates using the census approach at the Ankaful Prison Complex with a self developed questionnaire for the data collection. Frequency counts, one-way ANOVA, and multiple regression analysis were applied to the data. Results: The findings indicate that more than half of the inmates were moderately or highly stressed. Specifically, inmates at the Maximum Security Prison were the most stressed, followed by Annex Prison, Communicable Disease Prison, and the least, Main Camp Prison inmates. Inmate engagement in exercises, sporting activities, visit and chat with colleagues, and family connectedness outside the prison were stress-management strategies. Inmates' self-reported stress levels were influenced by the prison of custody and state of depression. Conclusion: The moderate to high stress levels identified among inmates of Ankaful Prison Complex are influenced by person-environment factors. Management of the Ankaful Prison Complex is encouraged to initiate health screening services for inmates on common mental health challenges such as stress and to promote functional stress reduction interventions to improve prisoners' mental health and overall well-being.

**Baidoo, M. A., Ansah, E. W., & Essien-Baidoo, S. (2023). Psychosocial work environment and burnout among employees of a Ghanaian Public University. International Journal of Health Promotion and Education, 8, 1-15. <https://doi.org/10.1080/14635240.2023.2282129>**

### **Abstract**

The psychosocial climate of universities becomes very important because of the increasing student enrolment, academic administrative duties, the quest for promotion, the fast-changing mode of lesson delivery, all leading to work overload. This study aims to examine the influence of psychosocial factors on burnout of employees of a public university in Ghana. A survey measuring burnout and psychosocial work characteristics with the Maslach Burnout Inventory – Educators Survey (MBI-ES) and job demands – Swedish Demand-Control-Support Questionnaire (DCSQ) was completed by 1,222 employees. We developed structural models that suggested that the elements of burnout – emotional weariness, personal accomplishment, and depersonalization – are positively impacted by job demands, social support, job decision freedom, harassment, and discrimination. The results further indicated that job demands, job decision latitude, social support, and harassment have significant effect on emotional exhaustion of the workers. Again, job decision latitude and discrimination significantly influenced depersonalization of the workers. In addition, job demands, job



decision latitude, social support, and discrimination affected personal accomplishment. However, there was no statistically significant influence of discrimination on emotional exhaustion, job demand and depersonalization, social support and depersonalization, harassment and depersonalization, and harassment and diminished personal accomplishment. We conclude that by implementing practical interventions, such as regular training on how to reduce job demands, either physical or psychological, and enhancing social support and job control, burnout among the employees can be improved for improved health and quality teaching.

**Baidoo, M. A., Ansah, E. W., & Essien-Baidoo, S. (2023). Employee turnover intention: The predictive role of work-related burnout and psychosocial climate among university workers. *Journal of Psychology in Africa*, 33(4), 303-312. <https://doi.org/10.1080/14330237.2023.2233210>**

### **Abstract**

This study aimed to investigate the extent to which work-related burnout and psychosocial environment predicted intention to leave employment. This cross-sectional survey sampled 1 222 Ghanaian university employees (females = 37.1%; age range = 18 to above 60 years; mean years of work experience = 5 years, SD = 3.1 years). The employees completed Demand-Control-Support, Work Burnout, Chronic Work Discrimination and Harassment, and Turnover Intention Measures. Using structural equation modelling (SEM), results indicate that work factors like job demand, job decision latitude and harassment predict turnover intention. Personal factors of depersonalisation and diminished personal accomplishment (but not emotional exhaustion) significantly influenced the turnover intention of the workers. Both female and male academic and non-academic employees reported experiencing significantly higher levels of work factors and personal factors and a moderate level of turnover intention. There is a need for university administration to create a workplace climate team to support employees in performing their roles.

**Boateng, A. A., Botchwey, C. O. A., Adatorvor, B. A., Baidoo, M. A., Boaky, D. S., & Boateng, R. (2023). A phenomenological study on recurrent teenage pregnancies in Effutu Municipality-Ghana. the experiences of teenage mothers. *BMC Public Health*, 23(1), 1-10. <https://doi.org/10.1186/s12889-023-15074-3>**

### **Abstract**

Background Generally, recurrent teenage pregnancies are public health menaces that impede the quality of life of teenage mothers, their offspring, and society as a whole. However, there is paucity of information regarding factors influencing this social issue especially, in developing countries where Ghana is no exception. Moreover, this menace has been least investigated from the perspective of the teenager with multiple pregnancies. Hence, this study aimed at identifying the factors influencing recurrent teenage pregnancies and the challenges confronted by these teenage mothers. Method This study is a phenomenological qualitative study that was conducted in the Effutu Municipality in the Central Region of Ghana. Employing convenience and snowball sampling, 40 participants who were residents of the study area, had a child each, and were pregnant at the time of the study were included. Other participants included teenage mothers who had at least two (2) children. A face-to-face in-depth interview with the help of an interview guide was conducted. Proceedings were recorded, transcribed, and analysed using thematic analysis. Quotations were used in the

result presentation. Results The results of the study revealed that factors influencing recurrent teenage pregnancies are multifactorial. It includes peer pressure, parental neglect, poverty, living with a partner, and inadequate knowledge of family planning. The teenager with recurrent pregnancy is confronted with financial difficulties and is faced with stigmatisation in the society where she finds herself. Conclusion To this effect, it is important to intensify education on family planning and good parental practices among parents with teenage mothers while providing a similar form of sensitization for members of the society about the harmful effects of stigmatisation on the teenage mother and her children. Again, a social support network for teenagers with recurrent pregnancies could be formed to help curb this public health menace. Keywords Recurrent teenage pregnancy, Causes, Teenage mothers, Challenges

**Otsin, M. N. A., Hooker L., Black, K. I., Taft, A. (2023). Pharmacy dispensing of abortion pills in Ghana: Experiences of pharmacy workers and users. *BMJ Sexual and Reproductive Health*, 49, 254-259.**

### **Conferences/Workshops/Symposia/Seminars with Presentations**

**Otsin, M. N. A. (2023, September 11 -13). Women at crossroads: A qualitative study of induced abortion and violence in a Ghanaian region [Paper presentation]. British Society for Population Studies Annual Conference, Keele, Staffordshire.**

### **Article(s)/Chapters in an Edited Book**

**Owusu, V., Atanga, R. A., Bofo, Y. A., Gyabaah, K., & Boateng, R. (2023). The effects of the COVID-19 pandemic on small-scale hospitality and tourism businesses in coastal communities in Ghana. In *Tourist destinations and prospects for recovery: Volume two: An African perspective* (pp. XX–XX). Springer International Publishing. [https://doi.org/10.1007/978-3-031-24655-5\\_2](https://doi.org/10.1007/978-3-031-24655-5_2)**

### **Books**

**Gbagbo, F. Y. (2023). *Child health, nutrition, safety and security*. Emmpong Press**

**Nkrumah, J. (2024). *Sexual and reproductive health made simple. Educational resource for young adolescents*. Emmpong Press. <https://adolescenthealthliteracy.com/>**

### **Abstract**

The book introduces readers to basic information and guidance in Child Health, Nutrition, Safety, and Security as well as how each of these variables impacts the growth and development of the child. The health component focuses on preventing diseases of public

health interest and healthy living practices. The Nutrition component encompasses the food we eat, food nutrients, malnutrition, meal planning, food hygiene healthy eating habits, and food safety in children. The safety aspect discusses human activities that lead to optimal safety of children in their environments for the proper functioning of the human body whilst the Security part of the book discusses the prevention of injuries among children and some basic first aid when injuries occur.

**Otsin, M. N. A. (2023). A mixed methods study of post abortion women and service providers in the Ashanti region of Ghana. Sahil.**

## Department of Integrated Home Economics Education

### Articles In Journal

**Cobbah, L., Amfo-Antiri, A., & Kutum C. M. (2024). Organoleptic and acceptability assessment of selected improved indigenous Ghanaian dishes. International Journal of Family and Consumer Sciences, 11, 85-100. <https://ijfacs.org/>**

### Abstract

Ghana is home to more than 70 different ethnic groups with distinct traditional indigenous recipes and dishes that spell out their cultural roots and identity, which have been handed down from generation to generation. However, there seems to be a reduction in the choice and consumption of these due to obsolete ingredients used in contact with foreign cultures, modernity, education, peer influence, convenience, time and method of preparation. Very little information can be found on improved indigenous Ghanaian dishes as most researchers in this field have focused on documenting the recipes rather than improving the existing ones to increase their acceptability and patronage hence this exploratory study. With a sample of 100 respondents, of Winneba community members using convenience and purposive techniques, quantitative and qualitative data were analysed using SPSS version 26 and presented using descriptive statistics. Findings revealed that all respondents (100%) were familiar with the original dishes but scored the improved dishes (Banku, Yakeyake, Mpɔtɔmpɔtɔ, Peewa, Eto, Akankye3, Aky3k3) very high (75% - 95%) with regards to their appearance, aroma, taste, after taste, texture and overall acceptability during the sensory evaluation. A p-value ranging from 0.00 - 0.02 ( $p < .05$ ) was obtained for all 5 null hypotheses, indicating a rejection of these null hypotheses for their alternate hypotheses. It is therefore concluded that adding other ingredients such as fish powder, soya flour, and assorted vegetables to the original recipes improves the dishes' sensory properties and increases their acceptability by consumers. It is recommended that homemakers, caterers, and chefs adopt improved recipes to bring variety to the diet of consumers while promoting and maintaining the Ghanaian food culture.

**Gregory, S., Amfo-Antiri, A., Agyapong, N. A. F., Davies, M., Danso, S. O., Farina, F. R., Saunders, S., Wells, K., Willingham, K., & Booi, L. (2023). Co-production in the PREVENT Next Generation Study: Methodology and outcomes. *Alzheimer's Dement*, 19: e077949. <https://doi.org/10.1002/alz.077949>**

### **Abstract**

Background: Involving patients and the public as stakeholders (hereafter described as contributors) in the design and management of research studies is increasingly recognised as central to conducting ethical, meaningful and translatable research. Consulting and co-producing are two methods for involving public contributors in the research cycle. This abstract describes the methodology used to establish a co-production model for the PREVENT Next Generation (NextGen) research program, alongside initial impact the contributors have had on the program. The NextGen research programs aims to explore brain health in young adults (aged 18-39), and all contributors represent this age group. Method: Adverts appealing for public contributors were sent to voluntary and community sector enterprises, universities, promoted on social media and spread via word of mouth. The first round of recruitment focused on contributors living in North America and Europe, with recruitment underway in Ghana. Contributors watched an introductory video, completed a form to indicate interest and were sent an invite to a virtual meeting. The aim of the initial work was to consider and feedback on the NextGen proposal, beginning the co-production by identifying topics of interest for inclusion in planned work. Result: Public contributors joined the initial meetings and were supportive of the need to understand more about brain health in young adults. Public contributors were interested in exploring topics such as the role of sex differences, social relationships and air pollution on brain health. Considering the focus groups (Phase 1 of NextGen), contributors advised having a choice of times that would support adults in work or education to join, as well as expressing a preference for virtual engagement for such studies

**Opoku, D. A., & Cobbah, L. (2024). A survey on the knowledge and use of quail eggs in the Effutu municipality of the central region of Ghana. *International Journal of Family and Consumer Sciences*, 11(1.0), 1-10. <http://ijfacs.org>**

### **Abstract**

This descriptive survey focused on investigating consumers' knowledge of quail eggs, frequency of consumption, and motive of usage among the people of Effutu in the central region of Ghana. Multi-stage sampling techniques (stratified, simple random, and purposive) were used to select a sample size of 392. Data collected with the questionnaire were analysed and presented in descriptive statistics. The Results indicated that out of the 392 respondents, 239 (61%) had knowledge about quail eggs, 127 (53%) of the respondents used quail eggs, and 62 (49%) of those who had ever used the eggs consumed them daily for medicinal purpose rather than food with the majority (87.1%) revealing that they experienced positive results in their health conditions after using the quail eggs. It could be concluded that most Effutu people know about quail eggs but the consumption rate is rather low with the motive of managing degenerative diseases such as hypertension, diabetes, and kidney problems but not as food. Increased education will enhance awareness and patronage of quail eggs and help ameliorate malnutrition since quail eggs are highly nutritious.

**Amfo-Antiri, A., Agyapong, N. A. F. & Cobbah L. (2023). Dietary habits and Nutritional challenges of the elderly in Ghana. *Journal of Nutrition and Metabolism*, 2023(3011067), 1-8. <https://doi.org/10.1155/2023/3011067>**

### **Abstract**

The elderly population is increasing worldwide. Dietary habits play a crucial role in prolonging life and preventing diseases. This cross-sectional study sought to investigate the dietary habits of the elderly in the Kwahu South District of the Eastern Region of Ghana and further ascertain the factors that constitute nutritional challenges among this group. A mixed method approach was used for the study. A questionnaire and focus group discussion guide were used to solicit data from study participants. A total of 97 participants made up of 59 males and 38 females participated in the study. Data on food habits reveal that staple food consumption especially those grown within the study area is common. Rice (34.1%), game meat (47.1%), banana (63.9%), and garden eggs (27.8%) were the commonly consumed foods by frequency. Mood (41.2%) and stress (24.8%) were identified as the most predominant determinants of food habits. Poly medication, toothache and loss, immobility, and financial and technological challenges were amongst the nutritional challenges mentioned by the elderly in this study. Results from the focus group discussion revealed high nutrition knowledge among the elderly through factors such as financial constraints that were mentioned as a barrier to the translation of this knowledge into practice. Strengthening of existing interventional programmes such as the Livelihood Empowerment Against Poverty and social interventions is needed to improve the dietary habits and nutritional intakes of the elderly.

**Cobbah, L, Edumadzie, M. E., & Ogoe, J. (2023). Endangered indigenous Ghanaian dishes: Home Economics students of University of Education, Winneba, Ghana's perspective. *Kwame Nkrumah University Multi-Disciplinary Journal-Zambia*, 1(1), 5-16.**

**Damalie, S. A., Forster, P., & Kludzi, E. A. (2023). Interpersonal relationship experiences of technical university fashion learners. *International Journal of Vocational and Technical Education Research*, 9(2), 25-39.**

# Department of Clothing and Textiles Education

## Articles In Journal

**Osei, M. A., Appiah, N. A., Howard, E. K., & Asinyo, B. K. (2023). Competitiveness: A critical factor in the performance of small and medium-sized garment enterprises amidst dynamism of globalisation. *Journal of African Arts & Culture*, 6(4), 5-26. <https://jaac-sca.org>**

### Abstract

This study aims to investigate the role of competitiveness in the dynamics of globalisation and performance of SMEs in Ghana's garment manufacturing sector. Employing a quantitative research design, the study analyzes survey data collected from members of the Ghana National Dressmakers and Tailors Association (GNDTA) who are registered with the Ministry of Trade and Industry (MoTI) database across major industrial cities: Accra, Kumasi, and Tamale. Among a sample of 204 conveniently selected respondents, it was observed that globalisation has a notable impact on enterprise performance. Additionally, competitiveness emerged as a significant factor influencing enterprise performance. Furthermore, the study found that competitiveness acts as a mediator, explaining the relationship between globalisation and enterprise performance. In summary, the research 16 *Journal of African Arts & Culture* Vol. 6 No. 4 2023 concluded that globalisation and competitiveness jointly enhance the performance of firms within the fashion industry. As a recommendation, fashion firms are encouraged to embrace modern approaches in their practices to enhance competitiveness in the global fashion landscape. Keywords: Globalisation, Competitiveness, Enterprise Performance, Garment Enterprise

**Osei, M. A., Appiah, N., Adala, C., Asinyo, B. K., & Howard, E. K. (2023). Globalisation and its impact on operational flexibility drive and the performance of Ghana's small and medium scale garment enterprises. *African Journal of Applied Research*, 9(2), 210-221. <http://doi.org/10.26437/ajar.31.10.2023.13>**

### Abstract

**Purpose:** This study aims to dissect the complex dynamics between globalisation, operational flexibility, and enterprise performance in Ghana's garment manufacturing sector. **Design/Methodology/Approach:** Employing a quantitative research design, the study analyses survey data collected from members of the Ghana National Dressmakers and Tailors Association (GNDTA) who are registered with the Ministry of Trade and Industry (MoTI) database across major industrial cities: Accra, Kumasi, and Tamale. Two hundred and thirteen small and medium garment producers were sampled from the three ecological zones in Ghana by convenience and stratification. **Findings:** The findings of the study revealed that globalisation significantly influences enterprise performance. Hence, operational flexibility did not influence performance. Additionally, operational flexibility did not explain the relationship between globalisation and enterprise performance. It can be concluded that fashion industries do not need operations to improve their performance, but rather globalisation to boost their performance in the fashion industry. It is recommended that fashion firms should focus more on globalisation to enhance their performance in the fashion industry. **Research limitation /Implication:** This study focused on Globalisation, Operational flexibility, and Enterprise Performance. **Practical implication:** It was discovered that there are practical implications

of globalisation for Small and medium-sized garment enterprise practitioners and other small garment enterprises in developing countries. Social implication: This study will assist policymakers in addressing globalisation's impact on Small and medium-sized garment enterprises considering that globalisation is a key factor in supporting the performance of enterprises' profitability and sustainability. Originality/ Value: The inclusion of operational flexibility as a central driving force sets this study apart. Examining how globalization influences the ability of garment enterprises to adapt and be flexible in their operations contributes novel insights into the mechanisms that drive competitiveness in the global market.

Keywords: Enterprises. garment. globalisation. operational flexibility. performance

**Osei, M. A., Forster, P., & Ogoe, J. (2023). Considerable factors influencing the selection of children's wear made in African print fabrics. *Journal of Business Administration and Research*, 12(2), 12. <https://www.researchgate.net/publication/372052192>**

### **Abstract**

African print is gaining much popularity worldwide. Its usage for children's wear is fast growing. Therefore, there was a need to find out what consumers considered when choosing African print fabrics for children's wear. The research utilized the qualitative method as the main method of gathering data where a descriptive survey design was employed to solicit data from forty (40) respondents. In-depth interviews were done with school children between the ages of 5-10 years, and one of each child's parents. The study adopted interviews and observation with children's emotions captured by the use of the Thematic Apperception Test (TAT). Results from interviews and observations, although not generalizable indicated that different types of African print possess different qualities. Colour, price, motif size, and pattern layout influenced the selection of African print for children's wear. The implication of this finding is that textile designers should make durable, versatile fabrics that are colourful but incorporate classic shapes and patterns with fun details

**Quacoo, R., Forster, P., Ogoe, J., Osei, M. A., Ghanney, V., & Agbodo, P. (2023). Acceptability of locally produced nose masks in a university community in Ghana. *Journal of African Arts and Culture*, 6(1), 91-119. <https://jaac-sca.org>**

### **Abstract**

The study looked at the acceptability of cloth nose masks produced during the outbreak of COVID 19 in a public University in Ghana. This study looked into staff consumers' views and experiences with the cloth nose mask produced by the Clothing Production Unit (CPU) of a public university in Ghana. The production quality, durability, comfortability, ease of care and acceptability of the cloth nose was assessed with the intent to use findings to guide future production. The study adopted the descriptive survey design. A self-developed structured questionnaire was used for detail data collection from one hundred (101) respondents who were purposively selected and conveniently reached. The findings generally presented high acceptance level for the cloth nose masks. Specifically, respondents rated sample two (46) and one (44) as the most preferred designs of the cloth nose mask. Also, respondents found the cloth nose masks quality in terms of production 92 (M=3.84), design (M=3.98), comfort of usage (M=3.77), durability (M=3.97), easiness in caring (M=3.95). The study concludes that the cloth nose masks produced by CPU meet consumer expectations and acceptance.



This implies that if production is guided by improved practices the cloth nose masks would serve its intended purpose of controlling the spread of covid-19. Therefore, this survey recommends the adoption of the cloth nose masks to supplement other types recommended for use by World Health Organization (WHO) whilst maintaining and/or improving standards of production.

**Cobbah, L, Edumadzie, M. E., & Ogoe, J. (2023). Endangered indigenous Ghanaian dishes: Home Economics students of University of Education, Winneba, Ghana’s perspective. Kwame Nkrumah University Multi-Disciplinary Journal-Zambia, 1(1), 5-16.**

### **Abstract**

The culture of any group of people portrays their way of life transmitted across generations. Most of the elements of the Ghanaian culture including the food, its preparation and service have been altered due to colonization. There seems to be an abandonment of indigenous Ghanaian cuisines and delicacies as very little of them is seen in eateries, at social functions and in homes. The study sought to identify indigenous Ghanaian dishes that are endangered; examine the factors accounting for the endangerment of the dishes and suggest strategies for ameliorating this phenomenon. This descriptive survey adopted the quantitative research approach to gather and analyze data from a sample of 204 respondents who were chosen from the various regional groups that were formed. Respondents were on an average age of 23 years. A multistage sampling technique comprising Purposive, Stratified Random and Convenience sampling techniques were employed to select respondents. A self-developed questionnaire (Google form) was used to gather data which were analyzed using Microsoft Excel and Statistical Package for Social Sciences (SPSS) version 23. The results revealed that majority (78.2%) of respondents are unfamiliar with most indigenous Ghanaian dishes from their respective localities; indicating their possible extinction. Factors leading to the unfamiliarity included Westernized education (96%), advertisement of foreign foods (92%), climate change (92%) and migration (89%). In order to ameliorate this looming canker, it was suggested that, media advertisements should hype indigenous dishes (37.2%); there should also be improvement in the nutritive and organoleptic properties of the dishes (14%) as well as infusion of indigenous foods into school curricula (10.1%). More research on endangered indigenous Ghanaian dishes is recommended to bail them out of obscurity and extinction. Intervention programmes such as recipe development of local dishes at school levels to revitalize cultural values in foods are also recommended.

**Ogoe, J., Howard, E. K., Appiah, N., & Asinyo, B. K. (2023). Challenges visually impaired students face in acquiring fashion skills: A case study among visually impaired training institutions in Ghana. African Journal of Applied Research, 9(2), 191-209. <http://doi.org/10.26437/ajar.31.10.2023.12>**

### **Abstract**

**Purpose:** This study explored the challenges visually impaired (VI) students face concerning fashion skill acquisition. **Design/Methodology/Approach:** The research design was based on qualitative. The combination of purposive and snowball sampling techniques was chosen to ensure a diverse participant pool, capturing a range of perspectives on what visually impaired students face concerning fashion skill acquisition. Thematic analysis was employed to uncover patterns and themes, contributing to a rich understanding of the subject matter. **Findings:** The findings revealed that the visually impaired are challenged by barriers to enrolment in fashion programmes, the cost-intensive nature of training, lack of sight, lack of

skilled teachers and perceptions about Students with Visual Impairments (SVI) in Fashion. The study initiates further stakeholder discussions regarding designing a simplified inclusive curriculum to accommodate individuals with visually impaired and interested in enrolling on fashion courses. The Research Limitation: Purposive and snowball sampling techniques may introduce selection bias, as participants are recruited based on specific criteria and through referrals. This may result in a sample that is more inclined to share similar perspectives, potentially overlooking the diversity of experiences within the visually impaired student community. Practical Implication: Implementation of these practical measures can contribute to breaking down barriers and ensuring equal access to opportunities in the field of fashion for all students, regardless of visual ability. Social Implication: Inclusive fashion education for the visually impaired has the potential of developing such individuals socially and economically thereby relieving the government of potential financial burden and reducing the social exclusion that the visually impaired experience. Originality/ value: The novelty of studying visually impaired students regarding fashion skill acquisition lies in its potential to uncover unique challenges, innovative solutions, and opportunities for inclusivity in education and vocational training.

**Ogoe, J., Howard, E. K., Appiah, N., Asinyo, B. K., & Antwi, A. B. (2023). An exploratory study on support systems available in Ghana for fashion skill acquisition by the visually impaired. *Journal of African Arts & Culture*, 6(3), 23-43.**

### **Abstract**

This study explored the views of respondents on systems available in Ghanaian institutions that support the acquisition of fashion skills by the visually impaired. The study was premised on the fact that the availability of these systems are not known to redirect and facilitate the skill development of the visually impaired in fashion. Specifically, the study assessed the experiences of visually impaired individuals concerning systems available to enable them to enroll and acquire fashion-related skills. The case study research design was adopted to select and report data qualitatively. Interview and Focus Group Discussion were used to collect data from twenty-seven visually impaired students and six Fashion and Special Education experts. The respondents were reached through the adoption of purposive, convenience and snowball sampling techniques. With the aid of Nvivo software version 14, thematic analysis was carried out and presented as findings in this study. The study revealed that the Ghanaian educational system struggles to provide systems supportive for training the visually impaired with fashion skills. It was recommended that the government and institutions that provide aids for visually impaired education, implement the necessary support systems to train the visually impaired with fashion skills in order to develop and empower their creative abilities in fashion.

**Osei, M. A., Forster, P., & Ogoe, J. (2023). Considerable factors influencing the selection of children's wear made in African print fabrics. *Journal of Business Administration Research*, 12(2), 1-8. <https://doi.org/10.5430/jbar.v12n2p1>**

### **Abstract**

African print is gaining much popularity worldwide. Its usage for children's wear is fast growing. Therefore, there was a need to find out what consumers considered when choosing African print fabrics for children's wear. The research utilized the qualitative method as the main method of gathering data where a descriptive survey design was employed to solicit

data from forty (40) respondents. In-depth interviews were done with school children between the ages of 5-10 years, and one of each child's parents. The study adopted interviews and observation with children's emotions captured by the use of the Thematic Apperception Test (TAT). Results from interviews and observations, although not generalizable indicated that different types of African print possess different qualities. Colour, price, motif size, and pattern layout influenced the selection of African print for children's wear. The implication of this finding is that textile designers should make durable, versatile fabrics that are colourful but incorporate classic shapes and patterns with fun details.

**Quarcoo, R., Forster, P., Ogoe, J., Osei, M. A., Ghanney, V., & Agbodo P. (2023). Acceptability of locally produced nose mask in a university community in Ghana. *Journal of African Arts & Culture*, 6(1), 91-119.**

### **Abstract**

The study looked at the acceptability of cloth nose masks produced during the outbreak of COVID 19 in a public University in Ghana. This study looked into students' views and experiences with the cloth nose mask produced by the Clothing Production Unit (CPU) of a public university in Ghana. The production quality, durability, comfortability, ease of care and acceptability of the cloth nose was assessed with the intent to use findings to guide future production. The study adopted the descriptive survey design. A self-developed structured questionnaire was used for detail data collection from one hundred (101) respondents who were purposively selected and conveniently reached. The findings generally presented high acceptance level for the cloth nose masks. Specifically, respondents rated sample two (46) and one (44) as the most preferred designs of the cloth nose mask. Also, respondents found the cloth nose masks quality in terms of production (M=3.84), design (M=3.98), comfort of usage (M=3.77), durability (M=3.97), easiness in caring (M=3.95). The study concludes that the cloth nose masks produced by CPU meet consumer expectations and acceptance. This implies that if production is guided by improved practices the cloth nose masks would serve its intended purpose of controlling the spread of covid-19. Therefore, this survey recommends the adoption of the cloth nose masks to supplement other types recommended for use by World Health Organization (WHO) whilst maintaining and/or improving standards of production.

## Department of Food and Nutrition Education

### Articles In Journal

Ekpor Anyimah-Ackah (2024). Local staples, and global solutions: optimizing the effect of traditional fermentation on heavy metals and mineral nutrients. *Nutrition & Food Science*, 54(1), 238-250. <https://doi.org/10.1108/NFS-02-2023-0037>

Glago, P., Nyefene, J. D., Darko, P., & Abdul Rahaman, A. B. (2023). Consumer perception on new ways of preparing and presenting “Koose” and leaves in Wa, Ghana. *American Journal of Food Technology*, 18(1), 16–26. <https://sialert.net/abstract/?doi=ajft.2023.16.26>

### Abstract

Background and Objective: Koose as an economical Ghanaian local dish prepared from cowpea can be eaten with moringa leaves or velvet tamarind leaves as a meal in the Northern part of Ghana. As part of strategies to promote the consumption of Ghanaian local dishes, the study sought to review the form of preparing and presenting the meal, introduce a different approach to the preparation and presentation of the meal as well as preparing the meal with dandelion leaves and testing its acceptability within the Wa Township. Materials and Methods: The study employed a descriptive survey design with a sample size of 156 consumers as panellists for sensory evaluation of three samples of the food. The sensory characteristics of the three samples of “koose” and leaves were judged by panellists using the hedonic scale of five-point on the sensory attributes of appearance, overall taste, moisture, texture, aroma, preparation and acceptability amongst other things. Results: Using the Kruskal-Wallis Test, significant differences were seen in appearance across the 3 categories of food samples. The findings revealed that the appearance of “koose with leaves” presented as koose salad was preferred over the usual koose mashed with leaves presented. The sample prepared with dandelion leaves were perceived to be more moist and tender than the samples prepared from moringa leaves. The preparation of samples 2 and 3 was perceived to be more hygienic than sample 1. The study revealed that koose salad was more accepted. Conclusion: Local dishes will have to be presented neatly and attractively to boost patronage as consumers will find more attractively served dishes more acceptable

**Boamah, G., Apprey, C., Annan, R. A., Asamoah-Boakye, O., Aduku, L. N. E., Gyimah, L. A., & Lutterodt, H. E. (2023). Level of nutritional knowledge and adherence to food taboos contribute to poor nutrition among pregnant adolescents in Ashanti Region of Ghana. Journal of Ghana Science Association, 21(2737-713), Article 5. [https://www.bing.com/search?pglt=43&q=LEVEL+OF+GRACE+BOAMAH+JOURNAL+OF+GHANA+SCIENCE+ASSOCIATION&cid=1e5442ec939a4c68bc326dbf009e98b2&gs\\_lcrp=EgZjaHJvbWUyBggAEEUYOdIBCTM4NzYxajBqMagCALACAA&FORM=ANNTA1&PC=HCTS](https://www.bing.com/search?pglt=43&q=LEVEL+OF+GRACE+BOAMAH+JOURNAL+OF+GHANA+SCIENCE+ASSOCIATION&cid=1e5442ec939a4c68bc326dbf009e98b2&gs_lcrp=EgZjaHJvbWUyBggAEEUYOdIBCTM4NzYxajBqMagCALACAA&FORM=ANNTA1&PC=HCTS)**

**Sekyi, E., Agyapong, N. A. F., & Eshun, G. (2023). Food consumption by NOVA food classification, metabolic outcomes, and barriers to healthy food consumption among university students. Food Science & Nutrition, 12(3), 1983 - 1994. <https://doi.org/10.1002/fsn3.3894>**

## Abstract

The NOVA food classification system is a simple tool that can be used to assess the consumption levels of different categories of foods based on their level of processing. The degree to which food is processed has a significant impact on health outcomes. In Ghana, no study exists on the consumption of the different NOVA food groups among tertiary students and how it relates to their metabolic outcomes. This study assessed the frequency of food intake according to the NOVA classification and how they relate to body mass index, waist circumference, and blood pressure. The barriers to the consumption of healthy foods among students were also assessed. This was a cross-sectional study conducted among 352 students of the Takoradi Technical University. Questionnaire was used to obtain sociodemographic information as well as data on perceived barriers to healthy food consumption. Food frequency questionnaire was used to obtain data on dietary intake. The weight, height, waist circumference, waist-to-hip ratio, and blood pressure of all participants were measured. Chi-square was used to compare categorical variables between males and females and to determine the association between the frequency of food intake according to the NOVA classification and metabolic indicators. The prevalence of overweight and obesity was 23.8%. More than half (51.1%) of the students had elevated blood pressure. The majority of study participants (54.2%) had a high frequency of consumption of both unprocessed and ultra-processed foods. Male students who frequently consumed ultra-processed foods (1–6 times/day) had significantly high blood pressure. High consumption of both ultra-processed and unprocessed foods was also associated with elevated blood pressure among male students. Limited time to prepare healthy meals and the high cost of unprocessed foods were among barriers to which most students strongly agreed to. Establishment of canteens that provide affordable healthy foods, teaching students time management, and nutrition education can mitigate barriers to healthy food consumption

**Xiong, Y., Huang, J., Amoah, A. N., Liu, B., Bo, Y., & Lyu, Q. (2023). Folate, vitamin B6, and vitamin B12 intakes are negatively associated with the prevalence of hypertension: A national population-based study. Nutrition Research, 112, 46–54. <https://doi.org/10.1016/j.nutres.2023.02.006>**

## Abstract

Abstract We hypothesized that the prevalence of hypertension is related to B-vitamin intake in the general population, but it has not been sufficiently studied. This study aimed to investigate the intakes of dietary folate, vitamin B6, and vitamin B12 concerning hypertension in US adults. A total of 55 569 adults from National Health and Nutrition Examination Survey III and 1999–2014 were included in this study. Nutrient intake was collected from subjects

through one or two 24-hour dietary reviews. Multiple logistic regression models were used to examine the relationship between these nutrient intakes and hypertension. Among male participants, dietary folate, vitamin B6, and vitamin B12 intakes were significantly and negatively associated with the prevalence of hypertension, with multivariate-adjusted odds ratios (ORs) of 0.61 (95% confidence interval [CI], 0.55–0.68), 0.65 (95% CI, 0.59–0.72), and 0.84 (95% CI, 0.75–0.95) for the highest quartile group compared with the lowest group. Results were similar for female participants, with multivariate-adjusted ORs of 0.63 (95% CI, 0.57–0.71), 0.60 (95% CI, 0.53–0.66), and 0.87 (95% CI, 0.77–0.98) for the highest quartile group. Moreover, there was a linear trend ( $P_{\text{trend}} < .001$ ) in both men and women that the prevalence of hypertension tended to decrease with increased intake of folate, vitamin B6, and vitamin B12; however, the decreases above the third quartile were negligible. Dietary folate, vitamin B6, and vitamin B12 were significantly associated negatively with hypertension, indicating that these nutrients might have a protective effect against hypertension in United States adults.

**Graphical Abstract** This study included a total of 55 569 adults from the National Health and Nutrition Examination Survey (NHANES). Nutrient intake was collected through one or two 24-hour dietary reviews. Dietary folate, vitamin B6, and vitamin B12 intake were negatively correlated with the prevalence of hypertension. There was a tendency for the prevalence of hypertension to decline as intake increased ( $P_{\text{trend}} < .001$ ). Besides, dietary folate and vitamin B6 were found to interact with smoking in females.

Image, graphical abstract

## Department of Family Life Management Education

### Conferences/Workshops/Symposia/Seminars with Presentations

**Okrah, A. K., & Adu Henaku, E. (2024, April 4-5). Collaboration between Stakeholders in the Design of Context-based Curriculum in Ghana [Paper presentation]. School of Education and Leadership (SEL) International Biennial Conference, Accra.**

**Adu Henaku, E. (2023, November 27-29). Collaboration between stakeholders in the design of context-based curriculum in Ghana [Paper presentation]. Journal of International Cooperation in Education (JICE) Writers' Workshop, Hiroshima, Chūgoku (San'yō).**

**Adu Henaku, E., & Sakata, N. (2023, November 24-26). Collaboration between stakeholders in the design of context-based curriculum in Ghana [Paper presentation]. 13th Biennial Conference of the Comparative Education Society of Asia (CESA), Hiroshima, Chūgoku (San'yō).**

**Koranteng, L. B., Amedekanya, J., & Adu Henaku, E. (2023, October 5-7). Exploring Sustainable Development Goals (SDGs) awareness among college of education students in Ghana [Paper presentation]. IREAD Ghana 2023 Global Educational Conference, Winneba, Central Region.**



# Department of Environmental Health and Sanitation Education

## Articles In Journal

**Agyekum, M. W., Nyieku, F. E., Yeboah, S. B., & Frempong-Ainguah, F. (2024). Factors associated with rural-urban safe disposal of children stools in Ghana. BMC Research Notes, 17(1), 1-9. <https://doi.org/10.1186/s13104-024-06701-2>**

### Abstract

**Introduction:** The burden of children’s disease in many low-and middle-income countries is associated with poor sanitation, including unsafe disposal of children’s stool. Infants and toddler stools pose a greater public health risk than adults. Studies on stool disposal in Sub-Saharan Africa (SSA) and Ghana have focused on prevalence, patterns, and associated factors. Nevertheless, these studies have not focused on factors that independently influence rural and/or urban child stool disposal. This study, therefore, examines factors associated with safe child stool disposal in rural areas separately from urban areas towards Ghana’s readiness for ending open defaecation by 2030. **Methodology:** We examined young children’s faecal disposal drawing on the sixth round of the nationally-representative Ghana Multiple Indicator Cluster Survey (MICS) conducted in 2017/18. This study was restricted to children under two years, yielding a sub-sample of 3,476. Responses of caregivers or mothers who disposed of children less than two years faecal matter, their characteristics in addition to the child’s age in months were analysed. A binary logistic regression was used to examine the factors associated with the safe disposal of young children’s stools. **Results:** In the aggregated data, only 22% of households, regardless of their residence, dispose of their young children less than two years stools safely. From the disaggregated data, the rural analysis shows that 26% of young children’s stools were safely disposed of, compared to 16% in the urban analysis. The urban analysis shows that the child’s age, sex and caregiver’s marital status were significantly associated with safe disposal of stools. On the other hand, child’s age, caregiver listening to radio and household access to improved toilet facilities were significant in the rural analysis. **Conclusion:** The safe practice of stool disposal was very low. The results of this study show that urgent and different policies and strategies are needed to address child stool disposal in urban residences compared to rural residences if we are to meet SDG targets of ending open defaecation.

**Safo-Adu, G., & Owusu-Adzorah, N. (2023). Solid waste characterisation and recycling potential: A study in secondary schools in Kumasi Metropolis, Ghana. Cleaner Waste Systems, 4(100065), 1-10. <https://doi.org/10.1016/j.clwas.2022.100065>**

### Abstract

Solid waste characterisation is vital for proper planning and successful implementation of a recycling strategy. Information on the physical characteristics of solid waste generated in the schools in Kumasi Metropolis is limited. This study characterised and assessed the recycling potential of solid waste generated in selected secondary schools in Kumasi Metropolis in the Ashanti Region of Ghana. A stratified random sampling technique was employed to select the schools, namely, Kumasi Anglican Senior High School (KASHS), Kumasi Wesley Girls Senior High School (KWGSHS), and Kumasi Senior High Technical School (KSHTS) for the study. Seventeen waste samples were collected daily in each school

for three weeks using coded 240 L waste bins. Physical characterisation was conducted on the solid waste generated in the schools. The data were analysed using one[1]way ANOVA. The study revealed that the distribution pattern of waste flow in the schools was organic (29.0 %), paper (29.0 %) > plastic (18.0 %) > metal (13.0 %) > leather (5.0 %) > glass (4.0 %) > residual waste (2.0 %). Daily waste generation levels in the schools differed [F(2, 60) = 105.860, p = .000] with varied levels of recyclable wastes. On average, the schools had a per capita waste generation of  $0.0926 \pm 0.0003$  kg/person/ day, with KSHTS recording the highest percentage recyclable waste level, followed by KASHS and KWGSHS. Recyclable waste constituted about 97.0 % of the schools' waste flow, with organic waste accounting for 30.0 %. The recycling potential of solid waste generated in the schools was high. Adoption of recycling and composting as sustainable means for treating recyclable and compostable wastes respectively is recommended.

# FACULTY OF SCIENCE EDUCATION

## Department of Biology Education

### Articles in Journal

- Asare, K. K., Azumah, D. E., Adu-Gyamfi, C. O., Opoku, Y. K., Adela, E. M., Afful, P., ... & Ekuman, E. O. (2024). Comparison of microscopic and xpert MTB diagnoses of presumptive mycobacteria tuberculosis infection: retrospective analysis of routine diagnosis at Cape Coast Teaching Hospital. *BMC Infectious Diseases*, 24(1), 1-10.
- Asare, K. K., Mbata, J., Amoah, S., Mayeem, P. B., Bentsi-Enchill, F., & Opoku, Y. K. (2023). Network of interaction among *Enterobacter* species and *Klebsiella pneumoniae* clinical isolates and the antibiotic resistance pattern at Cape Coast. *The Open Microbiology Journal*, 17(1), 1-10.
- Asare, K. K., Bentil, H. A., Gyesei, E., Amoah, S., Bentsi-Enchill, F., & Opoku, Y. K. (2023). Candidiasis profile at the outpatient department of the University of Cape Coast hospital in the Central Region of Ghana: A retrospective study. *BMC Women's Health*, 23, 110.
- Barnes P., Agbo E., Wang J., Amoani B., Opoku Y. K., Okyere P., Saahene R. O. (2023). Prognostic Worth of Nrf2/BACH1/HO-1 Protein Expression in the Development of Breast Cancer. *Medical Principles and Practice*, 8, 1-17. <https://doi.org/10.1159/00053453>
- Duntu, P. E., Afrifa, J., Opoku, Y. K., & Asare, K. K. (2023). *Plasmodium falciparum* RIFINS: Role in malaria pathogenesis. *Integrated Health Research Journal*, 1(1), 64–76.

### Abstract

Malaria kills an estimated 600,000 people each year, especially children under five years who reside in sub-Saharan Africa. Malaria fatalities are associated with severe forms such as cerebral malaria, acute respiratory failure, severe anaemia, renal failure, hypoglycaemia, and pulmonary oedema. Although the underlying pathogenic mechanisms in immune responses and parasite immune evasion, cytoadherence of parasitized red blood cells, and rosetting are enumerated, the mechanisms are not fully understood. *P. falciparum* parasite-derived surface protein, repetitive interspersed family (RIFIN) genes are involved in rosetting, blocking microcirculation, and playing a role in malaria pathogenesis; it is unclear which RIFIN family genes are involved in the various pathogenic mechanisms in malaria. RIFINs are the extensive malaria family genes expressed throughout the malaria parasite stages, indicating their diverse roles. Malaria pathogenesis occurs in erythrocyte-stage infection, and the expression of RIFINs at this phase could play a diverse role in the various pathogenic mechanisms. They are involved in major phenomena such as cytoadherence, merozoite evasion, and immune evasion. RIFINs aid in the immune evasion of *P. falciparum* through various molecular interactions by binding to the inhibitory receptors LAIR1, LILRB1, and LILRB2. RIFINs in severe forms of malaria (such as cerebral malaria and severe anaemia) require a considerable understanding to target and control malaria severity and mortality. RIFINs are implicated

in severe malaria and are discussed together with other variant surface antigens such as STEVORS or PfEMP1 in the specific pathophysiology of malaria. This review details the role of RIFINs in the various malaria pathophysiological mechanisms underlying severe malaria and mortality (PDF) *Plasmodium Falciparum Rifins: Role in malaria pathogenesis.*

**Wilmot, D., Asare, K. K., & Opoku, Y. K. (2023). Antimalarial health seekers' preferences and perceptions: Insights from Ghana. *Journal of Infectious Disease Epidemiology*, 9, 312.**

**Dwamena, E., Acquah, S., & Kumi-Manu, R. N. (2024). Perception of authentic assessment in the standards-based curriculum in the Effutu Municipality. *International Journal for Early Childhood and Educational Research*, 1(1), 174–194. <https://journals.uew.edu.gh/index.php/ijeccer/article/view/269>**

## **Abstract**

The study explored primary school science teachers' perception of authentic assessment in the Standards-based Curriculum in the Effutu Municipality. The study was modelled on an explanatory sequential mixed methods design. A simple random sampling technique was used to select a sample size of 180 teachers for the quantitative phase out of which four teachers were purposively sampled for the qualitative phase of the study. A structured questionnaire was used to gather the quantitative data on the respondents. Quantitative data was analysed using descriptive statistics (means, standard deviations, frequencies, and percentages) and inferential statistics (One-way ANOVA) was used to analyse the hypotheses. In the qualitative phase, a semi-structured interview guide was used to collect data, and the data from the interview was analysed and presented according to the research question. The study results revealed that the majority of the teachers generally had a positive perception of authentic assessment. Again, it came to light from the study that there was no statistically significant difference between teachers' academic qualifications and their perception of authentic assessment. The study, however, established that there was a statistically significant difference between teachers' teaching experience and their perception of authentic assessment. It was recommended amongst others that periodic in-service training programs and workshops, organized by educational stakeholders in the Effutu Municipality, would foster a positive perception of authentic assessment among the teachers in the municipality.

**Kumi-Manu, R., Owusu-Forduor, C., Asante, R. O., & Konadu, E. (2024). Level of exposure and effective usage of biology laboratory facilities by teachers: Evidence from selected senior high schools in Central region, Ghana. *International Journal of Academic Research and Reflection*, 12(1), 55-66. <http://www.idpublications.org/international-journals-of-academic-research-and-reflection/>**

## **Abstract**

The thrust of the study was to explore the level of exposure and effective usage of biology laboratory facilities by teachers from selected Senior High Schools in the Central Region of Ghana. This study was carried out in all 40 of the 'Category C' Senior High Schools in the region. A descriptive survey design with questionnaire and a Biology Laboratory Facility Checklist (BLFC) were used as data collection instruments. A total of one hundred and twenty (120) respondents comprising three biology teachers from each of the schools, were purposively sampled. Coding schemes were developed to organize the data into meaningful categories. This involves data obtained from the biology laboratory facility checklist and

questionnaire. The categorised data were converted into frequency counts and simple percentages. The study discovered that teachers found it very difficult to teach and conduct regular laboratory exercises with their students due to the heavy workload on them. Also, the lack of adequate laboratory equipment and materials is a major contributing factor to teachers' reluctance to conduct laboratory exercises. Lack of teachers' motivation is also a factor that prevents them from conducting laboratory exercises. It is therefore recommended that enough laboratory materials should be provided in various schools and also teachers should be motivated to ensure effective science practical work.

**Kumi-Manu, R. N., Acquah, S. & Addo-Wuver, F. (2023). Preservice teachers' professional experiences during internship at the University of Education, Winneba, Ghana. *East African Journal of Education and Social Sciences*, 4(3), 198-208. <https://doi.org/10.46606/eajess2023v04i03.0291>**

### **Abstract**

This study examined the effectiveness of how preservice teachers of the University of Education, Winneba are mentored when on internship. The study employed the sequential explanatory mixed-methods research design, utilizing a researcher-made close-ended questionnaire and interview guide to collect data. A simple random sampling technique determined 125 preservice teachers in the biology, chemistry, and physics departments for the quantitative phase of the study. Ten preservice teachers participated in the qualitative phase of the study. Quantitative data was analyzed using descriptive statistics. Qualitative data was categorized into themes generated from the research questions. The results revealed that preservice teachers have mentoring needs that were not adequately addressed by the mentors. Mentoring preservice teachers in the typical classroom situation is critical for professional development as it aims at inculcating in them practical experiences in teaching to enhance their abilities and develop their knowledge and skills in the areas studied. Mentors and mentees, therefore, need to know what their associated roles are and how to interact for a positive impact. Mentors should be engaged based on their specialization in the subject area, their rich experience and their willingness to mentor preservice teachers.

**Hordzi, W. H. K. (2024). Prevalence and abundance of cowpea *Vigna unguiculata* (L.) Walp insect flower visitors as possible pollinators. *Journal of Entomology and zoology Studies*, 12(2), 143-152. <https://www.entomoljournal.com/archives/?year=2024&vol=12&issue=2&ArticleId=9307>**

### **Abstract**

Abstract The study assessed the prevalence and abundance of insects on cowpea flowers in some farms in some districts in the Central Region of Ghana. Two research questions were answered and two null hypotheses tested. Survey was conducted in ten farms. Farms were visited between 6.00am and 12.00pm to observe insects on the flowers during this period. Insects were observed on stigma, anther and inside flowers. Samples of insects were collected using sweep net for identification. Insects were identified up to order and in some cases species level. Data was analysed using Chi square ( $\chi^2$ ) by employing use of contingency tables. Insects observed on the flowers were *Apis mellifera*, *Ceratina* sp., thrips, crickets, flies, butterflies/moths, *Megachile* sp., *Lasioglossum* sp., ants, wasps, *Xylocopa calens*, and beetles. The most prevalent insects were butterflies/moths and the most abundant were thrips. Differences between the numbers of insects on flowers in all the farms put together

were statistically significant ( $\chi^2 = 23,051.985$ ; DF = 11;  $p < 0.05$ ). The findings suggest that the insects observed on the flowers are probable pollinators and hence must be preserved. Keywords: Prevalence, abundance, insect visitors, *Xylocopa calens*, hymenoptera, observed

**Konadu, B. O., Annan, J. N., & Hordzi, W. H. K. (2024). Effect of computer simulation on academic performance and experiences of year two science students in the concept, circulatory system in humans. *International Journal of Multidisciplinary Research and Growth Evolution*, 5(3), 1-8. [https://www.allmultidisciplinaryjournal.com/uploads/archives/20240502131138\\_B-24-224.1.pdf](https://www.allmultidisciplinaryjournal.com/uploads/archives/20240502131138_B-24-224.1.pdf)**

### **Abstract**

Abstract The study was conducted to determine the effect of computer simulation on academic performance and experiences of second year science students in the concept, circulatory system in humans at Presbyterian Senior High School, Tema. Quasi- experimental research design and survey of students' opinion were used. The target population was all students of the school (800 students). The accessible population was year two science (80) students. The sample size was 80 students. Purposive sampling was used to select two intact classes A and B. Class A was assigned the experimental group and was exposed to the computer simulation and class B was assigned the control group and was exposed to the lecture method. Each group consisted of 40 students. Tests and Questionnaires were used for the collection of data. The data were analyzed using weighted means, effect size, and t-tests. The findings revealed that students of the control and experimental groups were all of the same academic standard before the treatments ( $t = 1.209$ ;  $df = 78$ ;  $P \geq 0.05$ ). Students in the experimental group performed better in the post test than the control group ( $t = 3.542$ ;  $df = 78$ ;  $P < 0.05$ ). The experiences of the students in the experimental group were significantly positive compared to the control group ( $t = 6.9584$ ;  $df = 78$ ;  $P < 0.05$ ). It is recommended that teachers of Presbyterian Senior High School should use computer-based instructions that may cater for the different learning styles of the students to enhance their academic performance. Keywords: Computer simulation, academic performance, circulatory system in humans, experiences, effects

**Klu, S. & Hordzi, W. K. (2023). Students' attitudes and achievement during biology practical lessons from two districts of Oti Region. *Journal of Education and Practice*, 14(23), 57-65. <https://www.iiste.org/Journals/index.php/JEP/article/view/61365>**

### **Abstract**

Abstract The purpose of this study was to determine the attitudes (expectations and reactions) and achievement of Second Year Home Economics students during biology practical lessons using Traditional Laboratory Approach (TLA) and Multimedia Laboratory Approach (MLA) in three topics in two Districts of Oti Region, Ghana. Quasi-experimental research design using pretest-posttest nonequivalent design was employed. The schools were selected based on performance in the three topics at the end of a preliminary investigation. In all, 50 students representing two intact classes participated in the study and were assigned randomly to each of the two practical approaches. Instruments used to collect data were Attitude Measuring Scale (AMS), Students' Knowledge in basic Biology Practical Concept Test (SKbBPCT) and Home Economics Students Achievement in Practical Biology Test (HESAPBT). Mean and



standard deviation were calculated using IBM SPSS Statistics version 25. Results indicated that students who took part in TLA and MLA all exhibited satisfactory attitudes towards biology practical teaching and this resulted in improved performance. However, MLA group performed better than TLA group in two topics (biological drawing and orientation, section & body symmetry). It is therefore recommended that biology teachers in the two Districts be trained to use MLA to teach practical lessons for these two topics. Keywords: Attitudes; Achievement; Teaching of Biology Practical; Multimedia Laboratory Approach; Traditional Laboratory Approach

**Obeng B. K., Annan, J. N., & Hordzi, W. H. K. (2024). Effect of computer simulation on academic performance and experiences of year two science students in the concept, circulatory system in humans. *International Journal of Multidisciplinary Research and Growth Evaluation*, 5(3), 1-8. <http://www.allmultidisciplinaryjournal.com>**

**Obirikorang, K. A., Alimo, T.A., Sekey, W., Gyampoh, B. A., Kassah, J. E., Bediako, J. O., & Anane-Taabeah, G. (2024). Influence of migrant Western Regional shark fishers on shark fishing practices along the eastern coastline of Ghana. *Regional Studies in Marine Science*, 69(103316). <https://doi.org/10.1016/j.rsma.2023.103316>**

## **Abstract**

Sharks have formed an integral part of Ghana's fisheries for many years, although in many areas outside the Western Region, they are often captured as bycatch. The shark fishery in the Dangme communities along the eastern coastline of Ghana has, however, over the last decade, acquired a commercial character that is believed to have been influenced by migrant fishers from the Western Region. This study thus sought to characterise the influence of the migrant fishers in the development of the thriving shark fishery in Dangme communities. Data collection was through key informant interviews, questionnaire administration to 180 randomly selected native and migrant fishers from the selected communities, and observations of fishing practices. Until the mid-2000 s, only the migrant fishers carried out targeted shark fishing along the Dangme coastline. Presently, however, a significant number of native fishers have redirected their fishing efforts towards shark fishing in the face of dwindling catches from the small pelagic fisheries, which were the primary target of the fisheries. Accounts 75 % of native fishers indicated that the declines in small pelagic fish stocks coupled with the influence of the migrant shark fishers have acted synergistically to influence the shark fisheries dynamics along the Dangme coastline. Despite the average ages of the native and migrant fishers being fairly the same (~36 years), the migrants possessed a more profound understanding of the marine ecosystem where they operated based on historical antecedents and their longer interactions with the shark fishing zones. Presently, this new fishery, like shark fishing in other shark fishing hotspots in Ghana, is unregulated, but it will be imperative for national fisheries authorities to implement some management measures to reduce fishing pressure on the most vulnerable species.

**Obirikorang, K. A., Quagraine, K.; Kassah, J. E., & Von Ahnen, M. (2024). Editorial: Sustainable aquaculture production for improved food security. *Frontiers in Sustainable Food Systems*, 8:1485956. <https://doi.org/10.3389/fsufs.2024.1485956>**

**Obirikorang, K. A., Sekey, W., Amenutsor-Vondee, S., Kweku-Akagbo, E., Adjei-Boateng, D., Kassah, J. E., & Gyampoh, B. A. (2023). Functional feeding traits and fecundity as predictors of invasive success of the introduced Nile tilapia, *Oreochromis niloticus* in Lake Bosomtwi, Ghana. *Biological Invasions*, 25, 2143–2157. <https://doi.org/10.1007/s10530-023-03029-z>**

## Abstract

Aquaculture-mediated introductions of Nile tilapia (*Oreochromis niloticus*) into environments where it is not indigenous is well documented. The establishment of a cage-aquaculture facility on Lake Bosomtwe in Ghana in 2012 led to the accidental introduction of *O. niloticus*. This study details the growing concerns about the potential invasiveness of the species by using morphological feeding traits to predict the ecological position and invasion potential. Fecundity and the relative abundance of the native and non-native species of fish were also assessed. The morphological dataset was constructed using 22 functional feeding traits of 87 fishes (13–15 specimens per species), while the feeding habits and fecundity were assessed using 60 fishes (10 individuals per species) and 66 mature females (9–12 individuals per species) respectively. The PCA ordination of the functional feeding traits and the food preferences indicated very little overlap among the *O. niloticus* and the native species. The mean fecundity of *O. niloticus* ( $470 \pm 178$  oocytes) was lower than most of the native species. Compared to the year 2020 when the invasion index (The degree of invasion ranging from 0 to 1) of *O. niloticus* was 0.1, this study recorded values ranging from 0.31 to 0.97, with the alien species accounting for more than half of the catch composition in 73% of the sampling activities. The spread of the alien *O. niloticus* and the concomitant declines in the populations of most of the native species is, potentially, of high conservation concern, and it is predicted that further spread of *O. niloticus* in Lake Bosomtwe might drive these native populations into local extinction.

**Mbage, B., Yu, Q., & Frimpong, R. (2023). Self-synthesized POM-chitosan material with enzyme mimetic activities for antioxidant applications. *ChemistrySelect*, 9(20), 1–6. <https://doi.org/10.1002/slct.202300575>**

## Abstract

An organic-POMs nanoparticle of PMo9V3/CS was successfully synthesized from chitosan (CS) and H6PMo9V3O40 (PMo9V3) by immobilized method. After characterization, PMo9V3/CS hybrids were determined to possess dual enzyme properties similar to peroxidase and oxidase (KO3). PMo9V3/CS exhibited good kinetic activity towards H<sub>2</sub>O<sub>2</sub> and could catalyze the decomposition of H<sub>2</sub>O<sub>2</sub> to generate \*OH and reactive oxygen species respectively. It also showed stability in wide pH range between 3 to 8. Based on the high peroxidase-mimetic and ROS activities, PMo9V3/CS for the first time was used as a nano-material to exhibit antibacterial properties against *E. coli* (gram negative bacterium). PMo9V3/CS-based antibacterial showed high proficiency in damaging the existing biofilm and preventing formation of new biofilm than H<sub>2</sub>O<sub>2</sub>. This performance was a contribution of the CS-mediated membrane destabilization and POM-mediated oxidation of bacteria in the electron transport chain, causing the deformation of rod shape morphology and the decrease of density count of the bacteria. Therefore, PMo9V3/CS shows excellent antioxidant activity and enzymatic-stability for clinic application.

**Thorell, K., Muñoz-Ramírez, Z. Y., Wang, D., Sandoval-Motta, S., Boscolo Agostini, R., Ghirotto, S., Torres, R. C., Falush, D., Constanza C. M. & Rabkin, C. S. (2023). The Helicobacter pylori Genome Project: Insights into H. pylori population structure from analysis of a worldwide collection of complete genomes. *Nature Communications*, 14(1), 8184. <https://www.nature.com/articles/s41467-023-43562-y>**

### **Abstract**

*Helicobacter pylori*, a dominant member of the gastric microbiota, shares co-evolutionary history with humans. This has led to the development of genetically distinct *H. pylori* subpopulations associated with the geographic origin of the host and with differential gastric disease risk. Here, we provide insights into *H. pylori* population structure as a part of the Helicobacter pylori Genome Project (HpGP), a multi-disciplinary initiative aimed at elucidating *H. pylori* pathogenesis and identifying new therapeutic targets. We collected 1011 well-characterized clinical strains from 50 countries and generated high-quality genome sequences. We analysed core genome diversity and population structure of the HpGP dataset and 255 worldwide reference genomes to outline the ancestral contribution to Eurasian, African, and American populations. We found evidence of substantial contribution of population hpNorthAsia and subpopulation hspUral in Northern European *H. pylori*. The genomes of *H. pylori* isolated from northern and southern Indigenous Americans differed in that bacteria isolated in northern Indigenous communities were more similar to North Asian *H. pylori* while the southern had higher relatedness to hpEastAsia. Notably, we also found a highly clonal yet geographically dispersed North American subpopulation, which is negative for the *cag* pathogenicity island, and present in 7% of sequenced US genomes. We expect the HpGP dataset and the corresponding strains to become a major asset for *H. pylori* genomics.

**Amoah, J. E. M., Eminah, K., Ngman-Wara, E. I. D., & Azure, J. A. (2023). The status of biology teaching and learning materials in selected schools in the Central Region of Ghana. *Cogent Education*, 10(1), 1-14. <https://doi.org/10.1080/2331186X.2023.2198939>**

### **Abstract**

This paper investigated constraints associated with biology teaching and learning materials in selected schools in the Central Region of Ghana. The purpose of this study was to evaluate the classroom implementation of biology curriculum. A cross-sectional descriptive survey design was used for the study. The target population comprised 187 biology teachers and 7790 second year biology students in all the 58 public senior high schools that offered elective biology during the 2016/2017 academic year. The accessible population however consisted of 4500 second year biology students drawn from 21 schools. The final sample comprised 106 biology teachers and 354 biology students. Factor analysis was used to perform inferential analysis and draw conclusions on the research questions. Resources for teaching and learning biology was inadequate in all schools visited. Most teachers did not organise practical activities regularly and this affected some profile dimensions suggested by the teaching curriculum. It is recommended that only qualified and experienced teachers should be employed to handle senior high school students in order to build a good and strong foundation for them.

## **Conferences/Workshops/Symposia/Seminars with Presentations**

- Asante, I. K., Kassah, J. E., Ocran, J. K., Ansah, R., Akoto, P., Mensah, J., Amoh, E. K., & Commey, F. K. (2024, September 26-27). Beyond the catch: Exploring the effects of work-related injuries on fisheries and the blue economy: A scoping survey [Paper presentation]. 11th International Conference on Fisheries and Aquaculture 2024, Bangkok.**
- Asante, I. K., Kassah J. E., & Ocran, J. K. (2023). Technology driven decision making among Purse-seining fishers in the Central Region of Ghana: An application of the Extended Technology Acceptance Model [Paper presentation]. 10th International Conference on Fisheries and Aquaculture, Bali.**
- Asante, I. K., Kassah, J. E., & Ocran, J. K. (2023, September 25-28). Precision fishing: Sound Navigation and Ranging (SONAR) technology assisting decision making of Purse-seine fishers [Paper presentation]. University of Cape Coast-Harper Adams University Global Challenge Research Fund Networking Forum 2023, Cape Coast, Central**
- Udzu, A. F. R. (2024, March 20). Evaluation of biochemical changes in four varieties of cocoa produced in Ghana: Physicochemical properties and bean quality [Paper presentation]. Faculty Seminar, Winneba-South Campus, Central Region.**

### **Abstract**

Raw cocoa bean is not useful for chocolate manufacture unless it is fermented. Fermentation and drying convert the fruity mucilaginous beans to brown chocolate aroma, low in astringency and residual bitterness determining its qualities. A study arranged in a 4 x 7 full factorial experiment comprising 4 varieties (PA 30, PA 150, Amelonado and Mixed Hybrid) and fermentation duration (0, 1,2,3,4,5,6) to determine the biochemical changes that occur during heap fermentation of cocoa varieties produced in Ghana. The results showed that effects of day of fermentation significantly ( $P \leq 0.05$ ) affected all physicochemical properties, proximate composition and cut test. Similarly, main effect of variety was important for all physicochemical properties except core temperature and proximate composition, and only slaty and dull purple qualities in cut test. It was established that except for total sugars, acidity of beans, moisture content of dried beans, ash, crude protein, crude fibre contents and cut test that were significant ( $P \leq 0.05$ ) for variety  $\times$  day interaction, all other parameters were not important.

- Kumi-Manu, R. N., & Danso S. (2023, January 17-19). Assessing pre-service science teachers' academic knowledge and misconceptions about evolution and genetics [Paper presentation]. Intersecting Research, Policy and Practice for a Sustainable Praxis in Mathematics, Science and Technology Education: New possibilities and directions for the post-COVID-19 Pandemic Era, Bloemfontein, Free State**

### **Abstract**

Evolution and genetics play a vital role in comprehending the field of biology and are widely recognized as unifying, interdisciplinary concepts within biological research. This study has a dual objective. Firstly, it aims to assess the knowledge (academic performance) and misconceptions concerning evolution and genetics among pre-service science teachers.

Secondly, it seeks to compare these findings across different years of study and gender among participants. A pragmatic mixed-method design was employed, involving 240 pre-service science teachers in their 2nd, 3rd, and 4th years of pursuing a Bachelor of Education degree at a university in Ghana. The study employed the Test on Evolution and Genetics Concepts (TEGIC), semi-structured interview questions, and document analysis to collect data. The collected data were analyzed using inferential statistics and descriptive-interpretive analysis. The results indicated no significant differences in academic success regarding evolution and genetics among pre-service science teachers based on their year of study and gender. Additionally, the findings revealed numerous misconceptions among pre-service science teachers, particularly related to concepts such as natural selection, human evolution, the connection between genetics and evolution, genetics crossing, blood groups, and DNA replication. Consequently, this study has implications for stakeholders in science education, suggesting the implementation of innovative teaching strategies, including conceptual maps, conceptual networks, semantic features analysis, technology integration, and conceptual change texts in the science classroom, to enhance the understanding of pre-service teachers. Moreover, student-centred learning activities should be implemented to foster conceptual development in these science concepts.

**Amoah, J. E. M., Eminah, K., Ngman-Wara, E. I. D., & Azure, J. A. (2023, September 5–7). The status of biology teaching and learning materials in selected schools in the Central Region of Ghana [Paper presentation]. Combating Climate Change: The Role of Science, Technology, and Innovation, GSA 33rd Biennial Conference, Accra, Legon, Greater Accra.**

## Abstract

This paper investigated constraints associated with biology teaching and learning materials in selected schools in the Central Region of Ghana. The purpose of this study was to evaluate the classroom implementation of biology curriculum. A cross-sectional descriptive survey design was used for the study. The target population comprised 187 biology teachers and 7790 second year biology students in all the 58 public senior high schools that offered elective biology during the 2016/2017 academic year. The accessible population however consisted of 4500 second year biology students drawn from 21 schools. The final sample comprised 106 biology teachers and 354 biology students. Factor analysis was used to perform inferential analysis and draw conclusions on the research questions. Resources for teaching and learning biology was inadequate in all schools visited. Most teachers did not organise practical activities regularly and this affected some profile dimensions suggested by the teaching curriculum. It is recommended that only qualified and experienced teachers should be employed to handle senior high school students in order to build a good and strong foundation for them.

## Books

**Kassah, J. E. (2023). Best management practices guidelines for small-scale tilapia cage aquaculture in Ghana and Nigeria. WorldFish. <https://www.ifad.org/documents/38714170/47397034/worldfish-proscawa-china-manual.pdf/1ca929a5-6225-74ea-848b-5e2d916099a5?t=1681379918262>**

## Published Proceedings of Conferences/Workshops/ Symposia/Seminars

Asante, I. K., Kassah, J. E., & Ocran, J. K. (2024). Technology-driven decision making among purse-seine fishers in the Central Region of Ghana: An application of the extended technology acceptance model (TAM3). In *10th International Conference on Fisheries and Aquaculture* (Vol. 10, Issue 2). TIIKM Publishing, Bali, Indonesia. <https://doi.org/10.17501/23861282.2024.10122>

## Article(s)/Chapters in an Edited Book

Asare, K. K., Wilmot, D., Opoku, Y. K., & Afrifa, J. (2024). The prevalence of intestinal opportunistic parasites among HIV seropositive individuals in the Cape Coast Metropolis. In *Futuristic Trends in Biotechnology. IIP Series*.

### Abstract

Persistent diarrhoea and small bowel enteropathies are features of HIV infection. The coccidian parasites such as *Microsporidium* species, *Cyclospora* species, *Cryptosporidium* species, bacteria and cytomegaloviruses are implicated in HIV infections-associate diarrhoea. Determination of the prevalence of coccidian parasites and *Microsporidium* sp in HIV/AIDS seropositive patients visiting Cape Coast Teaching Hospital (CCTH) will contribute immensely to the management of diarrhoea. Aims: The study estimates the percentage occurrence of *Cryptosporidium*, *Cyclospora*, *Microsporidium* and *Isospora* among HIV seropositive patients within the Cape Coast. Methods: The study was conducted from May 2012 to April 2013 at Cape Coast Teaching Hospital (CCTH). It was a cross-sectional study. The stool samples were examined microscopically using Wet mount, acid-fast staining methods. The protozoan was confirmed using species-specific PCR analysis. The data was analyzed using Pearson correlation. Results: The overall prevalence of *Cyclospora*, *Cryptosporidium*, *Microsporidium* and *Isospora* spp as detected by microscopic examination were 32% (16), 46% (23), 16% (8) and 0% respectively. PCR test showed 40% (20), 48% (24), 0% and 0% for *Cyclospora*, *Cryptosporidium*, *Microsporidium* and *Isospora* spp. There was a negative correlation ( $R=-0.424$ ) between the CD4+ T-cell counts and coccidian parasite counts among the subject. Conclusions: There was a high prevalence of *Cyclospora*, *Cryptosporidium*, and *Microsporidium* species among HIV/AIDS patients experiencing diarrhoea in the Cape Coast.

Ahenkorah, B. ., Helegbe, G. ., Der, E. M. ., Emba, N. O. A. ., Donkor, A.-M. ., Ofori, W. ., Johnson, P. A. ., Okai, B. K. ., Simono, A. M. ., Opare-Asamoah, K. ., Udzu, R. F. ., Emmanuel, A. ., Faakuu, E. ., Ogoe, E. A. ., Dorkenoo, J. ., Bimpong, S. ., Kyere, E. D. ., Adam, U. ., & Gyan, B. . (2023). Aetiology of Anaemia among Pregnant Women in Northern Ghana. *Advanced Concepts in Medicine and Medical Research* Vol. 5, 159–175. <https://doi.org/10.9734/bpi/acmmr/v5/6418Bn>

### Abstract

This chapter evaluated the aetiology of anaemia in pregnant women in Northern Ghana. Maternal anaemia has significant adverse effects on both mothers and infants. The risk of death among pregnant women with severe anaemia has been reported to be twice that of mothers without severe anaemia. This hospital-based cross-sectional case-control study was conducted in the Obstetrics and Gynecology Department of the Regional Hospital Bolgatanga (RHB), Ghana, West Africa, from May 2013 to May 2014. A total of 400 pregnant women,



comprising 253 anaemic and 147 non-anaemic pregnant women attending the antenatal clinic at the Bolgatanga Regional Hospital, Ghana, were selected for the study. Venous blood was collected and haemoglobin genotype, complete blood count and biochemical parameters [ferritin, iron, total iron binding capacity (TIBC), transferrin saturation (TfS), C-reactive protein (CRP) and bilirubin] were determined. Per the manufacturer's instructions, daily quality control checks were run on control specimens within specified limits. Thick blood films were prepared for malaria parasitemia, while early morning stool and midstream urine samples were examined for enteric and urogenital parasites, respectively. Anaemic pregnant women had a significantly lower mean HGB, HCT, MCV, and MCHC than their non-anaemic counterparts ( $p < 0.0001$ ). Conversely, there was a significantly higher mean WBC and RDW amongst anaemic pregnant women than non-naemic women ( $p < 0.05$ ). There were significantly reduced levels of HGB ( $p < 0.0001$ ), HCT ( $p < 0.0001$ ), MCV ( $p < 0.0001$ ), iron (0.0273), ferritin ( $p = 0.018$ ) and transferrin saturation (0.0391) and an increased WBC ( $p = 0.006$ ), RDW ( $p = 0.0480$ ), TIBC ( $p = 0.0438$ ) and positivity of CRP in the anaemic group compared to non-anaemic pregnant women. Plasmodium falciparum, Schistosoma hematobium, increased hemoglobinopathies (AS, SS, and SC), and intestinal parasite infections were associated with anaemic women. Iron deficiency is linked to a notable disruption in haematological and iron indices in pregnant women who are anaemic. Hemoglobinopathies and parasite infections further complicate this outcome.

## Department of Physics Education

### Articles In Journal

**Apeadido, S., & Amedeker, M. K. (2023). Enhancing students' academic performance through advance organizers in a cooperative learning classroom at a senior high school in the Ashanti Region, Ghana. East African Journal of Education and Social Science, 4(6), 48-57. <http://doi.org/10.46606/easjes2023v04i06.0666>**

### Abstract

This study was about enhancing students' academic performance through the use of advance organisers in a cooperative learning classroom at a senior high school in the Ashanti Region of Ghana. The study employed an action-research design. A General Art Form 3 class, consisting of 44 students, at Adugyama Senior High School was selected using convenience sampling. The study utilised pre- and post-tests, weekly exercises and observation checklists as sources of data. The data gathered was analysed using descriptive statistics. The study's findings revealed a significant enhancement in students' academic performance. This improvement was attributed to the effectiveness of the instructional strategy, leading to increased skill demonstration, active student participation, improved learning and retention and an overall elevation in academic success. Based on the findings, the study recommends the integration of advance organisers in cooperative learning classrooms to improve the academic performance.



**Amedeker, M. K. (2023). Assessment Pedagogical Content Knowledge (APCK): A model for implementing science classroom assessments. *Journal of Education and Practice*, 14(6), 17-25.**

## **Abstract**

Shulman's Pedagogical Content Knowledge (PCK), developed in the mid-1980s has undergone a number of revisions, with the aim of building upon the concept. The current paper introduces a new theoretical concept named Assessment Pedagogical Content Knowledge (APCK), for implementing formative assessment during science teaching in order to aid students' learning. The new concept, APCK, is an amalgam of knowledge that draws on how to combine assessment with pedagogy. It involves a combination of knowledge of assessment, the skills of assessment and the contents that are taught. The appropriate use of APCK inures to the benefit of students' science learning. The study uses both qualitative and quantitative approaches to show that integration of assessment with instruction has proved valuable for science learning. The feedback, which teachers give to their students during teaching are used by students to improve their learning of science. This shows that a good grasp of the concept will enable teachers to use APCK formatively when teaching science and their students will improve their science learning. Hence, APCK holds a great potential, especially for science teachers, to develop their skills of interweaving instruction with assessments to promote learning. This study then proposes that APCK of science teachers can be identified through their knowledge and practice of the inter-relationships between pedagogy and assessments.

**Acquah, I. K., Appiah, D., Antwi, V., Gyan, M., & Addo-Wuver, F., & Jebuni-Adanu, C. (2023). COVID-Immunisation: Perception, acceptance and attitude of Ghanaian students. *American Journal of Public Health Research*, 11(4), 136-142.**

**Antwi, V. (2023). Enhancing the performance and interest of physics learners in kinematics through the application of problem-solving techniques and regular classroom tests at Swedru Senior High School. *Journal of Innovations in Teaching and Learning*, 3(1), 45-53.**

**Antwi, V. (2023). Dynamic force analysis on blades of centrifugal pumps using computational fluids dynamics simulations. *International Journal of Engineering and Applied Physics (IJEAP)*, 3(2), 790-798.**

**Appiah, D., Antwi, V., Gyan, M., Acquah, I. K., & Addo-Wuver, F. (2023). Optical characterisation of polarised light beam under different aqueous concentrations. *International Journal of Engineering and Applied Physics (IJEAP)*, 3(2), 799-804. <https://ijeap.org/ijeap/article/view/149>**

**Jebuni-Adanu, C., Antwi, V., Acquah, I. K., Appiah, D., Gyan, M. Addo-Wuver, F., Jakalia, S. I., & Sarkyi, B. (2023). Utilizing Physics Education Technology (PhET) for improving students' understanding of energy conversion and conservation in a Senior High Technical School. *Journal of Education and Practice*, 14(8), 45-49.**

**Tindan, T. N., Abukari, M. A., Antwi, V., Dorsah, P., & Offei D. K. (2023). Gender Perspective of Interpersonal Relationships in Pre-Tertiary Schools as a Teacher Motivator. *Mediterranean Journal of Social Sciences*, 14(1), 67-77.**

- Acquah, I. K., Appiah, D., Antwi, V., Gyan, M., Addo-Wuwer, F., & Jebuni-Adanu, C. (2023). COVID-19 Immunisation: Perception, Acceptance and Attitude of Ghanaian Students. *American Journal of Public Health*, 11(4), 136-142. <https://doi.org/10.12691/ajphr-11-4-2>
- Addo-Wuwer, F., Antwi, V., Acquah, I.K., Appiah, D., Jebuni-Adanu, C., & Opoku, P. (2023). Improvement of senior high students' performance in heat transfer using practical activities in Effutu Municipal, Ghana. *European Journal of Education Studies*, 10(9), 438-446. DOI: <http://dx.doi.org/10.46827/ejes.v10i9.4997>
- Appiah, D., Adu-Poku, K. A., Zhang, F., Chen, K., & Yuan, S. (2023). Impeller design and performance characteristics of a side channel pump. *AIP Advances*, 13(3), 035310. <https://doi.org/10.1063/5.0136819>
- Appiah, D., Antwi, V., Gyan, M., Acquah, I. K., & Addo-Wuwer, F. (2023). Optical characterisation of polarised light beam under different aqueous concentrations. *International Journal of Engineering and Applied Physics (IJEAP)*, 3(2), 799-804. <https://ijeap.org/ijeap/article/view/149>
- Chen, K., Zhang, F., Fang, Y. J., Appiah, D., Yuan, S. Q., & Hong, F. (2023). Evaluation of vortex evolution and energy loss within the impeller of a side channel pump. *Journal of Hydrodynamics*, 35, 240-251.
- Acquah, I. K., Appiah, D., Antwi, V., Gyan, M., Addo-Wuwer, F., & Jebuni-Adanu, C. (2023). COVID-19 Immunisation: Perception, Acceptance and Attitude of Ghanaian Students. *American Journal of Public Health*, 11(4), 136-142. <https://doi.org/10.12691/ajphr-11-4-2>

## Abstract

One of the sectors that have been greatly affected by the 2019 pandemic coronavirus disease (COVID-19) was the various universities in Ghana. Universities were closed down for several months until strategically academic work resumed normalcy. COVID-19 immunisation is one of the best approaches to mitigate the spread of the novel disease. This process will increase the immunity of the students due to the extremely congested environments. For that matter, this study utilised a cross-sectional survey to assess the knowledge and attitudes of students toward vaccines in several Ghanaian universities. Reasons behind the refusal and acceptance of the COVID-19 vaccines were also ascertained. Descriptive, one-sample t-test and multinomial logistics regression statistics were used to analyse the data. Seven hundred and eighty-five (785) students from various universities in Ghana participated in this study. Respectively, 78.5% and 73.8% of the students were well informed about COVID-19 disease and COVID-19 vaccines. It can be concluded that information on social media significantly discouraged students from the COVID-19 immunisation process. The majority of students representing 63.1% were willing to receive the COVID-19 immunisation, compared to 36.3% of the students that exhibited negative attitudes toward the immunisation. The primary cause of non-compliance with the government-recommended immunisation schedule was the safety and side effects of the vaccines. It is recommended that additional advocacy initiatives be implemented at various universities to help address the numerous safety concerns students have regarding the COVID-19 immunisation and its side effects.

**Addo-Wuver, F., Antwi, V., Acquah, I.K., Appiah, D., Jebuni-Adanu, C., & Opoku, P. (2023). Improvement of senior high students' performance in heat transfer using practical activities in Effutu Municipal, Ghana. *European Journal of Education Studies*, 10(9), 438-446. DOI: <http://dx.doi.org/10.46827/ejes.v10i9.4997>**

**Appiah, D., Antwi, V., Gyan, M., Acquah, I. K., & Addo-Wuver, F. (2023). Optical characterisation of polarised light beam under different aqueous concentrations. *International Journal of Engineering and Applied Physics (IJEAP)*, 3(2), 799-804. <https://ijeap.org/ijeap/article/view/149>**

**Jebuni-Adanu, C, Antwi, V., Acquah, I. K., Appiah, D., Gyan, M., Addo-Wuver, F., Jakalia, I. S., & Sarkyi, B. (2023). Utilizing Physics Education Technology (PhET) for improving students' understanding of energy conversion and conservation in a Senior High Technical School. *Journal of Education and Practice*, 14(8), 45-49. <https://doi.org/10.7176/jep/14-8-06>**

## Abstract

This study aims to assess the effectiveness of using Physics Education Technology (PhET) interactive simulations in improving students' understanding of energy conversion and conservation at Tuobodom Senior High and Technical School, with a focus on comparing female and male students. A total of 45 students (male = 29, female = 16) were selected using purposive sampling and taught using both traditional methods and PhET simulations, with their understanding evaluated through pre and post-intervention tests. Data was analyzed using descriptive statistics and t-tests. There was a significant pre-intervention score difference between males (15.88) and females (8.25) with a p-value of 0.00, however post-intervention scores were similar for both groups (males 10.88, females 12.62). The study found that PhET simulations effectively promote gender equity by narrowing the performance gap which is likely to improve student's interest in science, technology, engineering and mathematics (STEM). The findings of the study shows that PhET interactive simulation improves students' conceptual understanding of energy conversion and conservation.

**Sedoawu, O., Preko, K., Jakalia, I. S., Obeng-Manu, C., Ablordeppey, W. K., Vorleto, R. Y., & Oware, S. A. (2023). Assessment of soil pollution in Kumasi, Ghana, by vehicular emissions using magnetic mapping method. *Science and Technology Publishing (SCI & TECH)*, 7(8), 1516–1526.**

## Abstract

In this work, magnetic susceptibility mapping was carried along out the Accra-Kumasi road and the KNUST Business school road in the greater Kumasi metropolis. The magnetic susceptibility of the soil samples along the Accra-Kumasi road was very high compared to the low values measured along the KNUST Business School Roadside. The maximum average magnetic susceptibility recorded along the Accra-Kumasi road was  $(347.26 - 349.90) \times 10^{-5}$  SI while that at the KNUST Business School Road was  $(99.16 - 115.25) \times 10^{-5}$  SI. A plot of magnetic susceptibility against distance shows a decreasing magnetic susceptibility with increasing distance away from the edge of the road for the measured magnetic susceptibility values along the Accra-Kumasi road. The KNUST Business School Road shows no specific trend or pattern. The high magnetic susceptibility recorded along the Accra-Kumasi road could be attributed to high vehicular traffic and its associated emissions. The vehicular emissions contained magnetic particles (heavy metals) which apparently enhanced the

magnetic susceptibility of the topsoil along the Accra-Kumasi road. These comparatively high magnetic susceptibility readings obtained with soil samples give an indication of pollution of the topsoil.

## **Conferences/Workshops/Symposia/Seminars with Presentations**

**Antwi, V. (2023, November 10). Managing a department mentoring and supporting faculty [Paper presentation]. Addressing Contemporary Challenges Facing Higher Education Service Delivery- The role of Deans, Directors, Deputy Registrars and HODs, Mankessim, Ghana.**

**Antwi, V. (2023 January, 17-19). Choice of thesis title in relation to problem identification and statement, objective, research questions and hypothesis [Paper presentation]. Inter University Conference for Doctoral Studies, University of Education, Winneba, Winneba, Ghana.**

## **Department of Chemistry Education**

### **Articles In Journal**

**Addo, K. F., & Yaayin, B. (2024). Implementation of flipped classroom pedagogy to enhance students' performance and retention of electron configuration concepts. African Journal of Chemical Education, 14(3), 2-36. <https://www.ajol.info/index.php/ajce/article/view/276601>**

### **Abstract**

Abstract Electron configuration is a fundamental topic in chemistry education at the senior high school level such that failure to understand the basic concepts will gravely affect students' comprehension of several other chemistry topics as they progress. This study investigated the implementation of flipped classroom pedagogy to enhance students' academic performance and retention of electron configuration concepts in a senior high school setting. The study, conducted at a selected Senior High Technical School in Ghana, addressed the prevalent issue of students' inadequate conceptual understanding resulting in low performance and retention of electron configuration concepts. Utilizing a single group, a classroom action research design guided this study. The intervention involved a four-week implementation of the flipped classroom learning approach. The instrument used was test, which was developed in a form of pre- intervention test, post-intervention test and delayed post-intervention test. Participants were selected by purposive sampling, by engaging students in an intact class with the challenge of understanding electron configuration. The findings revealed a significant enhancement in students' academic performance in electron configuration due to application of the flipped classroom pedagogy. The study further found that the magnitude of the effect the flipped classroom pedagogy had on the students' performance was large. The study also found that the flipped classroom pedagogy was effective in retaining electron configuration concepts among the students. Consequently, the study concludes that flipped classroom learning is a valuable pedagogical tool for improving students' academic performance and

retention of electron configuration concepts in chemistry education. The study recommends the integration of flipped classroom methodology by chemistry teachers in teaching electron configuration and other chemistry topics in the selected school.

**Addo, K. F., & Yaayin, B. (2024). Implementation of flipped classroom pedagogy to enhance students' performance and retention of electron configuration concepts. *African Journal of Chemical Education*, 14(3), 2-36. <https://www.ajol.info/index.php/ajce/article/view/276601>**

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**Nyagblormase, A. G., Yaayin, B., & Hanson, R. (2023). The effectiveness of flipped classroom in improving pre-service science teachers' performance in kinetic molecular theory of matter. *International Journal of Innovative Research & Development*, 12(6), 53-60. <https://doi.org/10.24940/ijird/2023/v12/i6/JUN23022>**

### **Abstract**

This study investigated the effectiveness of flipped classrooms in improving pre-service science teachers' performance in kinetic molecular theory of matter. It was carried out at Kibi Presbyterian College of Education in the South Abuakwa Municipality of the Eastern Region of Ghana. A classroom action research design was used for this study. The sample involved 72 Elective Chemistry students in level 200, whose other major subject areas were Mathematics and ICT. The pre-service science teachers in an intact class were chosen using a purposive sampling technique of the non-probability sampling procedure. The study examined the pre-existing knowledge of the students on kinetic molecular theory of

matter using a Kinetic Molecular Theory Diagnostic Test. The study further examined the performance of the students after four weeks of intervention on kinetic molecular theory of matter. A post-intervention test (Kinetic Molecular Theory Performance Test) was conducted using a modified version of the diagnostic test. A one-sample t-test conducted showed a significant performance of the students in kinetic molecular theory of matter. The study recommends that tutors at Kibi Presbyterian College of Education should flip their classes to engage learners in more challenging and practical activities during in-class periods.

Keywords: Pre-existing knowledge, flipped classroom, conventional classroom, colleges of education

**Baah, A., Yaayin, B., & Hanson, R. (2023). Multi residue analysis of systemic pesticide in cocoa beans from some farms in the Western North Region, Ghana. Food and Public Health, 13(1), 6-14. <http://article.sapub.org/10.5923.j.fph.20231301.02.html>**

### Abstract

Multi-residue concentrations of systemic pesticides were analysed in cocoa beans sampled from the Western North region. This study's main objectives were to determine whether it was safe to consume cocoa products from the Western North Region by evaluating the residue concentrations of 11 systemic insecticides, 16 systemic fungicides, and 10 systemic herbicides in the sampled cocoa beans and comparing those concentrations to the European Union's Maximum Residue Limit (MRL) for cocoa beans. Ten cocoa farms and ten villages were selected by purposive sampling and simple random sampling respectively, from five Municipal and District Assemblies (MDAs) in the Western North Region. The sampled cocoa beans were examined using a QuEChERS Method MRM by LC-MS/MS that had been partially modified. 37 active compounds were examined. Only one pesticide, pirimiphos-methyl, was found, and its residue level of 0.01 mg/kg was within the EU's MRL for cocoa beans. All of the examined cocoa beans did not contain the other 36 pesticide residues. This suggests that cocoa beans from the Western North Region are of high quality, free of pesticide residues, and hence safe to eat because they provide no health risks to consumers. Additionally, the Region's cocoa sector will not be threatened by the export of cocoa beans to Europe as there were no pesticide residue concentrations exceeding the set MRL.

Keywords Multi-Residue, Systemic, Pesticide, Cocoa Beans, Western North

**Baah, A., Yaayin, B., & Hanson, R. (2023). Assessment of systemic insecticide residues in cocoa beans from some farms in the Western North region, Ghana. International Journal of Multidisciplinary Research and Growth Evaluation, 4(5), 1045-1052. [https://www.allmultidisciplinaryjournal.com/uploads/archives/20231031100322\\_E-23-182.1.pdf](https://www.allmultidisciplinaryjournal.com/uploads/archives/20231031100322_E-23-182.1.pdf)**

### Abstract

Residue concentrations of systemic insecticides were analysed in cocoa beans sampled from the Western North Region. The objectives of the study were to assess the residue concentrations of 11 systemic insecticides in the sampled cocoa beans and compare the residue concentrations detected with the European Union's Maximum Residue Limit (MRL) of cocoa beans to ascertain whether or not it is safe to consume cocoa beans' products from the Western North region. Purposive sampling and simple random sampling were used to



choose 10 cocoa farms and 10 communities respectively across five Municipal and District Assemblies (MDAs) in the Western North Region. The sampled cocoa beans were analysed by a partially modified QuEChERS Method MRM by LC-MS/MS. A total of 11 active ingredients were analysed, and out of these only one was found in the cocoa beans sampled from WF2. This was pirimiphos-methyl with a residue concentration of 0.01 mg/kg, which falls within the EUs MRL set for cocoa beans. The other 10 systemic insecticide residues were not detected in all the samples analysed. This implies that it is either the insecticide residues have diminished from the cocoa beans, or the farmers have been following the prescribed insecticide application procedures, hence their non detection in cocoa beans sampled. Therefore, in terms of food safety as it relates to insecticide residue concentrations, cocoa beans from the Western North Region can be considered to be of good quality, and safe to consume as it poses no health risk to its consumers.

Keywords: systemic, insecticide, residue concentration, cocoa beans

**Jiang, S., Koranteng, E., Xiao, F., Weng, F., Jian, K., & Wu, Q. (2024). Effects of the molecular weight of soft segment of polycaprolactone polyurethane prepolymer on the properties of polyurethane composites with high wood content. *Journal of Thermoplastic Composite Materials*, 37(1), 387-401. <https://doi.org/10.1177/08927057231176426>**

### Abstract

Developing green composite with high biomass content is one crucial way to realize the strategy of 'carbon reduction'. The type of polyurethane prepolymer and its soft segment's structure have an important influence on the structure and properties of composite materials. This work focused on preparing different kinds of wood powder-polyurethane prepolymer (WCLPU) composite with high biomass content to study the effects of the molecular weight of the soft segment of the polyurethane prepolymer (PCLPU) on the structure and properties of the composites. The results showed that the composite materials with 70 wt% wood content exhibited high strength and good bending performance. Specifically, with decreasing molecular weight of the PCLPU soft segment, the bending strength and bending modulus of the modified WCLPU composite also increased. This work has laid a foundation for studying the effects of the molecular weight of the PCLPU soft segment on the structure and properties of composite materials.

**Koranteng, E., Shu, Z. C., Liu, Y. Y., Yang, Q., Shi, B., Wu, Q. X., ... & Xiao, W. J. (2024). Metallaphotoredox  $\square$  catalyzed three  $\square$  component couplings for practical synthesis of ureas and carbamates. *Chinese Journal of Chemistry*, 42(3), 264-270. <https://doi.org/10.1002/cjoc.202300500>**

### Abstract

Ureas are widely used in drugs, materials and catalysts because of their diamide structure, which can form strong hydrogen bonds. Therefore, it is of great scientific significance to develop efficient and green methods for the synthesis of urea compounds, especially unsymmetrical ureas. Here, we have disclosed novel and highly efficient three-component coupling reactions of organic halides, sodium cyanate and amines enabled by nickel/photoredox dual catalysis for the preparation of unsymmetrical ureas. The reaction features simple and safe operations, broad substrate scopes, and product diversities. It allows the

facile synthesis of N-aryl/vinyl ureas from readily available, user-friendly feedstocks under mild conditions (27 examples, 36%—98% yields). In addition, this method is further derived to alcohols as nucleophiles to synthesize a series of carbamates (15 examples, 40%—95% yields). The mechanism experiment shows that the isocyanate produced by the coupling of halide and sodium cyanate may be the key intermediate in this reaction.

**Ren, M., Liu, Y., Koranteng, E., Weng, F., & Wu, Q. (2024). Special interface structure and properties for compatible packaging film from biodegradable poly (butylene adipate-co-terephthalate)/corn starch composite. *Polymer Engineering & Science*, 64(6), 2824-2840. <https://doi.org/10.1002/pen.26728>**

### Abstract

Starch is an environmentally friendly, renewable, green resource and an ideal alternative to polymers from petroleum resources. The preparation of high-performance poly (butylene adipate-co-terephthalate) (PBAT)/corn starch composite materials is of significant importance for saving production costs and expanding the application fields of PBAT plastics. This study employed novel processing techniques such as melt blending and injection molding to fabricate PBAT/corn starch composite materials with polyurethane prepolymer (PCLPU) as a compatibilizer. The impact of varying polyurethane prepolymer concentrations on the composite material's structure, mechanical properties, morphology, thermal behavior, and water absorption was scrutinized. Mechanical performance testing showed that compared to the composite material without PCLPU (P90CS10), adding 5% PCLPU can increase the material's elongation at break from 350.2% to 359.0% and the tensile strength from 12.9 to 19.8 MPa. Scanning electron microscopy, thermogravimetric analysis, and water absorption results indicate that the composite material with the addition of the PCLPU compatibilizer has better compatibility, thermal stability, and water resistance than P90CS10. Additionally, the prepared composite material could be successfully blown into a thin film, further enriching the application of the composite material.

**Koranteng, E., Jiang, S., Xiao, F., Weng, F., & Wu, Q. (2023). Effects of poly (butanediol adipate ester) based polyurethane prepolymer content on structure and properties of PLA–diatomaceous earth composites. *Journal of Applied Polymer Science*, 140(29), e54067. <https://doi.org/10.1002/app.54067>**

### Abstract

Developing green composites has received intense attention among the scientific community because of their ability to help alleviate the global environmental pollution challenges. This current work focused on preparing a bio-based composite material with desirable performance using renewable materials like diatomaceous earth, and polylactic acid (PLA) with poly(butanediol adipate ester) prepolymer (PBAPU) as a compatibilizer. The composites were prepared by reactive mixing using an intensive mixer. Subsequently, the effects of the PBAPU content on the structure and properties of the composites were studied. From the test results, it was revealed that increasing the PBAPU content resulted in an increasing trend in the properties of the composites. For instance, the thermal stability of the composites was improved as the PBAPU content was increased, and the best thermal stability was obtained when 20 wt% PBAPU was added. In addition, the mechanical properties test results showed that the elongation at break and impact strength of the composites increased with increasing PBAPU content. On the contrary, the tensile strength of the composites decreased

with increasing PBAPU content. The scanning electron microscope images showed that the compatibility between the PLA matrix and PBAPU in the composites was improved significantly. Based on the analysis of the test results for the material's structure, morphology, thermal stability, fluidity, and other properties, it can be concluded that a bio-based composite material with desirable performance was successfully prepared.

**Nartey, E., Koranteng, E., Oppong E. K., & Hanson, R. (2024). Analysis of undergraduate chemistry students' responses to substitution reaction mechanisms: A road to mastery. *Chemistry Teacher International*, 4, 42-45. <https://doi.org/10.1515/cti-2023-0075>**

### **Abstract**

This study analyzed third-year undergraduate Chemistry major students' drawings and written explanations of substitution reactions. Seventy (70) students were purposively selected for this study. The main data collection instrument was a diagnostic test and students' responses were analyzed using deductive coding. The study aimed to unearth students' conceptual understanding and difficulties on substitution reactions to provide significant insights into improving teaching strategies and learning outcomes. The findings revealed that: 1. Students were more familiar with SN<sub>2</sub> reaction mechanisms and could answer questions on SN<sub>2</sub> reaction mechanisms better than SN<sub>1</sub> reaction mechanisms; 2. Students' use of 'chemical vocabulary' did not translate into an understanding of electron movement and causal mechanistic explanation; 3. About 97 % of the students who gave a correct/partially correct description provided a description of what was happening in the reaction without any further explanation of why the reaction occurred; 4. Students had a slightly better understanding of drawing the correct mechanisms than providing accurate explanations. This study recommends that, in teaching organic reaction mechanisms, instructors should emphasize on electron-pushing formalisms and explain how and why reactions occur to encourage mechanistic thinking in students. Also, students should be given ample practice in organic reaction mechanisms to improve mastery.

**Robert, K. K., & Bawa, M. (2024). Analysis of carbonate chemistry parameters and impact of anthropogenic CO<sub>2</sub> on ocean acidification in selected coastline sites of Ghana. *International Journal for Multidisciplinary Research*, 6(3), 1-14. <https://doi.org/10.36948/ijfmr.2024.v06i03.17464>**

**Tibamba, M. T., Youbao, W., Raphael, B. H. G., Bawa, M., Abudu, B. D., Nannan, W., & Li, B. (2024). Mono and simultaneous adsorption of aldrin and toxic metals from aqueous solution using rice husk biochar. *BioResources*, 19(1), 257-275. <https://ojs.cnr.ncsu.edu/index.php/BRJ/article/view/23044>**

**Mbage, B., Yu, Q., & Frimpong, R. (2023). Self-synthesized POM-chitosan material with enzyme mimetic activities for antioxidant applications. *ChemistrySelect*, 9(20), 1–6. <https://doi.org/10.1002/slct.202300575>**

**Magna, E. K., Tornyie, F., Ofofu-Koranteng, F., Mensah, E. T-D., Larbi, L., & Mbage, B. Occurrence and Environmental Risk Assessment of Antibiotics in Water and Sediment from Fish Farms in the Lower Volta Lake of Ghana. *Chemistry Africa*, 7, 409–419 (2024). <https://doi.org/10.1007/s42250-023-00727-y>**

**Tibamba M. T., Youbao, W., Raphael, B. H. G., Bawa, M., Abudu, B. D., Nannan, W., & Li, B. (2023). Multicomponent adsorption of pollutants from wastewater using low-cost eco-friendly iron-modified rice husk biochar in the era of green chemistry. *Sustainability*, 15(23), 16348. <https://doi.org/10.3390/su152316348>**

**Twumasi, A. K., Nartey, E., Quayson, C., Sam, A., & Hanson, R. (2023). Chemistry students' knowledge and practices of chemical waste management in chemistry laboratories. *African Journal of Chemical Education*, 13(3), 21-41.**

### **Abstract**

The study investigated chemistry students' knowledge and practices of chemical waste management in chemistry laboratories in a higher educational institution in Ghana. Descriptive survey design was employed, and the stratified sample comprised of 93 chemistry major students who were selected from levels 100, 200 and 300 in University of Education, Winneba. Questionnaires and unstructured interview were used to collect data which were then analyzed by descriptive statistics (mean and standard deviation) and inferential statistics (t-test and correlation). The results revealed students' good knowledge of, yet poor practices of chemical waste management in the various chemistry laboratories. The t-test conducted revealed a statistically significant difference ( $p=0.000<0.05$ ) in students' knowledge and practices of chemical waste management in the school's chemistry laboratories. Also, a Pearson correlation ( $r=0.415$ ) corroborated the finding that students weakly put their good knowledge in chemical waste management into practice. It is recommended for tertiary educational institutions to build a culture of sustainability and environmental protection in accordance with Sustainable Development Goals (SDG 6 and SDG 11) [3] among science students to by encouraging them to put their knowledge about waste management into practice and protect the environment.

**Agbeko, D. T., Yale, J., & Hanson, R. (2023). Science tutors' knowledge of differentiated instruction in colleges of education in Volta Region, Ghana. *Journal for Research in Applied Sciences and Biotechnology*, 2(1), 115-129. <https://doi.org/10.55544/jrasb.2.1.16>**

### **Abstract**

The purpose of the study was to explore science tutors' knowledge of differentiated instruction in the Colleges of Education in the Volta Region of Ghana. The study employed sequential explanatory design. The participants were 32 science tutors from Colleges of Education in the Volta Region of Ghana, who were purposively selected on the basis of having direct instructional contacts with students all the time and their teaching experiences within and outside colleges. Questionnaire, Rating Scale and Interview were used to collect data. It was found that science tutors have different knowledge on content, learning style, learner interest, learner diversity, process, product and lesson planning. The findings also revealed that majority (80%) of science tutors who did not differentiate instruction in their classrooms have the knowledge of differentiated instruction but their failure to make use of DI was due to scarcity of time, complex nature of DI, high level of workload. The results also revealed that, majority (80%) of the science tutors did not use their assessment feedback to guide their instruction. These science tutors said marking schemes were always given to the students for self-correction. The results from classroom observation showed that these tutors do not teach to meet the diverse needs of learners. Majority of the participants still hold to traditional classroom teaching strategies based on one size-fits-all approach which proved to be ineffective. The study recommended that mentoring universities should organize workshops on the differentiated instructional for tutors and mount course in DI for student teachers.

**Hanson, R., & Hanson, C. (2023). Exploring the possibility of embedded sustainability and humanitarian principles into chemical studies from a systems thinking approach. *International Journal for Cross-Disciplinary Subjects in Education*, 14(2), 4807-4818. <https://10.20533/ijcdse.2042.6364.2023.0591>**

### **Abstract**

The laudable intent of science and industrialization for the ease, long life and comfort of humans has resulted in degradation of the ecosystem as pollutants from chemical production and their use end up in the ecosystem and exert detrimental effects on systems. This damaging effect has translated into climate change, food crisis, financial crisis, poverty, water scarcity, poor health, war, injustice, migration and urbanization, and other humanitarian challenges. A sustainable and humanitarian solution must be found to mitigate the existing and subsequent challenges. A possible solution could be through the development of sustainability- and humanitarian-literate citizens through chemical education. To explore this possibility, 31 preservice graduate teachers were engaged in a case study where they developed solutions to real life environmental challenges in a safe, fun-filled environment, with simple, cost-effective equipment from a system thinking stance. Data was gathered through questionnaire, inter-rated observation schedule, semi-structured interviews and lab reports. Findings indicated that it was feasible to embed sustainability and humanitarian principles through a system thinking approach to inculcate into preservice teachers the need to protect our ecosystem for posterity through chemical studies.

**Essiam, C., Osei-Antwi, D., & Quayson, C. (2023). Are Chemistry topics difficult to learn? The stance of Ghanaian senior high school students. *International Journal of New Trends in Arts, Sports & Science Education (IJTASE)*, 12(2), 112-121. <http://www.ijtase.net>**

### **Abstract**

The study explored the chemistry topics in the Ghanaian Senior High School curriculum that students found difficult to learn, as well as the reasons for those difficulties. The study's participants (96) were all third-year science students at a well-endowed school chosen at random from the Central Region's well-endowed schools. Students were given a three-point Likert scale questionnaire containing topics from the Ghanaian chemistry syllabus. A focus group discussion was held with students to determine the reasons for their opinions on the topics. The final stage involved observing chemistry lessons at the school. According to the study's findings, approximately 66.7% of the chemistry topics examined were difficult for students. Students attributed their reasons to poor teaching techniques, a lack of practical activities, and an absence of extra tuition. The findings also revealed that, despite the teachers' subject matter mastery, their lessons are more teacher-centered with little interaction. Furthermore, assignment-based summative assessment was the most commonly used in the classroom. The study suggests that chemistry teachers use a variety of teaching methods such as hands-on activities, assess student understanding through a variety of methods and also offer extra help and support to students who may be struggling.

**Twumasi, A. K., Nartey, E., Quayson, C., Sam, A., & Hanson, R. (2023). Chemistry students' knowledge and practices of chemical waste management in chemistry laboratories. *African Journal of Chemical Education*, 13(3), 21-41.**

### **Abstract**

The study investigated chemistry students' knowledge and practices of chemical waste management in chemistry laboratories in a higher educational institution in Ghana. A descriptive survey design was employed, and the stratified sample comprised 93 chemistry major students who were selected from levels 100, 200 and 300 in the University of Education, Winneba. Questionnaires and unstructured interviews were used to collect data which were then analyzed by descriptive statistics (mean and standard deviation) and inferential statistics (t-test and correlation). The results revealed students' good knowledge of, yet poor practices of chemical waste management in the various chemistry laboratories. The t-test conducted revealed a statistically significant difference ( $p=0.000<0.05$ ) in students' knowledge and practices of chemical waste management in the school's chemistry laboratories. Also, a Pearson correlation ( $r=0.415$ ) corroborated the finding that students weakly put their good knowledge of chemical waste management into practice. It is recommended that tertiary educational institutions to build a culture of sustainability and environmental protection following Sustainable Development Goals (SDG 6 and SDG 11) [3] among science students by encouraging them to put their knowledge about waste management into practice and protect the environment.

**Nandhini, K. P., Alhassan, M., Veale, C. G., Albericio, F., & de la Torre, B. G. (2023). Methionine-Containing Peptides: Avoiding Secondary Reactions in the Final Global Deprotection. *ACS omega*, 8(17), 15631-15637. <https://doi.org/10.1021/acsomega.3c01058>**

### **Abstract**

The solid-phase synthesis of Met-containing peptides using a fluorenylmethoxycarbonyl (Fmoc)/tert-butyl (tBu) protection scheme is inevitably accompanied by two stubborn side reactions, namely, oxidation and S-alkylation (tert-butylation), which result in the formation of Met(O) and sulfonium salt impurities of the target peptide, respectively. These two reactions are acid-catalyzed, and they occur during the final trifluoroacetic (TFA)-based acidolytic cleavage step. Herein, we developed two new cleavage solutions that eradicate the oxidation and reduce S-alkylation. TFA-anisole-trimethylsilyl chloride (TMSCl)-Me<sub>2</sub>S-triisopropylsilane (TIS) containing 1 mg of triphenyl phosphine per mL of solution was the optimal mixture for Cys-containing peptides, while for the remaining peptides, TIS was not required. Both cleavage solutions proved to be excellent when sensitive amino acids such as Cys and Trp were involved. TMSCl did not affect either of these sensitive amino acids. Reversing the sulfonium salt to free Met-containing peptide was achieved by heating the peptide at 40 °C for 24 h using 5% acetic acid.



Twumasi, A. K., Nartey, E., Quayson, C., Sam, A., & Hanson, R. (2023). Chemistry students' knowledge and practices of chemical waste management in chemistry laboratories. *African Journal of Chemical Education*, 13(3), 21-41.

Twumasi, A. K., Nartey, E., Quayson, C., Sam, A., Hanson, R. (2023). Chemistry students' knowledge and practices of chemical waste in chemistry laboratories. *African Journal of Chemical Education*, 13(3), 21-41.

### **Article(s)/Chapters in an Edited Book**

Hanson, R. & Hanson, C. (2023). A better world through the integration of sustainability and humanitarianism in chemistry education. In C. A. Shoniregun, V. Argyropoulous, M. A. Plummer (Eds.), *Inclusive education and lifelong living*. Infonomics Society. <https://doi.10.20533/978-1-913572-45-7>.

### **Abstract**

This chapter has eulogised on sustainability, sustainability development, education for sustainable development, humanitarianism and humanitarian engineering, to a small extent. The need to create sustainable communities of sustainable-literate and humanitarian-literate citizens through chemistry education has been emphasised. The case of graduate students in teacher education who undertook contextualised mini-projects was presented. Statements made by graduates in teacher training education on the integrated programme was positively overwhelming and goes to prove that that teaching about sustainability and humanitarian principles need not be taught as standalone courses but could be integrated into existing curricula with accompanying appropriate pedagogies to yield positive results. The summarised lesson which was enacted by students illustrated how it was possible to embed sustainability and humanitarian principles in a simple chemistry lesson to enable future teachers to imbibe the desired concepts to help create a positive change to save the world from humanitarian challenges through scaled down practical activities.

## Department of Integrated Science Education

### Articles In Journal

**Annan, S. T. (2024). The ban on illegal mining in Ghana: Environmental and socio-economic effect on local communities. *Journal of Geoscience and Environment Protection*, 12(3), 153-162. <https://doi.org/10.4236/gep.2024.123009>**

#### Abstract

The study was conducted to assess the effects of small-scale (artisanal) gold mining and its social and economic implications on the people in Amansie West District of Ghana. The artisanal gold mining communities were studied using secondary data from scholarly articles and journals, books, conference papers, research reports, policy documents, working papers, and briefs. Descriptive and systematic analyses were conducted. The result indicated that youth aged between 21 - 30 were most likely to engage in illegal mining operations in the selected study areas. The study revealed that farmland had been destroyed, making farming difficult for the inhabitants. It is evident from the review that dug-out pits from mining serve as breeding grounds for mosquitoes and death traps for humans. The study, therefore, accentuates the need for illegal small-scale gold mining to be formalised and strategic interventions and policies proposed for the protection of Ghana's Natural resources. Furthermore, community members should be involved in policy-making and environmental protection issues to help control the menace of landscape destruction. Although the ban on illegal gold mining activity by the government has caused more people to lose their jobs leading to livelihood challenges in mining communities, it is a step in the right direction, as the ban seeks to halt and check the illegal small-scale mining sector. The study recommended alternative livelihood and income-generating projects such as beekeeping, mushroom culture, grasscutter rearing, and agroforestry technologies including the growth of economic fruit trees as alternative livelihood ventures.

**Annan, S. T., Boasu, B. Y., Anyamesem-Poku, A., & Addae, R. (2024). Small-scale mining and academic performance of Ghanaian students at the basic level. *Creative Education*, 2151-4755. <https://doi.org/10.4236/ce.2024.154035>**

#### Abstract

The mining sector has been growing steadily in Ghana but its effect on economic development and inclusive growth remains uncertain. Small-scale mining, for instance, has become popular as a panacea for poverty reduction in most developing countries including Ghana. However, how small-scale mining activities influence students' academic performance and education, in general, remains tentative. By employing a qualitative research design, the study aimed to assess the effects of small-scale mining activities on students at Kwabeng township, one of the small-scale mining hubs in Ghana. Through non-participant observation, interviews and focus group discussions techniques, data gathered from respondents revealed that small-scale mining activities stress students and disallow them from excelling in school. Lack of attention in class, low attendance to school, lateness to school, absenteeism, and school dropout were major challenges that constrained the academic performance of students in the Kwabeng township. The study, therefore, recommends a collaborative effort of all

educational stakeholders government, nongovernmental organizations, parents, students, and private individuals, in addressing this menace in the study area

**Nyaaba, M., Kyeremeh, P., Majialuwe, E. K., Owusu-Fordjour, C., Asebiga, E., & A-inkonge, B. (2024). Generative AI in academic research: A descriptive study on awareness, gender usage, and views among pre-service teachers. *Journal of AI*, 8(1), 45-60. <http://doi.org/10.61969/jai.1400867>**

## **Abstract**

This study investigated the engagement of Pre-Service Teachers (PSTs) with Generative AI (GAI) tools in their research projects, focusing on their awareness, source of awareness, usage pattern based on gender, and views of GAI tools in academic research. We adopted a descriptive survey method to collect data from one hundred and four PSTs across five institutions in Ghana using a five-point Likert-type survey instrument, which included an open-ended question. The quantitative data were analyzed using means, frequencies, percentages, standard deviations, and an independent samples t-test. The findings revealed that PSTs are familiar with GAI tools, especially ChatGPT and Google Bard. They learned about these tools through personal searches, recommendations from friends, and social media platforms. The PSTs used these tools in writing all chapters of their research projects, with the Introduction Chapter being the most common area of application, followed by the Discussion and Findings Chapter, the Literature Review Chapter, Methodology, and Summary and Conclusion. We also identified a significant gender disparity in the use of GAI tools, with male PSTs exhibiting a higher frequency of use compared to their female counterparts. Nonetheless, both genders expressed a positive attitude towards GAI tools in academic research, noting among other benefits that these tools provided them with confidence and independence in their research writing. However, they also recognized inaccuracies in the information provided by GAI tools, which led to skepticism about relying solely on these tools for their research projects. Consequently, they expressed a preference for support from their research supervisors, highlighting the importance of a balanced approach that combines the use of GAI tools with human supervision in academic research. While we recommend the integrating of GAI tools in teacher education programs, we strongly suggest that such integration should be complemented with comprehensive guidance on how these tools can be effectively used by PSTs to conduct original and advanced research.

**Kumi-Manu, R. N., Owusu-Fordjour, C., Asante, R. O., & Konadu, E. (2024). Level of exposure and effective usage of biology laboratory facilities by teachers: Evidence from selected senior high schools in Central region, Ghana. *International Journal of Academic Research and Reflection*, 12(1), 55-66. <http://www.idpublications.org/international-journals-of-academic-research-and-reflection/>**

## **Abstract**

The thrust of the study was to explore the level of exposure and effective usage of biology laboratory facilities by teachers from selected Senior High Schools in the Central Region of Ghana. This study was carried out in all 40 of the 'Category C' Senior High Schools in the region. A descriptive survey design with questionnaire and a Biology Laboratory Facility Checklist (BLFC) were used as data collection instruments. A total of one hundred and twenty (120) respondents comprising three biology teachers from each of the schools, were purposively sampled. Coding schemes were developed to organize the data into meaningful categories. This involves data obtained from the biology laboratory facility checklist and

questionnaire. The categorised data were converted into frequency counts and simple percentages. The study discovered that teachers found it very difficult to teach and conduct regular laboratory exercises with their students due to the heavy workload on them. Also, the lack of adequate laboratory equipment and materials is a major contributing factor to teachers' reluctance to conduct laboratory exercises. Lack of teachers' motivation is also a factor that prevents them from conducting laboratory exercises. It is therefore recommended that enough laboratory materials should be provided in various schools and also teachers should be motivated to ensure effective science practical work.

**Ibrahim, I., Eminah, J. K., Owusu-Fordjour, C., Afram, S. O., & Baalongbuoro, V. (2023). The effect of teacher motivation and instructional methodologies on student outcomes in integrated science in the Upper East region, Ghana. *International Journal for Innovation Education and Research*, 11(2), 12 – 22.**

### **Abstract**

This study's focus was to ascertain how teaching strategies and teacher motivation affected students' performance in integrated science in Ghana's Upper East. The researcher employed a survey design. Heads of senior high schools and teachers of integrated science constitute the study's population. Purposeful and straightforward random samplings were utilised to choose the respondents. 84 respondents made up the sample, comprising 80 integrated science teachers and 4 school heads. A structured questionnaire served as the primary tool, and the Statistical Package for Social Sciences was used to analyse the data (SPSS). The data analysis revealed that a large percentage of integrated science instructors (52.5%) thought that teacher motivation led them to perform in-depth study in order to teach effectively. Additionally, it was found that every integrated science instructor stated that skilled teachers employ effective teaching strategies to raise student achievement.

**Owusu-Fordjour, C., Koomson, C. K., Annan, S. T., & Asante, R. O. (2023). Influence of Peer Tutoring on Undergraduate Students Anxiety in Integrated Science: A Case Study in the University of Education, Winneba. *Science Education International*, 34(2), 159-163. <https://doi.org/10.33828/sei.v34.i2.10>**

### **Abstract**

The study's goal was to determine how peer tutoring affected the anxiety of undergraduate students studying Integrated Science at the University of Education, Winneba (UEW) in Ghana's Central Region. The study used a cross-sectional survey research design. Out of 193 students majoring in Integrated Science in their last year at UEW, the researchers chose a sample size of 82 for the survey using a simple random selection procedure. Interviews and a questionnaire served as the study's research tools. After the students completed the surveys, the respondents were then questioned to discover their answers. Statistical Package for the Social Science (SPSS) version 26.0 was used to enter, purify, and analyze the gathered data. The data were arranged into frequency and percentages using the descriptive SPSS function. Due to academic pressure and a fear of failing, the study's findings indicated that the respondents experienced extremely high levels of anxiety in Integrated Science. In addition, it was discovered that one of the main contributors to Integrated Science anxiety was that most students paid attention to what their peers had to say about the program, and in particular, some courses, which had instilled fear in them even before they had taken the

course. The study suggested that teachers do their best to aid students' comprehension and that teachers should encourage students to interact more with one another.

**Sakyi-Hagan, N. A. (2024). Exploring the nature of scientific explanations: An interactive predict-observe-explain model-based intervention for pre-service science teachers. *Aquademia*, Volume 8(2), ep24007, 1-11. <https://doi.org/10.29333/aquademia/14992>**

### **Abstract**

This study explored the nature of scientific explanations of pre-service science teachers' using an interactive teaching and learning approach while applying the predict-observe-explain (POE) model as intervention. It adopted an action research approach and quasi-experimental design on purposively sampled intact group of 251 first year students of the Department of Integrated Science Education, University of Education, Winneba (UEW). Data collected with pre- and post-tests items were analyzed using descriptive statistics and the statistical package for social sciences version 25.0. Findings revealed that prior to the intervention; about 61.4% of the pre-service science teachers' scientific explanations were mainly descriptive and every day in nature, thus, being informal and not reflecting use of formal language of science. However, after the implementation of the model-based strategy, their scientific explanations improved, with 86.9% being formal and causal in nature, inculcating experts' language use. The study recommended the adoption of an interactive POE model-based strategy by science educators in training pre-service science teachers.

**Nti, D., Appiah-Twumasi, E., Ameyaw, F., Agyemang, C., Asare, A. H. Y., & Issah, B. (2023). Analyzing gender differences in misconception in linear momentum using two-tier diagnostic test instrument. *Journal of Education and Practice*, 14, 87–95. <https://doi.org/10.7176/JEP/14-1-10>**

### **Abstract**

Misconceptions that occur can vary between male and female students, therefore, the study analyzed gender difference in misconceptions in linear momentum. The diagnostic-descriptive research method was used in this study. A total of 70 (35 males and 35 females) first-year Senior High School students in the La-Nkwantanan Municipality were used for this study. Identification of misconceptions was conducted using the Two-tier multiple-choice diagnostic test instrument that was equipped with the Certainty of the Response Index method. The study showed both males' level of understanding and misconception (56.88%; 42.88%) and females (28.51%; 50.24%), respectively. Three research questions were raised and two research hypotheses were formulated and tested in this study. The data were analyzed using an independent sample t-test and the hypothesis were tested at 0.05 level of significance. The findings of the study revealed that male's students understanding of concept was statistically more [ $t(18) = 0.003, p < .05$ ] than females and misconception was found not be statistically significantly different [ $t(18) = 0.285, p > .05$ ]. The researchers recommend that physics teachers use cutting-edge pedagogical instructional techniques such as the use of two-tier diagnostic test instrument to maximize students' prior knowledge and uncover misconceptions.

**Quansah, R. E. (2023). Senior High School students' scientific literacy: A case of an urban and a rural school in Ghana. *Journal of Education and Practice*, 14(11), 29-37. <http://doi.org/10.7176/JEP/14-11-04>**

### **Abstract**

This study assessed the scientific literacy level of senior high school students in a rural and an urban school in Ghana. One hundred and fifty-six students were assessed using the Nature of Science Literacy Test (NOSLiT) which was developed by Wenning (2006) and focused group discussion. Data from the NOSLiT were analysed descriptively and findings from the focused group discussion were presented and discussed along six frameworks. The study revealed that most students in Ghana showed low scientific literacy level, however, students (mean score of 16.19) in the urban school showed a higher scientific literacy level than their counterparts (mean score of 15.03) in the rural school. However, there was no statistical significance difference in the performance of students across school location. NOSLiT is best used as a research instrument for identifying weaknesses in student understanding, improving instructional practice, and determining program effectiveness. It is therefore hoped that the results of this study will persuade science teachers in the Senior High Schools to employ the enquiry processes of Science teaching (MoESS, 2010) as stipulated in the science syllabus. If Ghana have to achieve quality science education.

### **Conferences/Workshops/Symposia/Seminars with Presentations**

**Anor, C. E. (2024, January 19). GOT-Mobility - Goals expectations & collaboration [Paper presentation]. GOT Mobility, Winneba, Central Region**

**Anor, C. E., & Sakyi – Hagan, N. (2023, September 4-6). Promoting girls engagement in STEM through a maiden science fair in a community in Ghana [Paper presentation]. ICWES19, Auckland.**

### **Abstract**

Female Faculty Members (FFM) in Science, Technology, Engineering and Mathematics (STEM) of the University of Education, Winneba, Ghana responding to a clarion call to boost girls' engagement and interests in STEM, saw the maiden science fair for girls taking place in the Effutu Municipality in the Central Region of Ghana. In collaboration with the Science and Girls' Education Units of the Municipal Directorate of the Ghana Education Service (GES), 136 girls from 34 public basic schools in the municipality were actively engaged in various STEM projects during the fair. Innovative projects, relevant to society in helping to solve problems, based on any of four themes - Robotics, Technology, Waste Transformation, and Body Functioning - informed the overarching objective of the fair. However, the fair also included various mentoring sessions on pertinent adolescent issues in the society. Data from a survey on the fair revealed that the girls had been motivated to actively engage in STEM, and had had their interests in the disciplines hugely boosted. Therefore, it is recommended that more of such science fairs be organised by the FFM and other stakeholders in other municipalities and districts to help increase the active participation and interests of girls in STEM and related disciplines.



**Sakyi – Hagan, N., & Anor, C. E. (2023, September 4 - 6). Rural girls in STEM education: Perceptions, participation and future career [Paper presentation]. ICWES19, Auckland.**

### **Abstract**

The study aimed at investigating rural girls' perceptions, participation and future career in science, technology, engineering and mathematics (STEM). The low participation of girls in STEM in many countries in the world, particularly in Africa, has been a cause of concern for many stakeholders in the field. In many STEM classrooms or lecture rooms, the ratio of boys to girls has almost always been skewed toward boys. STEM education in Ghana has already been integrated into the basic school curriculum to enable continuous participation and a smooth progression as learners move up the academic ladder. Research about the participation of girls residing in rural areas in STEM seems to be pointing to the fact that the participation of girls in STEM is hampered in so many ways due to some factors such as gender disparities and wrong beliefs about girls' participation in STEM. These factors may be considered external as they tend to emanate from societal, psychological, physiological and even pedagogical "hindrances". However, there seems to be a gap in research about the girl child's own inherent perception of and participation in STEM as well as intrinsically motivated future career plans in STEM disciplines. This study investigated the perceptions and participation in STEM subjects and future career plans of basic school girls residing and schooling in three rural areas (Osobonpanyin-Atteitu, Atekyedo and Essuekyir) in the Effutu Municipality in the Central Region of Ghana. The study purposely sampled all Junior High school form three (JHS 3) girls totaling 31 students from the three schools. Data was collected using a questionnaire. Findings from the study showed poor participation and negative perceptions towards STEM. However, the students expressed willingness to pursue STEM and related careers in the future. The study recommended that the everyday experiences of learners should be inculcated into the teaching and learning of STEM to contextualise concepts to sustain students' participation, positive perception and to increasingly motivate them to pursue STEM and related careers.

Keywords: students' perception, students' participation, future career, STEM, rural girls

**Sakyi – Hagan, N., & Anor, C. E. (2023, July 16 - 21). Local gin production as an IK learning tool in the study of the concept of distillation [Paper presentation]. Gordon Research Conference workshop on Visualization in Science Education, Lewiston, Maine.**

### **Abstract**

Engaging students in the learning process empowers them to take active ownership of their education. Incorporating indigenous knowledge activities relevant to their environment makes learning tangible and relevant. This study aimed to help first-year senior high school (Grade 10) students construct knowledge and enhance their understanding of distillation by involving them in local gin production processes. Conducted in a senior high school in the Agona West District of Ghana, the study included an experimental and control group made up of 45 students each. Engagement activities included a field visit to a local gin production site. Data was collected through tests, questionnaires, and observations. The findings indicated that the experimental group was more engaged and had a better understanding of the chemistry concepts related to distillation. The study recommends that science educators connect classroom concepts to real-life practices to enhance student engagement, facilitate the acquisition of scientific knowledge, and improve understanding.

Keywords: Local gin production, Indigenous knowledge, Science concept, Distillation, Students' engagement, Knowledge construction

**Anor, C. E. (2023, November 29). Exploring global opportunities: The role of student associations in enhancing cross-border educational collaboration [Paper presentation]. Ghana Career and Migration Fair, Accra, Greater Accra Region.**

**Anor, C. E., & Sakyi-Hagan, N. (2023, July 16 - 21). Students' cognitive engagement through indigenous knowledge to learn about metals [Paper presentation]. Gordon Research Conference workshop on Visualization in Science Education, Lewiston, Maine.**

### **Abstract**

This study examines the integration of Indigenous Knowledge (IK) practices in teaching chemistry, specifically using blacksmithing to teach the concept of metals to Grade 11 students in the Agona West district of Ghana. With a sample of 60 students divided into an experimental group and a control group, the research aimed to assess cognitive engagement through a mixed-methods approach involving pretest and posttest assessments and open-ended questionnaires. The findings indicated significant improvement in students' understanding of the properties of metals, as the blacksmithing context helped bridge theoretical concepts with practical, culturally relevant activities. Students reported enhanced cognitive engagement, highlighting the effectiveness of IK practices in making learning more relatable and effective. The study suggests incorporating IK practices into the teaching and learning of chemistry to enhance interest, improve comprehension and promote application of concepts by students.

Keywords: Cognitive engagement, Blacksmithing process, indigenous knowledge, metals, chemistry

**Anor, C. E., & Sakyi-Hagan, N. (2023, June 16). Out of the classroom: Unmasking science in indigenous practices [Paper presentation]. International LUMAT Research Symposium, Joensuu, Eastern Finland.**

### **Abstract**

The project was a chemistry festival organised by the authors who are lecturers of the Department of Integrated Science Education at the University of Education, Winneba (UEW), Ghana, in collaboration with the American Chemical Society (ACS). The festival was aimed at promoting science (chemistry) education among pupils and engaging their community in understanding the role of science (chemistry) in their daily lives. It also aimed at demystifying the perceived difficult and abstract concepts of science, stressing on their importance in our daily lives through hands-on practical activities. The festival was held for four selected Junior High Schools (JHS) in the Effutu Municipality of Ghana, where 188 JHS students learned various concepts in science. It focused on practical activities related to indigenous practices such as the production of akpeteshie (local gin), gari (local staple food), palm oil, and the use of wood ash and lemon as cleansing materials. It also involved hands-on and fun-filled practical activities that demonstrated the scientific principles involved in these indigenous activities and showcased its relevance in everyday activities. The project was motivated by the need to show students that science is not limited to the classroom but is

part of their daily lives and the environment. Hence, incorporating indigenous practices and activities in science teaching and learning enabled the students to appreciate the relevance of science in their culture and community. Furthermore, the out-of-classroom experience inspired the students to learn science and appreciate it as part of life. The students also showed interest in pursuing science and related courses at higher levels of education and taking up future careers in science. It was recommended that students should be constantly engaged in more such activities to make the learning of science meaningful to them.

**Anor, C. E., & Sakyi-Hagan, N. (2023, June 16). Out of the classroom: Unmasking science in indigenous practices [Paper presentation]. International LUMAT Research Symposium, Joensuu, Eastern Finland.**

**Sakyi-Hagan, N. (2023, July 14 - 16). Science Fair for Girls in Ghana [Paper presentation]. Co-Creating Climate Futures Workshop, MIT Media Lab, Boston, Massachusetts.**

### **Abstract**

Seeking partners to fund projects to support rural girls in their study of STEM, and to improve the teaching and learning of STEM

**Sakyi-Hagan, N., & Anor, C. E. (2023, September 3 - 6). Rural girls in STEM education: Perceptions, participation and future career [Paper presentation]. 19th International Conference of Women in Engineering and Science (ICWES19), Aotea.**

### **Abstract**

The low participation of girls, particularly those living in rural areas in science, technology, engineering and mathematics (STEM) in many countries across the world, has been a cause of concern for many stakeholders in the field. With the ratio of males to females in the fields of STEM almost always skewed in favour of males, this study sought to investigate the perceptions, participation and future career aspirations in STEM of girls living in rural areas in the Effutu Municipality of the Central Region of Ghana. The authors used a questionnaire to solicit the participants' perceptions about their study of STEM. A focussed group interview was also employed to elicit the views of the girls on their participation in the study of STEM as well as future career plans they had towards further education in these disciplines. This was a qualitative study in which all 31 girls in three basic schools in the rural areas of the Municipality were purposely sampled to participate in the study. The findings revealed poor participation of the girls in their study of STEM, leading to negative perceptions towards the disciplines. However, the girls had positive future career plans towards STEM and related disciplines. The study recommends that the everyday experiences of learners should be inculcated into the teaching and learning of STEM, to contextualise concepts in order to encourage the learners' active participation and interests. This could lead to positive perceptions towards learners' study of STEM and continually motivate them to pursue STEM and related careers.

Keywords: students' perception, students' participation, future career, STEM, rural girls

**Sakyi-Hagan, N., & Anor, C. E. (2023, July 16-21). Local gin production as an indigenous knowledge learning tool in the study of the concept of distillation [Paper presentation]. Gordon Research Conference on Visualization in Science and Education, Bates College, Lewiston, Maine, Maine.**

## **Abstract**

The engagement of students in the teaching and learning processes enables them to take active ownership of their learning. Engaging students in lessons that involve indigenous knowledge activities pertaining to their environment makes their learning real, evidential and relevant. Apparently, students could be directly involved in such indigenous knowledge activities though they may not know the scientific concepts and principles underlying them. Therefore, this study aimed at helping grade 10 (15 - 17 years) students to construct knowledge and improve upon their understanding of the science (chemistry) concepts involved in distillation by engaging them in the processes of local gin production. The study was conducted in a senior high school in the Agona West District of the Central Region of Ghana, with an intact class of 25 students forming the experimental group. The control group, also made up of 25 students from the same school, was randomly selected from two other classes with similar characteristics as the experimental group. Among the various forms of engagements designed for the study included a field visit to the local gin production site. Data was collected by means of tests, a questionnaire and observation. The study's findings indicated that the experimental group were more engaged in learning the chemistry concepts. Also, they had acquired relevant scientific knowledge, and gained a better understanding of the concepts and principles governing the process of distillation. The study recommended that science/chemistry educators must endeavour to relate science concepts taught in the classroom to real life practices to promote students' engagement in lessons, enable them acquire the requisite scientific knowledge and improve on their understanding of scientific concepts. Thus, while providing the students with the comfort of learning from what they already practise in their communities (indigenous knowledge practices), they would appreciate the relevance of the scientific concepts learnt and be equipped to apply them in their daily lives.

**Keywords:** Local gin production, Indigenous knowledge, Science concept, Distillation, Students' engagement, Knowledge construction

## **Books**

**Anor C. E., Mbage, B., & Alhassan, M. (2023).** *Chemistry around us chemistry for BEd distance learners.* University of Education, Winneba – CODEL.

**Koomson, C. K., Owusu-Fordjour, C., Quaye, M. O., & Mensah, N. (2023).** *Plant physiology.* Otia Printing and Stationery Ltd.

## Department of Mathematics Education

### Articles In Journal

**Addai-Mununkum, R., Amoah, S. A., Tamanja, E. M. J., Amos, P. M., Agyeman, E. A., Addai-Poku, C., Akayuure, P., & Kusi, H. (2024). "It Makes Us Feel More Professional!" Stakeholders' Perception of the Ghana Teacher Licensure Examination. *Teacher Education and Curriculum Studies*, 9(1), 21–29. <https://doi.org/10.11648/j.tecs.20240901.13>**

#### Abstract

The professionalism of teaching has been subject of an age long debate. Teachers beseech others to recognize them as professionals and they become belligerent when they fail to receive recognition. Since 2018, Ghana has instituted the Ghana Teacher Licensure Examinations (GTLE) to regulate entry into the teaching profession. This policy has received a mixed bag of reactions with the populace sharply divided in opinion. Given that knowledge gap existed, it was important to interrogate the general perception of all stakeholders across Ghana to unravel how the GTLE is perceived among stakeholders. This paper is culled out of a broader study that employed a mixed-methods research approach in a nationwide study involving over 2800 respondents. For this paper, we report on the qualitative data generated from 145 participants. We describe the concerns of stakeholders who are in favour, against, or ambivalent about the GTLE. Drawing on an adaptation of CBAM model, we discuss stakeholders' perceptions of GTLE as stages of concern. We conclude that stakeholders opposed to the licensing of teachers do so because of their concerns about its form, content, and other logistical challenges. To sustain the policy, it is recommended for the National Teaching Council and the Ministry of Education to take steps to address these concerns. Regardless, what stakeholders agree to be the biggest strength of the GTLE is that it is a positive step towards professionalizing teaching. It is a useful yardstick to determine who is qualified to perform the function of teaching, and prevents all others who do not qualify from accessing classrooms.

**Amoah, E. K. (2024). Gender and other significant factors causing disparities in Senior High School Students' mathematics performance. *Turkish Journal of Computer and Mathematics Education*, 15(1), 26-33.**

#### Abstract

In the context of ongoing debates surrounding the influence of gender and various student-related, teacher-related, and school-related factors on students' performance in mathematics, this study seeks to contribute nuanced insights. The recent trend of suboptimal performance in mathematics, as evidenced in both district and national performance statistics within the Assin North District, necessitates a comprehensive examination of the underlying causes. This research specifically investigates the gender factor, along with other significant determinants, that may be contributing to disparities in mathematics performance among high school students. Utilizing a mathematics achievement test and carefully designed questionnaires, data were gathered from a stratified sample of 500 final-year students across three public senior high schools in the Assin North District, Ghana. The data were

subjected to rigorous analysis, employing both descriptive statistics and quantitative methods, including independent t-tests and probit regression. The findings reveal that male students outperformed their female counterparts in the mathematics achievement test, with the differences being statistically significant at the .05 significance level. Beyond gender, the study identifies self-assurance and self-regard as pivotal student-related factors influencing mathematics performance. Additionally, teacher subject matter expertise, instructional methodologies, and teacher-student interactions were found to be significant teacher-related factors impacting performance. School-related factors, such as teacher motivation and the overall school environment, were also recognized as influential. While other factors, such as students' socioeconomic background and available teaching resources, were observed to affect performance, they did not reach statistical significance in this study. In light of these findings, the study advocates for the implementation of gender-responsive pedagogies by senior high school mathematics teachers. Furthermore, the formation of professional learning communities at the school level is recommended to facilitate ongoing improvement in teachers' knowledge, motivation, and instructional styles. This approach aligns with the broader goal of enhancing mathematics education and performance within the Assin North District and potentially offers insights applicable to other educational contexts

**Keywords:** Gender Disparities, Mathematics Performance Factors, Senior High School Students

**Ansah, R. K., Tackie, S., Twum, R. A., Tawiah, K., Boadi, R. K., Addo, D. A., Effah-Poku, S., & Zigli, D. D. (2024). The relationship between anaemia and the use of treated bed nets among pregnant and non-pregnant women in Ghana. *PLOS ONE*, 19(5), e0300431. <https://doi.org/10.1371/journal.pone.0300431>**

## Abstract

Studies have indicated that the risk of malaria, particularly its association with anaemia in pregnant women, increases when treated bed nets are not used. This paper utilizes a statistical mechanical model to investigate whether there is a statistical relationship between the presence or absence of anaemia in pregnant and non-pregnant women and their decision to sleep under treated bed nets. Data from the Ghana Malaria Indicator Survey (GMIS), which includes both rural and urban malaria-endemic areas in Ghana, were employed in this study. A total of 2,434 women, comprising 215 pregnant and 2,219 non-pregnant participants, were involved. Among these, 4.76% of the pregnant and anaemic women and 45.89% of the non-pregnant and anaemic women slept under treated bed nets, while 0.86% of the pregnant and anaemic and 6.82% of the non-pregnant and anaemic women did not. The findings revealed that, in the absence of social interaction, non-anaemic pregnant women have a lower prevalence of choosing to use bed nets compared to their anaemic counterparts. Additionally, non-pregnant anaemic women showed a positive private incentive (30.87%) to use treated bed nets, implying a positive correlation between anaemia and the choice to sleep in a treated bed net. Furthermore, the study demonstrated that both pregnancy and anaemia status have a relationship with the use of treated bed nets in Ghana, especially when social interactions are considered. The interaction strength between non-pregnant and anaemic women interacting with each other shows a negative estimate (-1.49%), implying that there is no rewarding effect from imitation. These insights are crucial for malaria prevention and control programs, emphasizing the need for targeted interventions to enhance the use of treated bed nets among both pregnant and non-pregnant women in Ghana's malaria-endemic regions.

**Asante-Mensah, F., Asiedu-Addo, S. K., Obeng-Denteh, W., & Armah, G. (2024).**  
**The effectiveness of the inquiry-based teaching approach on technical and vocational students' mathematics achievement in Ghana.** *International Multidisciplinary Journal of Research and Education*, 02(01), 70 - 77. <https://journals.uew.edu.gh/index.php/imjre/article/view/285/140>

### Abstract

The study investigated the effectiveness of the inquiry-based teaching approach on technical and vocational students' mathematics achievement in Sekyere East District in Ghana. The research adopted a quantitative approach that employed quasi-experimental design. Purposive sampling technique was used to select 80 first-year students from Krobea Asante Technical and Vocational Institute for this study with 40 students each in the experimental and control groups. Data were collected using pre-test and post-test measurements with non-equivalent groups. Statistical analysis using the independent sample t-test revealed that students instructed through the inquiry-based approach in the experimental group outperformed those taught via the conventional approach in the control group. Cohen d effect size of 1.13 was obtained indicating that the Inquiry-based teaching approach is more effective in teaching geometry course than the conventional approach. The study recommended among others that teachers in the pre-tertiary institutions should employ Inquiry-Based approach in teaching geometry and its related topics.

**Owusu-Ansah, N. A., Armah, G., Frimpong, S. A., & Apawu, J. (2023).**  
**Using differentiated instruction to foster algebraic thinking in classrooms.** *International Journal of Studies in Education and Science*, 4(2), 151 - 162.

### Abstract

This quasi experiment sought to use strategies of differentiated instruction (DI) to foster algebraic reasoning of Junior High School (JHS) year 2 students in the Winneba municipality, Ghana. The study employed Solomon four group sampling technique to collect pre-test and post-test data from 337 students. After the treatment, the independent *t*-test on the post-test gave the results ( $M_1 = 11.2, SD_1 = 4.7$ ) and ( $M_2 = 4.3, SD_2 = 3.1$ ) with  $t(335) = 16.2, p(0.000) < 0.05$  indicating that, there was a significant difference between the achievement score of the experimental and control groups. The calculated effect size between the means of the experimental and control groups was approximately 0.7, an indication that the effect of DI strategies is large. It was recommended that, DI strategies should be employed in Ghanaian classroom to improve students' algebraic thinking.

**Assuah, C. K. (2024).** **The limit of a function using the epsilon-delta definition.** \*\*.

**Assuah, C. K. (2024).** **The concept of total probability and its applications.** \*\*.

**Assuah, C. K. (2024).** **Practical Approaches of assisting students to understand "Counting" at the undergraduate level.** \*\*.

**Assuah, C. K. (2024).** **Level 100 undergraduate mathematics students' conceptual understanding of independent, dependent, and mutually exclusive events.**



- Assuah, C. K. (2024). Teacher instructional variables contributing to mathematics teaching and learning in Ghanaian senior high schools: Smart partial least square analysis.**
- Assuah, C. K. (2024). The interconnectedness of the factors affecting STEM Education in Ghana: Smart Partial Least Square Analysis. \*\*.**
- Assuah, C. K. (2024). Ghanaian Mathematics teachers' knowledge about access and equity in Mathematics Education: A cross-sectional study design. \*\*.**
- Boakye, S., Quansah, F., Awuku, E., & Assuah, C. K. (2024). Assessing pre-service teachers' competencies in teaching basic school science curriculum: A case study. *European Journal of Educational Sciences, 11(1), 1-12.***
- Amadu, C. D., Ali, K. A., Andoh-Kesson, J. D., & Assuah, C. K. (2023). Tutors' perspectives of factors affecting the implementation of the four-year bachelor of education science curriculum in the colleges of education in Ghana. *International Journal of Innovative Research and Development, 12(8), 157-167.***

## **Abstract**

This study examined the factors affecting the implementation of the four-year bachelor of education (B.Ed) science curriculum in the colleges of education in Ghana. The study was a qualitative one that focused mainly on the account of science tutors who have been implementing the new curriculum since its inception in 2018. Data were collected from 2 colleges of education in the Tamale Metropolis in the Northern Region. The instrument used in collecting data was an observation checklist, which focused on the facilities in the colleges for effective implementation in relation to the benchmarks set by Rogan and Grayson's (2003) Framework for Science Curriculum Implementation. The other instrument was a semi-structured interview guide, which sought to find out the tutors' perspectives regarding the issue affecting the implementation. The study found that the college tutors have had some support, such as workshops, seminars and materials from external agencies for the implementation of the curriculum. However, the colleges lacked critical facilities such as well-equipped laboratories and libraries. The tutors recounted several challenges, such as heavy workload, lack of motivation, and unstable academic calendars, among others, which adversely affected the successful implementation of the curriculum. The study recommended that the science laboratories and libraries should be properly resourced to ensure effective teaching and learning of science. Furthermore, the study urged the Ghanaian Government to provide the needed infrastructure, such as dormitories and classrooms, to end the multi-phased semester system that interrupts academic work in the colleges of education.

Keywords: Curriculum, implementation, tutors' perspectives, colleges of education

**Goka, N. M. K., Assuah, C. K., & Owu-Annan, C. (2023). Senior High School mathematics teachers' continuous professional development: Evidence from Keta municipality in Ghana. *International Journal of Secondary Education*, 11(2), 49-54.**

### **Abstract**

To improve students' learning and academic performance, educational reforms have been proposed and implemented. One of these reforms was the introduction of teacher participation in Continuous Professional Development (CPD). The purpose of this study was to investigate the type of CPD workshops organised by stakeholders and the kind of motivation senior high school mathematics teachers get in participating in such workshops in the Keta Municipality in Ghana. The study was conducted using a phenomenology design and a semi-structured interview guide as the research instrument to collect data from the respondents. A purposive sampling technique was used to select eighteen (18) public senior high school mathematics teachers. The findings of the study show that CPD workshops that were subject-based were less organised for mathematics teachers and non-subject-based CPD workshops do not have much impact on their mathematics teaching and learning abilities. Again, some mathematics teachers participated in CPD workshops because of allowances and certificates for promotion exercises, not necessarily being motivated to improve their mathematical knowledge and competencies. The study recommends that CPD trainers should organise more subject-based workshops for mathematics teachers in senior high schools to increase their knowledge and teaching skills. Again, National Teaching Council should educate teachers on how important continuous professional development is to their teaching profession and clear the misconception that they attend CPD workshops for allowances and promotion purposes.

Keywords: Continuous Professional Development (CPD), Mathematics, Teachers

**Owu-Annan, C., & Assuah, C. K. (2023). The relationship between female students' attitude and their mathematics achievement. *International Journal of Secondary Education*, 11(1), 18-25.**

### **Abstract**

Abstract: There is a great effort in curriculum reforms in Ghana to create opportunities to close the gender gap in mathematics achievement for Senior High School (SHS) students. However, it remains unclear how female students are ready to bridge this gap in order to take-up mathematics related programs at the tertiary level. The purpose of this study was to investigate the relationship between senior high school female students' attitude and their mathematics achievement. The study was grounded in a pragmatic paradigm, using a sequential explanatory mixed-method design with questionnaires and interview guide as the research instruments to collect data from the respondents. A simple random sampling technique was used to select 331 female students. The findings showed that, self-confidence,  $r = .13$ ,  $n = 331$  and  $P < 0.05$  ( $.016 < .05$ ), enjoyment of mathematics,  $r = .22$ ,  $n = 331$  and  $P < 0.01$  ( $.000 < .01$ ), and value of mathematics  $r = .11$ ,  $n = 331$  and  $P < 0.05$  ( $.04 < .05$ ) had a positive and significant relationship with mathematics achievement whiles motivation  $r = .07$ ,  $n = 331$  and  $P > 0.05$  ( $.20 > .05$ ) have no relationship with mathematics achievement. The implication of the study to teaching and learning is that teachers should use instructional strategies that would meet the needs of all female students. Teachers must also take into account students' learning differences and assist them with the counselling they need to increase the students' motivation towards mathematics.

Keywords: Attitude, Mathematics, Female Students' Learning, Achievement

**Pinamang, I., Mensah-Wonkyi, T., & Assuah, C. K. (2023). Pre-service teachers' perceptions of the effectiveness of their mathematics tutors' classroom learning environment management practices. *African Journal of Educational Studies in Mathematics and Sciences*, 19(2), 225-231.**

### **Abstract**

The study explored pre-service teachers' perceptions of the effectiveness of their classroom-learning environment for learning mathematics, specifically, geometric transformation. The pre-service teachers' perceptions examined were confined to their tutors' support, equity, and task orientation during lessons on geometric transformation. Using a descriptive survey design, the views of 60 pre-service mathematics tutors, who were purposively sampled from three Colleges of Education in Ghana, were collected through a classroom learning environment management questionnaire. This instrument was adapted from the WIHIC Classroom Learning Environment Inventory which was used to collect data after the respondents had been taught geometric transformations in the colleges. The pre-service teachers' perceptions of mathematics classroom learning environment were gauged by their mean ratings of their agreement/disagreement with 5-point Likert scale statements about the subscales explored. The results show that there were only few of the statements about effective classroom learning environment management practices in the three subscales explored which the pre-service teachers rated above 3.5 on the 5-point Likert scale. The overall mean score obtained on the ratings for tutor support ( $M = 3.20$ ,  $SD = 1.456$ ), teacher equity ( $M = 2.48$ ,  $SD = 1.455$ ) and task orientation ( $M = 2.48$ ,  $SD = 1.455$ ), suggest the pre-service teachers' perception of their tutors' effectiveness in managing the classroom learning environment was low or not good enough to enhance their learning of geometric transformations. This indicates the pre-service teachers' have a negative perception of the effectiveness of their tutors' classroom learning environment management practices to promote their learning of geometric transformations. It is recommended that CPD in the colleges should focus on enhancing tutors' or mathematics educators' classroom learning environment management practices in order to help pre-service teachers appreciate the learning of mathematics.

Keywords: pre-service teachers; classroom learning environment; learning environment management practices

**Marifa, M. Y., Nabie, M. J., & Acheon, G. I. (2024). Factors that influence students learning styles in mathematics at Ullo Senior High School in the Jirapa Municipality, Ghana. *East African Journal of Education Studies*, 7(1), 165-171. <https://doi.org/10.37284/eajes.7.1.1738>**

**Abubakari, A., Nabie, M. J., Adusei, M. S., & Zuberu, M. B. (2023). The effectiveness of the "Think-Pair-Share" Cooperative Learning Approach in the teaching of mensuration to Senior High School students. *Journal of Global Research in Education and Social Science*, 17(5), 22-33. <https://doi.org/10.56557/jogress/2023/v17i58432>**

**Marifa, M. Y., & Nabie, M. J. (2023). Effect of Learning Styles on Students' Performance in Mathematics at Ullo Senior High School, Jirapa Municipality, Ghana. *East African Journal of Education Studies*, 6(3), 311-321. <https://doi.org/10.37284/eajes.6.3.1566>**

**Owusu-Darko, I., Sabtiwu, R., Doe, F., Owusu-Mintah, B., & Ofosu, E.K. (2023). Akan ethnomathematics: Demonstrating its pedagogical action on the teaching and learning of mensuration and geometry. *Journal of Mathematics and Science Teacher*, 3(2), 1-12. <https://doi.org/10.29333/mathsciteacher/13281>**

### **Abstract**

The mathematics curriculum implementation depends largely on teachers' choice of pedagogical skills that would influence meaningful teaching and learning. The suggestive ideal approach this paper presents is to consider exploration and demonstration of Akan (a tribe in Ghana, West Africa) ethnomathematics in the teaching and learning of some selected mensuration and geometrical concepts found in the secondary school curriculum. The study found various Akan ethnomathematical processes supporting the teaching and learning of school geometrical and mensuration topics such as artefacts, buildings, tools, and others. The ethnomathematical processes reveal a resemblance of pi ( $\pi$ ) concepts and its application to ethno-technology from selected artefacts used for pedagogical demonstrations. We recommend further research into the practical effect of ethnomathematics move in teaching other mathematical concepts in several communities where there exists cultural diversity. It is suggested that mathematics educators adopt ethnomathematics methodology by integrating it into the curriculum implementation process to check its impact on the teaching and learning of mathematics.

Keywords: ethnomathematics, pedagogy, curriculum implementation, pedagogical moves, informal teaching, geometry, ethno-technology

**Apawu J., & Owusu-Ansah, N. A. (2023). Investigating Pre-service teachers' perception on cognitive needs. *Asian research Journal of Mathematics*, 19(9), 131-147.**

### **Abstract**

This article reports on part of a two- year study. The paper examined the perception of pre-service mathematics teachers' cognitive needs via the lens of Maslow theory of needs. The research design employed was the mixed methods approach specifically sequential explanation mixed methods design. The population for this study was pre-service mathematics teachers at the University of Education, Winneba of Ghana. The purposive sampling technique was employed to select Level 300 pre-service mathematics teachers. Level 300 students were 183. The simple random sampling technique was used in selecting 125 respondents for the study. Questionnaire and interview protocol were used as instruments to collect data. Data collected through the questionnaire were analysed quantitatively and the interview data collected were analysed qualitatively. Results showed that the cognitive needs of the pre-service mathematics teachers have been met to a very large extent. Recommendations were thereof made accordingly.

**Owusu-Ansah, N. A., Armah, G., Frimpong, S.A., & Apawu, J. (2023). Using differentiated instruction to foster algebraic thinking in classrooms. *International Journal of Studies in Education and Science*, 4(2), 151-162. <https://doi.org/10.46328/ijres.64>**

### **Abstract**

This quasi experiment sought to use strategies of differentiated instruction (DI) to foster algebraic reasoning of Junior High School (JHS) year 2 students in the Winneba municipality, Ghana. The study employed Solomon four group sampling technique to collect pre-test and

post-test data from 337 students. After the treatment, the independent  $t$ -test on the post-test gave the results ( $M_1=11.2, SD_1=4.7$ ) and ( $M_2=4.3, SD_2=3.1$ ) with  $t(335)=16.2, p(0.000)<0.05$  indicating that, there was a significant difference between the achievement score of the experimental and control groups. The calculated effect size between the means of the experimental and control groups was approximately 0.7, an indication that the effect of DI strategies is large. It was recommended that, DI strategies should be employed in Ghanaian classroom to improve students' algebraic thinking.

**Efa, Y., & Frimpong, S. A. (2023). Effect of Gender on Senior High School Students' Performance and Perception of Core Mathematics in the Cape Coast Metropolis of Ghana. *African Journal of Educational Studies in Mathematics and Sciences*, 19(1), 45-73. <https://dx.doi.org/10.4314/ajesms.v19i1.4>**

### Abstract

This study investigated the gender differences in senior high school student's performance and perception of core mathematics in the Cape Coast Metropolis of Ghana. A mixed approach was used specifically the sequential explanation mixed method. A purposive, convenient, simple and stratified sampling method was employed in the study to select 393 senior high school students, consisting of 212 males and 181 females. Data was collected through the use of Mathematics Perception Questionnaires (MPQ), a mathematics test, and an interview protocol. Quantitative data (questionnaires and mathematics tests) was analysed using descriptive and inferential statistics, while qualitative data (interviews) was analysed on a thematic basis. The results of the study revealed that there was a significant gender difference in students' performance in mathematics in favour of females. Female students reported feeling more supported in mathematics by both parents and teachers than male students. Additionally, the results revealed that there was no significant difference between males and females in their perceptions of mathematics. Both males and females had a positive perception of mathematics because they saw the subject to be an integral part of daily life, also a way to succeed in many other areas. The study recommends that stakeholders in the education sector should provide equal opportunities for both male and female students to learn and excel in core mathematics and also mathematics teachers in SHS should employ positive behaviours during teaching and learning to help students of both genders perform better.

**Owusu-Ansah, N. A., Armah, G., Frimpong, S. A., Apawu, J. (2023). Using Differentiated Instruction to foster algebraic thinking in classrooms. *International Journal of Studies in Education and Science (IJSES)*, 4(2), 151-162. <https://doi.org/10.46328/ijres.64>**

### Abstract

This quasi experiment sought to use strategies of differentiated instruction (DI) to foster algebraic reasoning of Junior High School (JHS) year 2 students in the Winneba municipality, Ghana. The study employed Solomon four group sampling technique to collect pre-test and post-test data from 337 students. After the treatment, the independent  $t$ -test on the post-test gave the results ( ) and ( ) with indicating that, there was a significant difference between the achievement score of the experimental and control groups. The calculated effect size between the means of the experimental and control groups was approximately 0.7, an indication that the effect of DI strategies is large. It was recommended that, DI strategies should be employed in Ghanaian classroom to improve students' algebraic thinking.

**Owusu-Ansah, N. A., & Apawu, J. (2023). Investigating Pre-service Mathematics Teachers' Perception on Cognitive Needs. *Asian Research Journal of Mathematics*, 19(9), 131-147. [https://www.researchgate.net/publication/372428981\\_Investigating\\_Pre-service\\_Mathematics\\_Teachers%27\\_Perception\\_on\\_Cognitive\\_Needs](https://www.researchgate.net/publication/372428981_Investigating_Pre-service_Mathematics_Teachers%27_Perception_on_Cognitive_Needs)**

### **Abstract**

This article reports on part of a two-year study. The paper examined the perception of pre-service mathematics teachers' cognitive needs via the lens of Maslow theory of needs. The research design employed was the mixed methods approach specifically sequential explanation mixed methods design. The population for this study was pre-service mathematics teachers at the University of Education, Winneba of Ghana. The purposive sampling technique was employed to select Level 300 pre-service mathematics teachers. Level 300 students were 183. The simple random sampling technique was used in selecting 125 respondents for the study. Questionnaire and interview protocol were used as instruments to collect data. Data collected through the questionnaire were analysed quantitatively and the interview data collected were analysed qualitatively. Results showed that the cognitive needs of the pre-service mathematics teachers have been met to a very large extent. Recommendations were thereof made accordingly.

**Owusu-Ansah, N. A., Armah, G., Frimpong, S. A., & Apawu, J. (2023). Using differentiated instruction to foster algebraic thinking in classrooms. *International Journal of Studies in Education and Science*, 4(2), 151-162. <https://ijses.net/index.php/ijses/article/view/64>**

### **Abstract**

This quasi experiment sought to use strategies of differentiated instruction (DI) to foster algebraic reasoning of Junior High School (JHS) year 2 students in the Winneba municipality, Ghana. The study employed Solomon four group sampling technique to collect pre-test and post-test data from 337 students. After the treatment, the independent -test on the post-test gave the results ( ) and ( ) with indicating that, there was a significant difference between the achievement score of the experimental and control groups. The calculated effect size between the means of the experimental and control groups was approximately 0.7, an indication that the effect of DI strategies is large. It was recommended that, DI strategies should be employed in Ghanaian classroom to improve students' algebraic thinking.

## **Conferences/Workshops/Symposia/Seminars with Presentations**

**Armah, G. (2023, August 16). *Mathematics for Everyone* [Paper presentation]. Mentoring the next generation: Using mathematics as a tool to achieve quality education (SDG 4), Winneba, Central Region.**

**Assuah, C. K. (2023, January 17-19). *Preparation, defense of a thesis, and format of thesis presentation* [Paper presentation]. Inter-university conference for doctoral studies at UEW, Winneba**

**Zakaria, A. L., Assuah, C. K., & Mathisen, S. (2023, September 26-29).** *Developing global skills for future teachers through the virtual exchange: Reflections from Ghana, Norway, and Denmark* [Paper presentation]. European Association for International Education, Rotterdam

**Addo, D. A. (2023, November 27–30).** *End-to-End HHL algorithm: Pseudocode for solving system of linear equation problems (SLEP)* [Paper presentation]. Conference on Mathematics & Its Applications, Accra, Ghana.

## Abstract

The goal of research into quantum computing is to build super computer that is powerful enough to surpass classical computers at useful computational tasks where classical computers are limited. We design an end-to-end quantum algorithm (HHL algorithm), that solves a system of linear equation (SLEP). We present a pseudo-code for HHL algorithm fitting into the current use of quantum computers, bridging the start with the design for a quantum algorithm and ends with executable instructions for quantum hardware.

## Books

**Apawu, J., & Owusu-Ansah, N. A. (2024).** *Introduction to ICT systems and tools for mathematics teachers.* BigMike Printing Press.

**Apawu, J., & Owusu-Ansah, N. A. (2024).** *Computer programming for beginners.* BigMike Printing Press.

**Owusu-Ansah, N. A., & Apawu, J. (2024).** *Trigonometry for tertiary institutions.* BigMike Printing Press.

**Owusu-Ansah, N. A., & Apawu, J. (2023).** *Numerical analysis.* BigMike Printing Press.

## Article(s)/Chapters in an Edited Book

**Mereku, D.K. (2023).** *Modern Mathematics Curriculum Reforms in Ghana: UK and USA Influences.* In: D. De Bock (Ed.) *Modern Mathematics. History of Mathematics Education.* Springer, Cham. [https://doi.org/10.1007/978-3-031-11166-2\\_24](https://doi.org/10.1007/978-3-031-11166-2_24)

## Abstract

In this chapter, we examine the nature of the mathematics curriculum experienced in Ghanaian schools in the pre- and post-independence eras. In the early 1960s, when the school mathematics curriculum reforms reached Africa, there was a desire for change in all spheres of life, including education. There was also an optimism that governments would initiate policies to change the educational systems to transform the nation's youth into a completely literate working population for the rapid economic development of their country. The chapter discusses the nature of changes to school mathematics brought by the UK-led initiatives (grounded in the British School Mathematics Project tradition) and those that came with the USA-led initiatives (grounded in the American School Mathematics Study Group tradition). The chapter also examines the differences between the USA- and UK-led curriculum



development approaches and their emphasis on content. Finally, factors which delayed the full implementation of the curriculum reforms, the criticisms of the reforms, particularities, and how the reforms have influenced the school mathematics curriculum in Ghana in the past five decades are discussed.

**Yakubu, S., Nabie, M. J., & Luo, F. (2023). Mathematics teachers' conceptions of the theory of multiple intelligences in Ghana. In T. Lamberg & D. Moss, *Proceedings of the forty-fifth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. PMENA, University of Nevada, Reno.* <http://www.pmena.org/pmenaproceedings/PMENA%2045%202023%20Proceedings%20Vol%201.pdf>**

## Department of Information and Communication Technology

### Articles In Journal

**Elo, G., Ghansah, B., & Kwaa-Aidoo, E. K. (2024). Critical review of stack ensemble classifier for the prediction of young adults' voting patterns based on parents' political affiliations. *Informing Science. The International Journal of an Emerging Transdiscipline*, 27(007), 1-32.**

**Nsoh, A., Atarah., M., Toateba, J., & Adablanu, S. (2023). Artificial intelligence in education: Trends, opportunities and pitfalls for institutes of higher education in Ghana., *International Journal of Computer Science and Mobile Computing*, 12(2), 38–69.**

**Dake, D. K. (2023). Online recruitment fraud detection: A machine learning-based model for Ghanaian job websites. *International Journal of Computer Applications*, 184(51), 20–28. <https://doi.org/10.5120/ijca2023922639>**

### Abstract

The proliferation of online job websites has eased the difficulties in hiring and applying for jobs globally. Unfortunately, the risk of defrauding desperate job seekers exists with malicious recruiters taking advantage of the loopholes in the online recruitment process. The reactive approach to detecting online job fraud and the subsequent warnings on reputable job websites hasn't curtailed this spiteful act. The purpose of the study is to propose a machine learning model for proactive job fraud detection. In building the predictive model, a job fraud dataset from a job advertisement firm in Ghana was utilised. Using the 10-fold and the 5-fold cross-validation techniques, a job fraud detection model was built by comparing conventional and ensemble machine learning algorithms. The machine learning metrics, including accuracy, F1-score and the area under the curve (AUC) value, were reported and discussed. The findings show that the Random Forest traditional algorithm, with an accuracy of 91.86%, is best suited for the dataset. The investigation further indicates that information gain and chi-square feature selection mechanisms decreased classification accuracy marginally to 91.51%.

**Dake, D. K. (2023). Artificial Intelligence Self-Organising (AI-SON) Frameworks for 5G-Enabled Networks: A Review.** *Journal of Computer and Communications, 11(4)*, 33–62. <https://doi.org/10.4236/jcc.2023.114003>

### Abstract

The fifth generation (5G) networks will support the rapid emergence of Internet of Things (IoT) devices operating in a heterogeneous network (HetNet) system. These 5G-enabled IoT devices will result in a surge in data traffic for Mobile Network Operators (MNOs) to handle. At the same time, MNOs are preparing for a paradigm shift to decouple the control and forwarding plane in a Software-Defined Networking (SDN) architecture. Artificial Intelligence powered Self-Organising Networks (AI-SON) can fit into the SDN architecture by providing prediction and recommender systems to minimise costs in supporting the MNO's infrastructure. This paper presents a review report on AI-SON frameworks in 5G and SDN. The review considers the dynamic deployment and functions of the AI-SON frameworks, especially for SDN support and applications. Each module in the frameworks was discussed to ascertain its relevance based on the context of AI-SON and SDN integration. After examining each framework, the identified gaps are summarised as open issues for future works.

**Dake, D. K., & Bada, G. K. (2023). Unveiling learner emotions: Sentiment analysis of Moodle-based online assessments using machine learning.** *Journal of Information Technology Education: Innovations in Practice, 22*, 109-132. <https://doi.org/10.28945/5174>

**Dake, D. K., Bada, G. K., & Dadzie, A. E. (2023). Internet of Things (IoT) applications in education: Benefits and implementation challenges in Ghanaian tertiary institutions.** *Journal of Information Technology Education: Research, 22*, 311 - 338. <https://doi.org/10.28945/5183>

**Dake, D. K., Gyimah, E., & Buabeng-Andoh, C. (2023). University students' behaviour modelling using the K-prototype clustering algorithm.** *Mathematical Problems in Engineering, 2023(1)*, 12. <https://doi.org/10.1155/2023/5507814>

**Dake, D. K., Nwiah, E., Klogo, G. S., & Ativi, W. X. (2023). Instructor assisted question classification system using machine learning algorithms with N gram and weighting schemes.** *Discover Artificial Intelligence, 3*, 29. <https://doi.org/10.1007/s44163-023-00073-5>

### Abstract

One aspect of natural language processing, text classification, has become necessary in the educational domain due to the increasing number of students and the COVID-19 outbreak. The advent of the devastating pandemic and the need to remain safe have surged the discussions around online learning and integrated modules in teaching and learning. In this study, we employed machine learning to develop an automatic instructor-assisted question classification module for learning management systems. In selecting the best classifier, the conventional and the ensemble machine learning algorithms were compared using the tenfold and the fivefold cross-validation techniques. In addition, the N-gram feature selection mechanism and three weighting schemes were evaluated for performance enhancement. The detailed analysis indicates that the ensemble algorithms outperform the conventional ones with decreasing accuracy as the N-gram size increases. For all compared algorithms, the AdaBoost (SVM) ensemble algorithm has the highest accuracy of 78.55% for Unigram

(TP, TF, TF-IDF). In addition, the AdaBoost (SVM) emerged with the highest F1-score of 0.782, while the ensemble Bagging (RF) algorithm had the highest ROC value of 0.955 for Unigram (TP).

**Dake, D. K., Bada, G. K., & Dadzie, A. E. (2023). Internet of Things (IoT) applications in education: Benefits and implementation challenges in Ghanaian tertiary institutions. *Journal of Information Technology Education: Research*, 22, 311–338.**

## **Abstract**

**Aim/Purpose:** The Internet of Things (IoT) application modules have covered diverse sectors, and the educational domain is no exception. In this survey, we discuss the specific application benefits of IoT in education and further examine implementation challenges in Ghanaian tertiary institutions.

**Background:** This survey examines pertinent applications for IoT benefits in education and offers present and future opportunities to enhance educational outcomes. The survey includes anticipated IoT technologies that will have a significant impact on education. Each module contains concise definitions accompanied by analysis and application-specific relevance.

**Methodology:** In order to accomplish the objectives of the survey, a search review was conducted across relevant databases, including Scopus, Hindawi, IEEE, MPDI, ScienceDirect, Informing Science Institute, Springer, and Wiley. In addition, a thorough search was carried out using Google Scholar to cover all relevant repositories. The phrases and keywords for the search were made up of five categories. The literature search resulted in 300 articles, of which 200 were considered relevant for the survey. Of the 200 articles, 95 of them shared common themes and discussed the same application integration and challenges.

**Contribution:** This paper discusses the revolution involving IoT deployments in education and covers many aspects of the educational domain.

**Findings:** IoT integration in education will transform Education 4.0 and improve learning outcomes significantly.

**Recommendations for Practitioners:** Educational institutions are to embrace IoT integrations even with the emerging Education 4.0 and Industry 4.0 use cases.

**Recommendations for Researchers:** Educational IoT is the next big thing and research directions on unique use cases for educational institutions are eminent with 5G and other disruptive technologies.

**Impact on Society:** Effective IoT implementation in education will positively affect all stakeholders in the educational ecosystem and create a society with much access to information, connectivity, and convenience.

**Future Research:** To survey the integration of blockchain-based IoT applications in education.

**Dake, D. K., Gyimah, E., & Buabeng-Andoh, C. (2023). University Students Behaviour Modelling Using the K-Prototype Clustering Algorithm. *Mathematical Problems in Engineering*, 2023(1), 1-14. <https://doi.org/10.1155/2023/5507814>**

### **Abstract**

Counselling students remains a pre-eminence for most tertiary institutions in Ghana to the extent that institutions now have counselling units that extend to the departmental level. This study used the K-prototype machine learning algorithm to cluster students' behaviour based on 28 relevant attributes and further proposed a classification model. The analysis of the experimental outcomes using the elbow method reveals the formation of three distinct clusters with decreasing intra-cluster similarities and increasing inter-cluster distances. The first cluster uniquely consists of active learners with three or more roommates, primarily in the first year. The second cluster with the highest membership consists mainly of second-year students who exhibit passive classroom conduct and reside in a two-occupancy hostel. The third cluster contains a mixture of third and final-year students who are highly passive in class and live in a tenancy occupancy of two. After clustering, the K-nearest neighbours, logistic regression, naïve Bayes (NB), and AdaBoost ensemble algorithms were implemented to create a model for future learner cluster prediction. Simulation results using the tenfold cross-validation technique show that AdaBoost (NB) has the highest accuracy of 99.88% with an F-measure score of 0.999 and receiver operating characteristic–area under the curve value of 1.00.

**Oppong, S. O. (2023). Predicting students' performance using machine learning algorithms: A review. *Asian Journal of Research in Computer Science*, 16(3), 128–148. <https://doi.org/10.9734/ajrcos/2023/v16i3351>**

**Owusu-Boateng, O., Yidana, I., Salifu, A. S., Benuwa, B. B., Emmideme, G. N., Abdul-Mumin, K., & Yussif, B. K. (2023). College tutors' barriers and challenges with their usage of online instructional delivery resources during Covid-19 pandemic, Ghana. *Journal of Digital Learning and Distance Education*, 2(2), 462-475.**

### **Conferences/Workshops/Symposia/Seminars with Presentations**

**White, E. P. G., Okkonen, J., Oksa, R., Ghansah, B., Yarkwah, C., Kwaa-Aidoo, E., ... & Twum, R. (2023, August 18-19). Approaches to leveraging digital higher education in Africa [Paper presentation]. In Proceedings of the 6th ACM SIGCAS/SIGCHI Conference on Computing and Sustainability, Cape Town**

### **Published Proceedings of Conferences/Workshops/Symposia/Seminars**

**Olukemi, A., Broklyn, P., & Adablanu, S. (2024). The intersection of artificial intelligence and cybersecurity. In *EasyChair Proceedings and Collections* (Vol. 14095). EasyChair Proceedings and Collections.**

**Olaoye, F., Doris, L., & Adablanu, S. (2024). Adversarial machine learning for cybersecurity defense. *EasyChair Proceedings and Collections*, (13996). EasyChair Proceedings and Collections.**

- Olaoye, F., Broklyn, P., & Adablanu, S. (2024). **Adversarial machine learning for robust intrusion detection systems.** *EasyChair Proceedings and Collections, (14101).* EasyChair Proceedings and Collections.
- Potter, K., Doris, L., & Adablanu, S. (2024). **Explainable neural networks for interpretable cybersecurity decisions.** *EasyChair Proceedings and Collections, (14013).* EasyChair Proceedings and Collections.
- Potter, K., Doris, L., & Adablanu, S. (2024). **Reinforcement learning for adaptive cybersecurity policy optimization.** *EasyChair Proceedings and Collections, (14012).* EasyChair Proceedings and Collections.
- Potter, K., Doris, L., & Adablanu, S. (2024). **Multimodal deep learning for integrated cybersecurity analytics.** *EasyChair Proceedings and Collections, (14011).* EasyChair Proceedings and Collections.
- Potter, K., Doris, L., & Adablanu, S. (2024). **Homomorphic encryption for secure cloud computing.** *EasyChair Proceedings and Collections, (14009).* EasyChair Proceedings and Collections.
- Potter, K., Doris, L., & Adablanu, S. (2024). **Blockchain-based security solutions for the Internet of Things (IoT).** *EasyChair Proceedings and Collections, (14010).* EasyChair Proceedings and Collections.
- Dake, D. K., Bada, G. K., & Techie-Menson, H. (2023). **Using machine learning to cluster and predict the learning pattern of university students.** In *Annual Conference on Education and E-Learning, 22(1),* TELEMATIQUE, Benin, Nigeria.
- Potter, K., Doris, L., & Adablanu, S. (2024). **Explainable neural networks for interpretable cybersecurity decisions.** *EasyChair Proceedings and Collections, (14013).* EasyChair Proceedings and Collections.
- Potter, K., Doris, L., & Adablanu, S. (2024). **Reinforcement learning for adaptive cybersecurity policy optimization.** *EasyChair Proceedings and Collections, (14012).* EasyChair Proceedings and Collections.
- Potter, K., Doris, L., & Adablanu, S. (2024). **Multimodal deep learning for integrated cybersecurity analytics.** *EasyChair Proceedings and Collections, (14011).* EasyChair Proceedings and Collections.
- Potter, K., Doris, L., & Adablanu, S. (2024). **Homomorphic encryption for secure cloud computing.** *EasyChair Proceedings and Collections, (14009).* EasyChair Proceedings and Collections.
- Potter, K., Doris, L., & Adablanu, S. (2024). **Blockchain-based security solutions for the Internet of Things (IoT).** *EasyChair Proceedings and Collections, (14010).* EasyChair Proceedings and Collections.
- Dake, D. K., Bada, G. K., & Techie-Menson, H. (2023). **Using machine learning to cluster and predict the learning pattern of university students.** In *Annual Conference on Education and E-Learning, 22(1),* TELEMATIQUE, Benin, Nigeria.

## Abstract

The devastating COVID-19 pandemic has brought rapid transformation to the educational sector with the increasing integration of E-learning systems to complement the traditional classroom. Whether the lesson is online or in the conventional classroom, understanding students' learning styles is relevant, especially in active learning and collaborative projects. The study employed the k-modes clustering algorithm on thirty seven relevant categorical attributes that reveal students' hidden learning styles. The purposive sampling approach was used to collect data from level 100 and 200 students in the Department of ICT Education, University of Education, Winneba. The elbow method implementation of cluster identification led to the formation of three distinct clusters. The first cluster consists of visual and social learning. The second cluster members are primarily verbal and solitary learners, while the third cluster members are visual, social and logical learners. In addition to clustering, a classification model was built using the 10-fold cross-validation and Pearson's correlation feature selection evaluator. The ensemble AdaBoost (RF) emerged as the best classifier with an accuracy of 61.77%.

**Dake, D. K., Bada, G. K., & Techie-Menson, H. (2023). Using Machine learning to cluster and predict the learning pattern of university students. In 2023 Annual Conference on Education and E-learning (ACEE).**

## Abstract

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**White, E. P. G., Okkonen, J., Oksa, R., Ghansah, B., Yarkwah, C., Kwaa-Aidoo, E., ... & Twum, R. (2023). Approaches to leveraging digital higher education in Africa. In Proceedings of the 6th ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies ACM, Cape Town.**

## Department of Environmental Science Education

### Articles In Journal

**Eduah, J. O., Dogbatse, J. A., Arthur, A., Essibu, J. K., & Amoako-Attah, I. (2024). Comparative Assessment of Copper Bioavailability, Pollution, and Ecological Risks in Soil-Cacao Systems under Organic versus Conventional Management: A Case Study from Suhum Municipality, Ghana. *Soil and Environmental Health*, 2(2), 450-461.**

#### Abstract

The continuous use of fertilizers and fungicides has triggered copper (Cu) contamination in cacao soils in Ghana, which is a critical issue for the ecological risk and health safety of cacao products. In this study, we investigated Cu pollution, bioavailability, and ecological risk in soil and determined Cu levels in the cacao nib, shell, and pod husk. Soils were collected at two soil depths (0-15 cm and 15-30 cm) from 20 cacao farms, under conventional (CCM: relies on chemical-based fertilizers) and organic (OCM: relies on organic-based fertilizers) management practices together with pods. The total Cu concentration ranged from 67.6-96.8 mg kg<sup>-1</sup> in OCM and 28.5-33.9 mg kg<sup>-1</sup> in CCM and decreased with soil depth. The enrichment factor values revealed minimal Cu enrichment, which was attributed to anthropogenic activity (fungicide and fertilizer applications). The contamination factor and geoaccumulation index values were low for the CCM soils, and moderate for the OCM soils. Both management systems pose a low potential ecological risk to soil biota activity. Bioavailable Cu extracted with CaCl<sub>2</sub>, NH<sub>4</sub>OAc, and DTPA was dominant in CCM but decreased with soil depth. The Cu concentration in the cacao decreased in the order of nib < pod husk < shell. Nib-Cu was below the threshold (50.0 mg kg<sup>-1</sup>) of contamination. The results from the pairwise correlation analysis showed that extracting soil-available Cu with CaCl<sub>2</sub> is a better approach for evaluating the Cu content of cacao plants (nib, shell, and pod husk). This study reveals the pollution levels associated with cacao management practices and, thus providing valuable insights for developing appropriate mitigation strategies.

**Safo-Adu, G., Attiogbe F., Emahi, I., Ofofu, F. G. (2023). Outdoor and indoor particle air pollution and its health consequences in African cities: New evidence and an exhortation. *Sustainable Environment*, 9(1), 1-21. <https://doi.org/10.1080/27658511.2023.2265729>**

#### Abstract

Particulate matter (PM) air pollution has been identified as the leading cause of disease burden in Africa. A greater understanding of particle air pollution and its negative health effects is critical for developing effective and long-term solutions to air pollution. The current research on outdoor and indoor particle pollution concentrations and their health effects in populated African cities was summarised in this study. In academic research databases, 72 articles published in peer-reviewed journals between 2010 and 2023 were located, with 45 reporting on PM concentrations and 27 examining the health impacts of exposure to airborne particles. A narrative synthesis technique was used in the systematic review to critically



analyse and provide descriptive summaries of study findings in tabular form. According to the study, most of the research that assessed particle air pollution burdens focused on either PM<sub>2.5</sub> or both PM<sub>2.5</sub> and PM<sub>10</sub>. PM<sub>2.5</sub> and PM<sub>10</sub> levels in ambient and home air surpassed WHO-recommended threshold values. Sub-Saharan Africa has greater PM concentrations than North Africa. Chronic exposure to outdoor and indoor PM<sub>2.5</sub> raised the risk of respiratory infections and pulmonary illnesses, with females, children, and the elderly being more vulnerable. The high levels of PM promote the spread of COVID-19 and cause human capital loss, poverty, low agricultural productivity, a decline in food supply, and a decrease in GDP. Reduced energy consumption, environmentally friendly mobility, increased renewable fuel and clean energy generation, and a shift to sustainable clean cooking are all required to reduce particle air pollution in populated African cities.

**Safo-Adu, G., Attiogbe F., Emahi, I., Ofofu, F. G. (2023). A review on the sources, distribution sequences and health risks associated with exposure to atmospheric polycyclic aromatic hydrocarbons. *Cogent Engineering*, 10(1), 1-29. <https://doi.org/10.1080/23311916.2023.2199511>**

### Abstract

Atmospheric polycyclic aromatic hydrocarbons (PAHs) are associated with adverse health effects in exposed populations. Understanding PAHs pollution in ambient air and its adverse impacts is essential for developing effective actions for combating air pollution. This review paper summarised and discussed the findings of research works that determined the concentrations, distribution sequence and health risk exposure levels of atmospheric PAHs in cities worldwide. It also gave an overview of the sources and the methodology for appraising the health risk of exposure to atmospheric PAHs. 85 articles published in peer-reviewed journals from 2010 to 2023 were identified in academic research databases, with 55 reporting on sources and distribution of atmospheric PAHs while 30 evaluated the health risk of exposure PAHs in ambient air. The narrative review approach was employed to critically analyse and produced descriptive summaries of distribution patterns and health risks exposure levels of atmospheric PAHs in a tabular form. The review showed that total PAH concentration in urban areas was about eight times greater than in rural environments and emanated from diverse sources. However, vehicle exhaust and industrial emissions were the primary sources of atmospheric PAHs. The distribution sequence of PAHs in particulate and gas phases was HMW>MMW>LMW PAHs and LMW>MMW>HMW PAHs respectively. Chronic exposure to PAHs in the environment increased the risk of asthma, cardiovascular disease, and lung cancer. Adoption of stricter emission standards, cleaner energy sources, and more efficient industrial technology will aid in the reduction of particulate PAH pollution and its negative health consequences in urban areas.

**Safo-Adu, G., Owusu-Adzorah, N. (2023). Solid waste characterisation and recycling potential: A study in secondary schools in Kumasi Metropolis, Ghana. *Cleaner Waste Systems*, 4(2023), 1-10. <https://doi.org/10.1016/j.clwas.2022.100065>**

### Abstract

Solid waste characterisation is vital for proper planning and successful implementation of a recycling strategy. Information on the physical characteristics of solid waste generated in the schools in Kumasi Metropolis is limited. This study characterised and assessed the recycling potential of solid waste generated in selected secondary schools in Kumasi Metropolis in the Ashanti Region of Ghana. A stratified random sampling technique was employed to select the schools, namely, Kumasi Anglican Senior High School (KASHS), Kumasi Wesley Girls Senior High School (KWGSHS), and Kumasi Senior High Technical

School (KSHTS) for the study. Seventeen waste samples were collected daily in each school for three weeks using coded 240 L waste bins. Physical characterisation was conducted on the solid waste generated in the schools. The data were analysed using one-way ANOVA. The study revealed that the distribution pattern of waste flow in the schools was organic (29.0 %), paper (29.0 %) > plastic (18.0 %) > metal (13.0 %) > leather (5.0 %) > glass (4.0 %) > residual waste (2.0 %). Daily waste generation levels in the schools differed [F(2, 60) = 105.860, p = .000] with varied levels of recyclable wastes. On average, the schools had a per capita waste generation of  $0.0926 \pm 0.0003$  kg/person/day, with KSHTS recording the highest percentage recyclable waste level, followed by KASHS and KWGSHTS. Recyclable waste constituted about 97.0 % of the schools' waste flow, with organic waste accounting for 30.0 %. The recycling potential of solid waste generated in the schools was high. Adoption of recycling and composting as sustainable means for treating recyclable and compostable wastes respectively is recommended.

## Department Agricultural Science Education and Environmental Science

### Articles In Journal

Attipoe, S. G. (2024). Project management pedagogy: Cultivating critical thinking skills in higher education. *Advanced Education*, 12(24), 151–172. <https://doi.org/10.20535/2410-8286.296878>

### Abstract

The present study explores the integration of critical thinking skills concepts in agricultural project management instruction at the undergraduate level, using the traditional classroom theoretical approach and a blended learning model. The study, encompassing 118 undergraduate students, compares the effectiveness of these methods in enhancing students' understanding, measured through examination scores, group presentations, and students' overall perceptions of the use of the methods. Students achieved a mean examination score of 64.82% under the traditional approach and 72.66% for the blended learning approach. Statistical analysis, including a t-test, revealed significant differences favoring the blended approach. Additionally, performance assessments using six criteria during presentations yielded varied mean scores. ANOVA analysis showed a significant difference among the groups, and post hoc tests highlighted distinctions between specific groups' means, emphasizing the effectiveness of blended learning in enhancing students' understanding. Students' perceptions, gathered through a 5-point Likert scale, underscored satisfaction with the blended approach due to its flexibility, catering to diverse learning styles, and fostering critical thinking skills. We recommend institutions strengthen project management instruction by adopting blended learning, emphasizing critical thinking, and prioritizing continuous assessment and student-centric approaches since they cultivate an engaging learning experience, preparing students for managing future complexities on projects.

**Kwabena, K., Agyarko, K., Kotei, R., Dodd, M., Darko, G., Kavi F. K., & Attipoe, S. G. (2024). mpsites farmers' awareness of physicochemical properties of dumpsites soil in two agro-ecological zones, Ghana. *Environmental Monitoring and Assessment*, 196(10), 955. <https://doi.org/10.1007/s10661-024-13124-w>**

## Abstract

In Ghana, widespread backyard farming on arable land with refuse waste is driven by the enriched physicochemical properties of dumpsite soils, supporting crop growth. However, the enhanced levels of heavy metals have raised concerns among policymakers focusing on the environmental challenges posed by dumpsites soil. The purpose of the study was to assess the awareness of dumpsites farmers on soil physicochemical properties and dangers posed by accumulated toxic heavy metals. A total of 100 vegetable farmers were interviewed in three communities to gauge their awareness of dumpsite soil properties and potential contamination. A semistructured questionnaire was purposively used to solicit for information from farmers. Chi-square ( $\chi^2$ ) test of homogeneity was used to ascertain if there was any uniformity among respondents in the different communities studied. The findings showed that the level of education of the farmers had no relationship ( $p=0.21$ ) with farmers' educational level. Dumpsites farmers' knowledge on soil physicochemical properties had a significant ( $p=0.02$ ) relationship with farmers' awareness of toxic elements in dumpsites. Farmers' soil physicochemical knowledge further had a significant ( $p=0.03$ ) relationship with their awareness that, plants on dumpsites absorb toxic elements. Furthermore, ailments commonly associated with heavy metals as reported by farmers included skin rashes, cough, diarrhoea, and cholera. It can be concluded that although dumpsite farmers exhibit some awareness about the physicochemical properties of their soil and the risks associated with toxic heavy metals, there is still room for improvement. Despite education levels not significantly impacting awareness, targeted intervention programs are necessary to enhance understanding and address this pressing issue effectively. We recommend an implementation of a tailored educational programs for dumpsite farmers to enhance understanding of soil properties and heavy metal risks. There should be improved access to soil testing and interpretation to enable informed decision-making among farmers. Foster collaborations among stakeholders for sustainable waste management, soil remediation, and health monitoring to mitigate heavy metal contamination are also recommended

**Attipoe, S. G., & Adams, A. (2024). Influential factors shaping cocoa farmers' crop insurance participation and coverage amount in Ghana. *Cogent Food & Agriculture*, 10(1), 1-22. <https://doi.org/10.1080/23311932.2024.2417830>**

## Abstract

the Ghanaian cocoa sector faces numerous challenges which contributes to lower yields, forcing farmers to depend on traditional coping strategies due to the absence of institutionalized cocoa crop insurance. the effectiveness of these traditional risk-coping strategies remains uncertain. this study aims to identify the influential factors shaping cocoa farmers' decisions to participate in insurance schemes and the premium amounts they can afford. Using multi-stage random sampling, a semi-structured questionnaire was used to illicit responses from 240 cocoa farmers in the Western north region. A binary logistic and a multinomial logistic models were used for data analysis. age, education, experience, credit access, and off-farm income were identified as statistically significant factors influencing farmers' decisions to participate in the insurance scheme. Moreover, among the 3 price contracts, multinomial results indicate that the majority of farmers (50.4%) favoured a premium/acre of Gh¢250 for a minimum price insurance contract of Gh¢1300 per annum. the multinomial log-odds determining the amount farmers are willing to pay are influenced by age, education, and

off-farm income. Despite the sector's inherent challenges, there should be opportunities for collaboration between government agencies, insurance companies, and agricultural stakeholders aimed at improving insurance accessibility and affordability for cocoa farmers, thereby enhancing the sector's resilience against various risks

**Han, D., Attipoe, S. G., Han, D., & Cao, J. (2023). Does transportation infrastructure construction promote population agglomeration? Evidence from 1838 Chinese county-level administrative units. *Cities, 140*, Article 104409, 1–14. <https://doi.org/10.1016/j.cities.2023.104409>**

### **Abstract**

This study used panel data selected from 1838 county-level administrative regions for the period 2003–2018 on the opening of high-speed railway in China. Using the difference in difference (DID) method, the impact of transportation infrastructure construction on population agglomeration in different counties was studied by utilizing the exogenous impact of high-speed railway opening. Baseline regression results and robustness tests indicated that the opening of high-speed railways in the selected counties has significantly promoted population agglomeration compared to counties without high-speed railways. This result further proves that transportation infrastructure construction can directly improve a county's population agglomeration level, while labour mobility plays an effective intermediary role in the agglomeration effect. Also, the county population agglomeration effect produced by the construction of transportation infrastructure has a significant administrative division heterogeneity and geographical location heterogeneity. Additionally, due to the “siphon effect” and “trickle-down effect” of the central city, counties within different geographic distance circles exhibit different agglomeration characteristics after the construction of transportation infrastructure. Generally, with an increase in the distance from the central city, the population agglomeration effect shows an “inverted U-shaped” change trend where the threshold for high-speed rail is 200 km. This study provides theoretical support and a practical basis for railway layout, population element allocation, and coordinated regional development.

**Kavi, F. K., Attipoe, S. G., Kyere, K., Agbosu, W. K., & Offei, M. K. (2023). Effects of production parameters on rice output in the Ketu North District of the Volta Region, Ghana. *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, 23(3)*, 439–447. [https://managementjournal.usamv.ro/pdf/vol.23\\_3/Art47.pdf](https://managementjournal.usamv.ro/pdf/vol.23_3/Art47.pdf)**

### **Abstract**

This article investigated the effects of production parameters on the cultivation of rice in the Ketu North District of Ghana. Out of 1,024 farmers, 290 rice farmers were chosen to take part in the study using a two-stage sampling procedure. A structured interview schedule was used to collect primary data from 285 respondents resulting in a response rate of 93%. A translog stochastic frontier production function with a model for inefficiency effects was employed in data analysis, using the Maximum Likelihood Method. Land area under cultivation, fertilizer input, irrigation cost, and equipment were identified as the major input factors that significantly influenced yield of rice in the Ketu North District. Also, results indicated 0.642 returns to scale; which implies that an aggregate increase in inputs results in a less than proportionate increase in the yield of rice in the study area. This indicates a decreasing return to scale. The findings of this study would guide governments and civil

society organisations to understand where public investments can best be directed to boost rice production in Ghana. Increased rice output would raise farmers' income and improve their livelihood security. Also, increased output of rice will help reduce rice imports to save foreign exchange and strengthen the local currency. Finally, the findings of this study would fill the gaps in literature and contribute to knowledge.

**Attipoe, S. G. (2023). The relationship between domestic agricultural investments and economic growth in Ghana. *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, 23(3), 31–40. [https://managementjournal.usamv.ro/pdf/vol.23\\_3/Art3.pdf](https://managementjournal.usamv.ro/pdf/vol.23_3/Art3.pdf)**

### Abstract

We investigated the contribution to economic growth emerging from Ghana's investment into domestic agriculture. To this effect, time series data spanning 1965 to 2020 was used. For data analysis, stationarity was achieved using Augmented Dicky-Fuller and Phillips-Perron test; the ARDL bounds approach adopted for cointegration; finally, the Error Correction Model and Granger causality test were used for determining the long-run and short-run causal effects. From the results, in both long-run and short-run, the nation's domestic agricultural investment was not a positive contributor to economic growth. Positive contribution to economic growth was from investment in other sectors (industrial and service sectors) and trade openness index. Moreover, government expenditure index contributed negatively to economic growth. In the short-run, unidirectional causality was from economic growth to government expenditure index, other sector investments to economic growth, and economic growth to trade openness index. In this study, we strongly advocate for considerable government domestic investment into the agricultural sector besides other sector investments, and further relaxing trade policies since it is the only surety to achieving the government's two-fold agenda of zero tolerance for hunger and poverty while simultaneously increasing agriculture's contribution to economic growth with partial dependence on donor funds.

**Kyere, K., Agyarko, K., Kotei, R., Dodd, M., Darko, G., Kavi, F. K., & Attipoe, S. G. (2024). Dumpsites farmers' awareness of physicochemical properties of dumpsites soil in two agro-ecological zones, Ghana. *Environmental Monitoring and Assessment*, 196(955), Article 13124. <https://doi.org/10.1007/s10661-024-13124-w>**

### Abstract

Abstract In Ghana, widespread backyard farming on arable land with refuse waste is driven by the enriched physicochemical properties of dumpsite soils, supporting crop growth. However, the enhanced levels of heavy metals have raised concerns among policymakers focusing on the environmental challenges posed by dumpsites soil. The purpose of the study was to assess the awareness of dumpsites farmers on soil physicochemical properties and dangers posed by accumulated toxic heavy metals. A total of 100 vegetable farmers were interviewed in three communities to gauge their awareness of dumpsite soil properties and potential contamination. A semi-structured questionnaire was purposively used to solicit for information from farmers. Chi-square ( $\chi^2$ ) test of homogeneity was used to ascertain if there was any uniformity among respondents in the different communities studied. The findings showed that the level of education of the farmers had no relationship ( $p=0.21$ ) with farmers' educational level. Dumpsites farmers' knowledge on soil physicochemical properties had

a significant ( $p=0.02$ ) relationship with farmers' awareness of toxic elements in dumpsites. Farmers' soil physicochemical knowledge further had a significant ( $p=0.03$ ) relationship with their awareness that, plants on dumpsites absorb toxic elements. Furthermore, ailments commonly associated with heavy metals as reported by farmers included skin rashes, cough, diarrhoea, and cholera. It can be concluded that although dumpsite farmers exhibit some awareness about the physicochemical properties of their soil and the risks associated with toxic heavy metals, there is still room for improvement. Despite education levels not significantly impacting awareness, targeted intervention programs are necessary to enhance understanding and address this pressing issue effectively. We recommend an implementation of a tailored educational programs for dumpsite farmers to enhance understanding of soil properties and heavy metal risks. There should be improved access to soil testing and interpretation to enable informed decision-making among farmers. Foster collaborations among stakeholders for sustainable waste management, soil remediation, and health monitoring to mitigate heavy metal contamination are also recommended.

Keywords Backyard farming · Dumpsites soil · Physicochemical properties · Toxic metals · Ailments

**Kavi, F. K., Attipoe, S. G., Kyere, K., Agbosu, W. K., & Offei, M. K. (2023). Effects of production parameters on rice output in the Ketu North District of the Volta Region, Ghana. *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, 23(3), 11. <https://www.researchgate.net/publication/375681008>**

## Abstract

This article investigated the effects of production parameters on the cultivation of rice in the Ketu North District of Ghana. Out of 1,024 farmers, 290 rice farmers were chosen to take part in the study using a two-stage sampling procedure. A structured interview schedule was used to collect primary data from 285 respondents resulting in a response rate of 93%. A translog stochastic frontier production function with a model for inefficiency effects was employed in data analysis, using the Maximum Likelihood Method. Land area under cultivation, fertilizer input, irrigation cost, and equipment were identified as the major input factors that significantly influenced yield of rice in the Ketu North District. Also, results indicated 0.642 returns to scale; which implies that an aggregate increase in inputs results in a less than proportionate increase in the yield of rice in the study area. This indicates a decreasing returns to scale. The findings of this study would guide governments and civil society organisations to understand where public investments can best be directed to boost rice production in Ghana. Increased rice output would raise farmers' income and improve their livelihood security. Also, increased output of rice will help reduce rice imports to save foreign exchange and strengthen the local currency. Finally, the findings of this study would fill the gaps in literature and contribute to knowledge.

Key words: irrigation scheme, return to scale, production, stochastic frontier analysis



**Adu, J., Nyadanu, D., Nyarko, A., Quaye, M. O., Kuor, F., & Menka, C. A. (2023). Identification of high-yielding landraces and hybrids of maize (*Zea mays* L.) and the heritability of yield-related traits in Ghana. *Asian Journal of Advances in Agricultural Research*, 22(4), 22–33. <https://doi.org/10.9734/ajaar/2023/v22i4447>**

## Abstract

A field research was undertaken at the research site of the Mampong campus of the University of Education, Winneba, Ghana to evaluate the parents and progenies of seven maize varieties. The main objective of the study was to identify high-yielding landraces and hybrids of maize and the heritability of yield-related traits using diallel analysis. The seven maize varieties (parents) used were: Aburopa, Aburonenkatie, Aburohoma, Kamaazie red, Kamaazie yellow, Kamaazie light red and Obaatampa. These varieties were crossed using the complete diallel design to generate 49 progenies. The progenies and their parents were evaluated using the Randomized Complete Block Design (RCBD) with three replications. In general, Obaatampa and Kamaazie red performed best for the yield and traits. General Combining Abilities (GCA) and Specific Combining Abilities (SCA) were significant for yield and yield related traits suggesting the importance of both additive and non-additive genes in their inheritance. Maternal gene effect was found to control days to 50% silking, size of seeds, number of seeds per cob and number of husk. It is therefore important to include reciprocals of traits in study. Obaatampa, Aburopa and Aburonenkatie were the best general combiner for 100 seeds weight. High narrow sense heritability was observed for days to 50% tasseling, days to 50% silking, diameter of cob, length of cob, weight per cob, 100 seeds weight and size of seeds. The progeny Aburopa X Kamaazie light red recorded the highest SCA for 100 seeds weight followed by Kamaazie light red X Aburonenkatie.

**Agyekum, M. W., Yeboah, S. B., Dzradosi, C., Ofosu-Ampong, K., Quaye, M. O., Donkoh, C., Acquah, A., Dzikunu, C. E., Pajibo, E., Yelkperier, D., Tamanja, M. J., & Nsoh, E. A. (2023). Rural-urban differentials in early childhood education and child development: Evidence from Multiple Indicator Cluster Survey (MICS) in Ghana. *PLOS Global Public Health*, 3(8), 22-33. <https://doi.org/10.1371/journal.pgph.0002171>**

## Abstract

Children's early development is a key component that affects their wellbeing and health as they age. In recent times, scholars' interest in Early Childhood Education (ECE) and Early Child Development (ECD) has grown exponentially. However, rural-urban differentials in early childhood development in sub-Saharan Africa (SSA) and particularly in Ghana are unknown. This study examined the rural-urban differentials in Early Childhood Education (ECE) and Early Child Development (ECD) in Ghana. We used cross-sectional data from 2017/2018 Multiple Indicator Cluster Survey (MICS) by the Ghana Statistical Service. We restricted the data to children aged 3 and 4 years. A sample size of 3683 children was used in this study. Poisson regression analysis was used to examine the relationship between Early Childhood Education (ECE) and Early Child Development (ECD) in rural and urban Ghana. Both ECE and ECD scores were higher in the urban areas than in the rural areas. The regression shows the rural-urban disparity in ECD by ECE. The Preschool Program (ECE) has a good impact on children's early development in Ghana. However, the Relative Risk Ratio (RRR) in rural areas was higher than in urban areas. Beyond this, other factors such as age of child, ecological zone, maternal education and wealth index were associated with ECD. Our findings show a significant disparity in Early Childhood Education and Childhood



Development in rural and urban areas This study therefore recommends that more resources be channeled in rural areas to help improve ECE and ECD while policies should be tailored to Early Childhood Education.

**Agyeman, K., Brempong, M. B., Ofori, A., Danquah, O. E., Keteku, A. K., Marno, P., Atta Poku, P. S., Quaye, M.O and Berchie, J. N. (2023). Yield Potential of Improved Maize Achieved from Optimal Rates of YARA Crop Nutrition Fertilizers for Sustainable Maize Production in the Semi-Deciduous Forest Agro-Ecological Zone of Ghana. *Asian Journal of Plant Sciences*, 13(8), 13.**

## Abstract

Wide gaps in maize yield responses to blanket NPK fertilizer application across the agro-ecological zones of Ghana calls for revisions in the recommendation. New fertilizer protocols that focus more on crop nutrition and the supply of many essential nutrients other than just NPK should be tested. This study determined the best YARA crop nutrition fertilizers for optimum maize productivity and economic viability in the semi-deciduous forest agro-ecology of Ghana. Nine treatments consisting of seven different YARA fertilizer protocols, the blanket NPK fertilizer recommendation and a no-amendment control were applied to maize at Fumesua in the Ashanti region of Ghana, in 2019 and 2020. Most of the YARA crop nutrition fertilizers performed better in terms of plant height, leaf chlorophyll concentration and days to 50% tasseling. Days to 50% silking, grain yield and biomass than the blanket NPK recommendation and control in both years. On-field, Treatment 5 (T5) supplied 40 kg/ha N, 16.25 kg/ha P, 31.25 kg/ha K and 6.5 kg/ha S at 2 WAP; half of these rates at 4 WAP and plant growth regulators and doses of some micronutrients at 3 and 4 WAP produced the highest average yield of 5875 kg/ha in the two years compared to 4241 kg/ha from the blanket NPK recommendation. In terms of yield, blanket NPK was only better than the control. T5 and the other four YARA fertilizers were economically viable (Value-to-Cost Ratio>2), while the blanket NPK fertilizer recommendation and two other YARA fertilizers were not (VCR<2). More attention should be given to the adoption of economically viable YARA blends by farmers for improved maize productivity and livelihoods

**Agyeman, K., Frimpong, F., Amankwaa-Yeboah, P., Osei-Bonsu, I., Yeboah, S., Keteku, A., Paul Marno, P., Brempong, M. B., Danquah, E. O., Adjei, E. A., Quaye, M. O., & Berchie, J. N. (2023). Physiological resilience of bambara groundnut (*Vigna subterranea* L. Verde) genotypes to intermittent periods of drought stress at different growth stages. *Agricultural Sciences*, 14(11), 1573-1592. <https://doi.org/10.4236/as.2023.1411102>**

## Abstract

Different genotypes of Bambara groundnut (*Vigna subterranea* L. Verde) grow well under conducive environmental conditions, provided that adequate soil moisture is available during vegetative and reproductive phases. However, drought stress is the major limiting factor to bambara production, which accounts for up to 40% of yield losses. This situation could worsen due to drastic and rapid changes in the global climate. Landraces grown by farmers are low-yielding. Understanding the physiological response of different genotypes to drought stress is key to achieving food security through crop improvement and diversification. This study focused on variations in the response of Bambara groundnut genotypes to intermittent drought stress during the crop's critical growth (vegetative and reproductive) stages. The experiment was undertaken at CSIR-Crops Research Institute Screen-house. The treatments were used in a factorial experiment with three replications in a randomized complete block design. The Bambara genotypes showed considerable variability in tolerance to drought

stress. Drought stress during vegetative and reproductive stages significantly reduced crop growth indices, the leaf relative water content, chlorophyll content and leaf area. Drought stress during vegetative and reproductive stages had a more severe impact on the seed yield of genotype Nav Red, reducing it by 69% and 13%, respectively. Farmers should pay more attention to adopting drought-tolerant and high-yielding varieties for improved Bambara groundnut productivity and livelihoods.

**Asante, I. K., Inkoom, E. W., Ocran, J. K., Kyeremateng, E., Sabari, G., & Odamtten, F. T. (2023). Intention of smallholder maize farmers to adopt integrated pest management practices for fall armyworm control in the Upper East Region of Ghana. *International Journal of Pest Management*, 1–18. <https://doi.org/10.1080/09670874.2023.2190627>**

### Abstract

The intention of farmers to adopt integrated pest management (IPM) for the control of fall armyworm (FAW) in the Upper East region of Ghana was studied using an extended version of the theory of planned behaviour (TPB), with past behaviour as an additional construct to the original model. Questionnaires were used to collect data from 266 respondents using the multi-stage sampling technique. Descriptive statistics, measures of central tendencies, and partial least squares structural equation modeling (PLS-SEM) were used to analyze the data. Intention had the highest mean (mean = 4.18), while, past behaviour had the lowest mean (mean = 3.16). The PLS-SEM revealed that attitude was the only significant predictor of farmers' intention to use IPM for FAW control, accounting for 30% of the variance in farmers' intention. Past behaviour of farmers in IPM use did not affect their intention to adopt IPM for FAW control. Accordingly, IPM training for farmers by the Ministry of Food and Agriculture must integrate method and results demonstration extension strategies that will inspire positive attitudes and enthusiasm in using IPM to manage FAW.

**Asante, I. K., Ocran, J. K., & Inkoom, E. W. (2023). Modeling pesticide use behavior among farmers in the Upper East Region of Ghana: An empirical application of the Theory of Planned Behavior. *Environmental Protection Research*, 3(1), 130–149. <https://doi.org/10.37256/epr.3120232074>**

### Abstract

This study examined the pesticide use behavior of farmers along the White Volta Basin in the Upper East Region of Ghana, using the Theory of Planned Behavior (TPB) to explore the underlying factors. A multistage sampling procedure was used to select 300 food crop farmers, from whom data was collected and analyzed using the frequency, percentage, means, standard deviation and partial least squares structural equation modeling (PLS-SEM) techniques. The results revealed that attitude, subjective norm, and perceived behavioral control compositely accounted for approximately 29% of the variation in farmers' intention towards the safe use of pesticides, whereas intention and perceived behavioral control explained 38% of the variation in farmers' behavior towards safe pesticide use. Additionally, attitude and perceived behavioral control were found to significantly impact the intention and behavior of farmers towards safe pesticide use in the study area. Accordingly, it is recommended that stakeholders, including agricultural extension agents (AEAs), agricultural input retailers, the Environmental Protection Agency (EPA), and the Plant Protection and Regulatory Services Directorate (PPRS), collaborate to develop training curricula aimed

at improving the behavior of the farmers in the study area. The training regimes should incorporate extension training methods, for example, method and result demonstrations, which are known to improve the attitudes and behaviors of farmers.

**Ocran, J. K., Okorley, E. L., Annor-Frempong, F., Akaba, S., Obeng-Mensah, A., Asante, I. K., & Omega, S. (2023). Maize farmers' preferred option for Fall Armyworm control, and factors influencing their preference: A case of Northern Ghana. *ADRRRI Journal of Agriculture and Food Sciences, Ghana*, 7(1(6)), 12–36. <https://journals.adrri.org/index.php/adrrijafs/article/view/1046/768>**

### **Abstract**

This study examined maize farmers' preferred option for control of FAW and factors influencing their preferences in three selected districts of the Northern and North-East Regions of Ghana. Primary data was collected from 323 randomly surveyed maize farmers with the help of well-structured questionnaire. Descriptive statistics, Henry Garrett ranking test, Wilcoxon signed rank test and multinomial logistic regression were computed to analyze the data. The results revealed that synthetic pesticides use is the most preferred FAW control method while Integrated Pest Management (IPM) is the least preferred method among maize farmers in the study area. Results from the Wilcoxon signed rank test showed that farmers' choice of synthetic pesticide is significantly different from the other FAW control methods. Evidence from the multinomial regression analysis revealed that the preference of maize farmers was influenced primarily by the perceived effectiveness of the control methods, the farmers' primary occupation, the benefits they receive from belonging to FBOs, and the frequency of their meetings with agricultural extension agents. From the study, synthetic pesticides currently represent the most preferred FAW control method. The study recommends that all synthetic pesticides registered and approved for the control of FAW display graphical labels of the FAW so that all farmers can relate to them and easily recognize the usage of such chemicals. In addition, method and result demonstrations should be adopted to demonstrate the effectiveness of new and alternative methods of FAW control in order to improve adoption of such FAW control methods.

## **Conferences/Workshops/Symposia/Seminars with Presentations**

**Kyere, K. (2024, June 18-22). Heavy Metal Levels in Waste Dumpsites and Risk Assessment of Cucumber (*Cucumis sativus* L.) Fruits Cultivated in Coastal Savannah [Paper presentation]. Contributing to Sustainable Development Goals (SDGs) in Africa through Multidisciplinary Research and Engagement, University of Bradford, Bradford.**

### **Abstract**

Cucumber cultivation on waste dumpsites in Ghana poses a potential health threat to the consuming public. This study assessed the levels of Fe, Cu, Hg, and Pb metals in both soil and cucumber fruits at harvest in pots under field conditions. Samples were collected from three active dumpsites and background soils at a depth of 0 - 30 cm. Metal levels in both cucumber and soils were determined before planting and at the harvest of matured cucumber fruits using a Niton XL3t GOLD field portable XRF (X-ray fluorescence spectrometer). The physicochemical properties of dumpsite soil were found to be at improved levels compared

to the background soil. All studied metals were present in higher levels in dumpsite soil than in background soil. Specifically, Pomadze dumpsite soil exhibited elevated levels of Fe, Pb, and Hg that exceeded allowable limits, as did the cucumber fruits. Pollution indices including Igeo, EF, TR, and TF indicated contamination levels for Fe, Hg, and Pb in the following increasing order: New Winneba background soil < Oguakurom dumpsite soil < UEW South dumpsite soil < Pomadze dumpsite soil. To mitigate potential health risks from heavy metal accumulation, it is recommended that the Pomadze dumpsite be excavated and relocated to a designated landfill site at Nsuakyire.

**Key words:** Backyard farming, Cucumber fruit, Dumpsite soil, Soil Physicochemical, XRF, Pollution indices

**Annor-Frempong, F., & Asante, I. K. (2023, September 06).** *Agricultural extension in delivering technologies to farmers in Ghana* [Paper presentation]. **the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) Webinar Series “Sharing What Works”, Webinar 2: Harnessing Advances in Delivery of Agricultural Technologies, Kampala.**

### Abstract

Agricultural technology extension refers to the activities of transforming and applying advanced agricultural technologies and scientific and technological achievements to the agricultural production process through experiments, demonstrations, training, guidance and consulting services. Agricultural extension has been at the in delivering technologies to farmers for decades. Smallholder farmers who form majority of Africa’s population produce about 80% of the food needs of the population. It however important to note that the productivity of these farmers on the African continent lag behind that of most part of the world. This is occasioned by a myriad of challenges including, poor soil fertility, low quality of seed and cultivars, and high cost and poor quality of agricultural inputs supply, high incidence of pest and diseases, high cost of farm labour, land tenure system, poor market opportunities and financial intermediation. These challenges require the development and dissemination of improved technologies to address them. Technology is an idea, practice, or object for adoption by an individual or other unit of adoption (group). This presentation offer insight into adoption of technologies in the Ghanaian context and how technology adoption is improving agricultural productivity in Ghana.

**Asante, I. K., Kassah, J. E., & Ocran, J. K. (2023, September 25-28).** *Precision fishing: Sound Navigation and Ranging (SONAR) technology assisting decision making of Purse-seine fishers* [Paper presentation]. **University of Cape Coast-Harper Adams University Global Challenge Research Fund Networking Forum 2023, Cape Coast, Central**

**Asante, I. K., Kassah, J. E., & Ocran, J. K. (2023, October 24-25).** *Technology driven decision making among inshore fishers in the Central Region of Ghana: An application of the extended technology acceptance model* [Paper presentation]. **The 10th Conference of Fisheries and Aquaculture 2023, Bali.**

### Abstract

Some few decades ago, Ghanaian inshore fishers depended largely on personal experiences and navigational skills to determine location, and also used the physical characteristics of the sea to predict fishing grounds. These were often misleading as many fishers often lost their way, especially on nights when the moon and stars were not visible. The introduction

of the Sound Navigation and Ranging (SONAR) technology in recent years to help fishers detect changes in bathymetry, or help locate aggregations such as fish schools, underwater formations among others using sound waves transmitted from onboard the vessel has received little attention from the scientific community. With this equipment, inshore vessels could easily identify fish schools and uneven sea bottoms which facilitates purse seining. The study was conducted to determine how inshore fishers have adopted this SONAR technology and the factors influencing their adoption decisions. Little empirical data exist on adoption of this technology in Ghana. Utilising the extended technology acceptance model (TAM3), and a validated structured questionnaire, 161 inshore fishers were surveyed from three fishing communities in the Central region of Ghana. With the help of SmartPLS 4.0, partial least squares structural equation modeling (PLS-SEM) was used for data analysis. The results showed that, perceived ease of use, perceived usefulness, and subjective norms accounted for 38% of the variance in the behavioural intention of inshore fishers to adopt the SONAR technology while behavioural intention predicted 8% of the variation in their use behaviour of the technology. We recommend that the Fisheries Commission of Ghana should leverage on the characteristics of the technology as ease and usefulness of the technology to drive its adoption in the study area and beyond.

# FACULTY OF SOCIAL SCIENCES EDUCATION

## Department of Social Studies Education

### Articles In Journal

**Appiah-Kubi, E., Bordoh, A., & Eshun, . I. (2024). Exploring teachers' perspectives on attitude change instruction in social studies education. *Advances in Social Sciences Research Journal*, 11(6), 19-37. <https://doi.org/10.14738/assrj.116.17059>**

#### Abstract

This qualitative study explores the perspectives of social studies teachers in Ghana on attitude change instruction within the context of senior high school. The study investigates teachers' viewpoints, experiences, and practices related to attitudinal change instruction in Social Studies education. The study adopted a multiple case study design to gain in-depth insights into teachers' perceptions of attitudinal instruction. The population comprises Social Studies teachers in public Senior High Schools in the Oforikrom Municipality and Sekyere South District of the Ashanti Region. Sampling techniques involve selecting participants from nine public Senior High/Technical and Vocational Schools in the study area. The main instrument for data collection was semi-structured interviews. The study highlights the complexities and opportunities in fostering positive attitudes and behaviours among Ghanaian Senior High School students. Conclusions drawn from the study inform recommendations for enhancing attitude change instruction in Social Studies education, emphasising the importance of teacher commitment, student engagement, and a supportive educational environment.

**Eshun, I., Ochour, K. B., & Bordoh, A. (2024). Factors influencing formative assessment practices of Junior High School social studies teachers. *Innovare Journal of Education*, 12(1), 48-54. <https://doi.org/10.22159/ijoe.2024v12i1.49794>**

#### Abstract

The study investigated factors that influence formative assessment practices of Social Studies in the Techiman Municipality of the Bono East Region of Ghana. A quantitative approach with a descriptive survey research design was employed for the study. For the target population, all eighty-four public junior high school (JHS) Social Studies teachers in the Techiman Municipality of the Bono East Region of Ghana were chosen for the study. All the Social Studies teachers in the public JHSs in the Techiman Municipality were sampled for the study. The census sampling technique was employed to select the population for the study. Because the population was homogenous, all the Social Studies teachers, comprising ninety-five (95) teaching the subject at the JHS in the municipality, were selected for the study. The primary data collection instrument for the study was a twenty-two (22) five-point Likert itemized questionnaire used for the collection of data. Descriptive statistical tools were employed in analyzing the quantitative data. The quantitative figures were prearranged into frequency tables, simple percentages, weighted mean, and standard deviation for easy interpretation. The findings revealed that most teacher assessments are mainly influenced by external factors such as the nature and demand of the West Africa Examination Council's

(WAEC) questions and requirements set by the Municipal Director of Education or the school district. Therefore, the National Council for Curriculum and Assessment (NaCCA) should consider introducing interventions in teacher training universities and colleges that help improve classroom practices, including formative assessment practices.

**Eshun, I., Iddrisu, D., Bordoh, A., & Dankwa, S. (2023). Cultural Challenges Affecting Effective Community Participation in Potable Water Management in Selected Rural Communities in the Upper West Region of Ghana. *Global Journal of Science Frontier Research: H Environment & Earth Science*, 23(6), 33-43. <https://ssrn.com/abstract=4675130>**

### **Abstract**

The study aimed to identify challenges hindering community participation in potable water management in specific communities in the Wa West District of Ghana. A qualitative approach and a case study design were employed for the research. The qualitative approach and the case study design were employed to gain in-depth insights into the challenges affecting effective community participation in potable water management in the Gbaalwob, Chogsia, and Gadi, communities in the Wa West District in the Upper West Region of Ghana. The population included twenty residents each from the three communities, namely; Gbaalwob, Chogsia, and Gadi. Also, three key officials from the district assembly and three opinion leaders each from the Gbaalwob, Chogsia, and Gadi communities were sampled for the study. In all the sample size of the study was seventy-two participants. A purposive sampling technique was employed in selecting the participants for the study. A semi-structured interview guide and a focus group discussion checklist were employed in the data collection. Data was analysed thematically. Emerged themes from the interviews and the focus group discussion were analysed based on the themes from the data collection. It was revealed that inadequate finance is a foremost impediment to effective community participation in water management in the district. As a result, people are unable to make regular contributions to maintenance services of boreholes when they break down. It was therefore suggested that there should be the provision of credit facilities to households who are deprived to be able to diversify their livelihood to enhance them to effectively contribute monthly towards the borehole's maintenance in their various communities.

**Bordoh, A. (2023). Efficacy of formative assessment practices in social studies instructions: A case study of Holy Child College of Education in Ghana. *Asian J. Educ. Soc. Stud*, 49(4), 409-419. <https://doi.org/10.9734/ajess/2023/v49i41219>**

### **Abstract**

Assessment has become the foundation of all levels of education. This study aimed to examine the efficacy of formative assessment practices in Social Studies instructions at Holy Child College of Education in the Western Region of Ghana. A qualitative approach and a case study research design were adopted for this study. The case study focused on the teacher-trainee's views and roles of formative assessment in the teaching and learning process in Social Studies lessons. The population for this study included all seventy-five (75) final-year teacher-trainees offering a general programme for a Bachelor of Education in Social Studies in the Holy Child College of Education in the Western Region of Ghana. Purposive and convenience sampling techniques were used to select the College of Education and participants for the study. A purposive sampling technique was used to sample the college



and municipality in the Western Region. Twenty (20) teacher trainees on teaching practice were conveniently sampled for the study. A semi-structured interview guide was the main tool used in data collection. The data was analysed using the interpretative technique based on the themes arrived at during the data collection. It was revealed that assessment for learning is a gradual engagement that takes place endlessly throughout ongoing classroom learning activities to offer immediate feedback for assessors and assesses to close the gap identified in the ongoing learning situation. Therefore, mentoring institutions like the University of Education, Winneba, University of Cape Coast and others should collaborate with the Ghana Teacher Education Commission to organise continuous professional development for colleges of education teachers on efficacy and implementation of formative assessment.

**Bonful, E., Kyei, S., Boateng, I. (2024). Environmental risks associated with quarry activities and its anthropogenic changes in Weija Hills, Ga South Municipal, Ghana. *Discover Geoscience, Springer Nature, 2(76), 75-92. https://doi.org/10.1007/s44288-024-00075-5***

**Kyei, S., Agorkpa B., Benewaa B., Sadique, N. S. N. (2024). Marital power play in a patriarchal society, a qualitative study of Ghanaian religious wives' perspectives. *Discover Global Society, Springer, 5(18), 175-202. https://doi.org/10.1007/s44282-024-00110-3***

**Eshun, I., Iddrisu, D., Bordoh, A., & Dankwa, S. (2023). Cultural challenges affecting effective community participation in potable water management in selected rural communities in the Upper West Region of Ghana. *Global Journal of Science Frontier Research: H Environment & Earth Science, 23(6), 32-43. https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=4675130***

## Abstract

The study aimed to identify challenges hindering community participation in potable water management in specific communities in the Wa West District of Ghana. A qualitative approach and a case study design were employed for the research. The qualitative approach and the case study design were employed to gain in-depth insights into the challenges affecting effective community participation in potable water management in the Gbaalwob, Chogsia, and Gadi, communities in the Wa West District in the Upper West Region of Ghana. The population included twenty residents each from the three communities, namely; Gbaalwob, Chogsia, and Gadi. Also, three key officials from the district assembly and three opinion leaders each from the Gbaalwob, Chogsia, and Gadi communities were sampled for the study. In all the sample size of the study was seventy-two participants. A purposive sampling technique was employed in selecting the participants for the study. A semi-structured interview guide and a focus group discussion checklist were employed in the data collection. Data was analysed thematically. Emerged themes from the interviews and the focus group discussion were analysed based on the themes from the data collection. It was revealed that inadequate finance is a foremost impediment to effective community participation in water management in the district. As a result, people are unable to make regular contributions to maintenance services of boreholes when they break down. It was therefore suggested that there should be the provision of credit facilities to households who are deprived to be able to diversify their livelihood to enhance them to effectively contribute monthly towards the borehole's maintenance in their various communities.

**Isaac Eshun. (2023). Assessing Students' level of awareness of their constitutional human rights. *Asian Journal of Education and Social Studies*, 49(4), 467-482. <https://doi.org/10.9734/ajess/2023/v49i41225>**

### **Abstract**

Abstract The main focus of this study was to assess the level of students' human rights awareness at the University of Education, Winneba. The study adopted a pragmatic research paradigm using the mixed-method approach with an explanatory sequential design. The population for the study was the level 400 students of the University of Education, Winneba for the 2022/2023 academic year. A total of 368 students were carefully selected hinging on the Krejcie and Morgan tabulation formula from the total population of 9,408 final year students for the quantitative data. Sixteen (16) students were purposively selected from the sample size of 368 for a focus group discussion. Standard-based students' academic rights and freedom questionnaires were adapted to merit the research context. The focus group discussion guide was designed from the quantitative questionnaire for triangulation purposes. Descriptive statistics (Mean and Standard Deviation) and inferential statistics (Independent sample t-test) were employed for the quantitative analysis, whilst qualitative content analysis was used for the qualitative analysis. As an insider, positionality issues and ethical considerations were professionally addressed to avoid any influence on the outcome of the research. The findings showed that students had a high level of human rights awareness about the right to life, while the right to a speedy trial was moderate, though it is among the general aspects of human rights to be enjoyed by all citizens. Overall, it was realized that students of the University of Education, Winneba had a high level of human rights awareness (M=4.24, SD=0.50). The results indicated that even though students within the 31-40 age range had a higher level of human rights awareness (M=4.45, SD=0.48) than those between the 21-30 age range (M=4.23, SD=0.50), the independent sample t-test results were not statistically significant [t (337) = -1.765, p>0.05, 2-tailed]. The qualitative data revealed that courses offered in the domain of human rights, seminars, conferences, flyers, newsletters, and basic school rules from students' handbooks were some of the sources of their human rights awareness.

**Benewaa, B., Gyimah E., Turkson, S. (2023). Road disciplinary challenges: The case of pedestrians of La Nkwantanang Madina Adenta Municipal District, Ghana. *European Journal of Social Sciences Studies*, Volume 9(No 2), 23-40. <http://dx.doi.org/10.46827/ejsss.v9i2.1558>**

**Ntumi, S., Agbenyo, S., Tetteh, A., Yalley, C. E., Yeboah, A., & Gyapong, N. D. (2023). Teacher preparedness and implementation of the national pre-tertiary education curriculum framework in Ghana. *Journal of Educational Research and Practice*, 13(1), 251-269. <https://doi.org/10.5590/JERAP.2023.13.1.18>**

### **Abstract**

Curriculum reform is a significant approach to prepare schools to be effective in meeting contemporary societal needs and imperatives. Several countries around the world, therefore, engage in curriculum reform to enable schools to prepare children with the knowledge, skills, and competencies needed in the present and future society, but implementing change following a curriculum reform is often complex. In our study, we sought to understand how teachers respond to curriculum implementation following the introduction of the national pre-tertiary education curriculum framework (NPECF) in Ghana. We employed a concurrent, nested, mixed-design strategy (embedded design) using a sample of 352 randomly selected basic school teachers from six regions in Ghana. Data from surveys and interviews reveal

that teachers consider the NPECF as relevant for Ghanaian educational fortunes; however, a myriad of classroom challenges come with the implementation process. We concluded that these challenges could affect the realization of the relevance of the NPECF if schools and teachers are not well resourced. We call the attention of duty bearers to the need to provide the necessary resources for the seamless implementation of the NPECF in Ghana. For policy adjustment, we recommended and proposed improvisation as an approach for teachers to utilize and exert autonomy and independence in the design and delivery of classroom instruction to sustain the NPECF in primary schools. Again, our study calls for coordination and collaboration among parents, civic society, and individuals across political divides to remain united to provide a solid foundation for education in Ghana.

**Osman, A., Mensah, B., Yalley, C. E & Poku, A. A. (2023). Personal computer usage and teasing among geographic information systems students. *Social Sciences & Humanities Open*, 8(1), 1-7. <https://doi.org/10.1016/j.ssaho.2023.100600>**

### Abstract

This study arose from the observation of teasing among Geographic Information Systems (GIS) students who use personal computers (PCs) during practical sessions. A review of the literature did not provide any informative knowledge on teasing based on PC characteristics. Hence, the study sought to assess the degree of teasing among GIS students, PC characteristics students are frequently teased over, types of teasing, and its positive and negative effects. Students at University of Education in Winneba (UEW), Ghana, provided data on their experiences with analysis employed being multinomial regression, binary logistic regression, the McNemar and Wilcoxon signed-rank test. The findings of the study revealed that students had experienced and engaged in various forms of teasing during GIS sessions. Low processing power of PCs and the brand type were the targets of verbal jokes among students. Teasing during lecture periods resulted in both positive and negative utility, with a greater number of students reporting net positive utility. Although the findings verified the researchers' utilitarian viewpoint, teasing needs to be regulated, as some students exhibited feelings of depression and low self-worth.

**Yalley, C. E., Akore, E. A., & Afutor, P. (2023). Pre-service teachers' characteristics predict their technological knowledge: An exploratory multiple-regression design. *Social Education Research*, 4(1), 70=81. <https://doi.org/10.37256/ser.4120231933>**

### Abstract

Academic discourse has highlighted the influence of pre-service teachers' technological knowledge as a cord linking their pedagogy and content integration. However, pre-service teachers' demographic characteristics play a crucial role in their technological knowledge development. As a result, this study examined how prospective teachers' demographic variables predict their technological knowledge. A census survey with an exploratory multiple-regression design was adopted to test the relationship of the predictive variables (programme of study, gender, central area of specialization, and minor area of specialization) of Abetifi Presbyterian College of Education pre-service teachers. A census technique was used to include all the 379 level 400 pre-service teachers pursuing Bachelor of Education (Primary Education) and Bachelor of Education (Junior High School Education) for the 2021/2022 academic year. A five-point closed-ended questionnaire with a Cronbach alpha coefficient of 0.758 was used as the primary data collection instrument. The study's findings indicated that prospective teachers were technologically knowledgeable in recognizing,

accepting, adapting, exploring and advancing technological resources. The study's findings established that demographic variables were statistically significant predictors of pre-service technological knowledge. For teacher training institutions to address the technological challenges of prospective teachers, technological resources applicable within their subject areas of specialization should be used during instruction. Teacher educators should consider the background characteristics of prospective teachers in order to select and adjust technological resources to whip prospective teachers' interest in the use of innovative resources during instruction

## **Conferences/Workshops/Symposia/Seminars with Presentations**

**Adam, M., Ngaaso, C. K., Poatob, S., & Yalley, C. E. (2024, March 26–27). Enhancing employability skills among social studies student-teachers in Ghana: A human capital approach [Paper presentation]. *Bringing the Gown to Town: Governance, Society and Post-Pandemic Adjustments, Winneba, Central Region, Ghana.***

### **Abstract**

The paper focused on the challenges faced by graduates in Ghana in accessing employment opportunities due to a lack of possession of essential transferable skills, despite increased accessibility to tertiary education. The study centred on assessing the acquisition of employability skills among Social Studies teacher-trainees at the University of Education, Winneba, guided by human capital theory. The findings from the mixed-method approach revealed that respondents possessed some level of employable skills and qualities. However, there is a need to further develop key employability qualities such as positive attitude, communication, teamwork, self-management, willingness to learn, problem-solving, decision-making, and resilience among respondents to fully propel them for the competitive labour market. This study therefore concluded by recommending a shift towards learner-centred techniques, constructivist learning approaches, and authentic assessment methods to create a more conducive learning environment for learners to develop essential employability skills.

**Kuupiel, C. M., & Adam, M. (2023, August 9–11). Education and human rights in the context of Ghana's pre-tertiary education curriculum framework [Paper presentation]. *7th International Multidisciplinary Conference for Post-graduate Students: The Paradigm Shift in Pedagogical Innovation for Transformative Education, Winneba, Central Region, Ghana.***

### **Abstract**

This paper contributes to the ongoing discourse on human rights education, particularly focusing on Ghana as an invested proponent of education and human rights. Highlighting the constitutional and international acknowledgment of education as a fundamental human right, as well as the importance of human rights education for societal progress, the study delves into Ghana's dedication to human rights education. This study was basically a meta-analysis of which the current curriculum framework for the pre-tertiary education in Ghana was the focus. The findings reveal that while the new curriculum framework contains elements of human rights within its core values and specific primary school modules, there's a notable absence of explicit articulation of human rights education. The study suggests that integrating human rights throughout the curriculum could provide a more comprehensive approach, ensuring their significance is not overlooked.

# Department of Political Science Education

## Articles In Journal

**Braimah, A. I. (2024). Killing to cling to power? The dilemmas of Israeli Prime Minister.** *International Journal of Social Science Research and Review*, 7(3), 205-218.

**Abdul Hakim Ahmed. (2024). The Fourth Estate in Ghana's fourth republic: From "culture of silence" to fake news and post-truth politics.** *African Journalism Studies*, 45, 1-19. <https://doi.org/10.1080/23743670.2024.2346850>

### Abstract

Ghana's democratisation process under the Fourth Republican Constitution in 1992 restored a raft of civil liberties and democratic institutions truncated by the erstwhile Provisional National Defence Council's (PNDC's) authoritarian military regime. One of these institutions is the mass media which has been assigned the role of the Fourth Estate, with its rights, independence and freedom stipulated and strongly protected by Chapter 12 of the 1992 constitution. This new-found freedom of the media and information not only led to the springing up of a multitude of private print and electronic media outlets but also stimulated the general transformation of the public sphere with the emergence of the digital media, particularly the social media platforms. Using existing data for thematic analysis and through the lenses of postmodernism, I examine the various cases of post-truth news (also called post-truth politics in this study), their implications and the methods used in combating them. The study finds that the prevalence of post-truth news leads to rising political tension and national security problems. Measures including arrests, detentions, harassment of perceived offenders and independent fact-checking have so far proven ineffective because of the perceived selective applications of the law and paucity of technical and technological capability.

**Maame Adwoa Gyekye-Jandoh and Abdul Hakim Ahmed. (2023). Ghana's democracy and the digital public sphere: Some pertinent issues.** *Contemporary Journal of African Studies*, Vol. 10(No. 1), 139-168. <https://dx.doi.org/10.4314/contjas.v10i1.6>

**Botchway, T. P. (2024). The convention on biological diversity and ecological protection-related laws and policies in Ghana.** *UCC Law Journal*, 3(2), 190–220. <https://doi.org/10.47963/ucclj.v3i2.1364>

### Abstract

This study sets out to examine the implementation of the Convention on Biological Diversity (CBD) in Ghana. A key objective of the study was to understand how the country has attempted to achieve sustainable development while reducing the risk to biodiversity and environmental pollution given its abundant natural resources. In an effort to achieve this and other related objectives of the study, the researcher adopted a qualitative approach to research which enabled him to gather relevant information in non-numerical format. The study consequently finds that though the country has introduced several legislations and policies to ensure ecological protection, several challenges still remain. Indeed, in Ghana today, attempting to ensure the functionality, orderliness and the usefulness of ecological protection

policies such as those aimed at the effective implementation of the CBD necessarily requires that such policies have firm legitimacy among the local norms; legality alone is not enough. It is in view of this that the study advocates for a balanced obligation.

**Botchway, T. P., & Owusu, L. P. (2024). Protecting lives & livelihoods: Interrogating the abuse of human rights in the midst of a global pandemic. *Cogent Social Sciences*, 10(1), 2303806. <https://doi.org/10.1080/23311886.2024.2303806>**

### **Abstract**

This study attempts to review some of the measures countries implement to mitigate the upsurge of the corona virus disease (Covid-19). It delves into how the Ghanaian state abused its powers in the name of ‘protecting lives and livelihoods’. It focuses on the introduction and subsequent implementation of draconian measures that infringe on the rights of the citizen and how the state (government) abuses its authority under such conditions. The study uses Ghana’s implementation of COVID-19-related measures as a case. Thus, the various directives of the president and state agencies are reviewed. Key among the issues is the use of emergency powers as granted by the 1992 Constitution of Ghana and the introduction of executive instruments that ultimately curtailed citizens’ rights. The Imposition of Restrictions Act, 2020 (Act 1012), Article 21 (4) (c) & (d) as well as Article 31 of the 1992 Constitution of Ghana, Section 169 of the Public Health Act, 2012 (Act 851), etc. are among some of the legal sources that are interrogated by the study. In addition, the ban on public gatherings (religious, social, and political) is questioned from the perspective of human and other related rights citizens enjoy. The study thus examines the rationale behind the use of emergency powers during the COVID-19 pandemic and how such exercise of powers affects the rights and freedoms of citizens (the very people that such exercise of power is meant to protect).

**Ntim, E. O., & Botchway, T. P. (2023). Ghana beyond aid: A bargaining chip for draconian economic policies in Ghana. *The African Review*, 50(1), 1–33. <https://doi.org/10.1163/1821889X-BJA10073>**

### **Abstract**

This article evaluates the austere economic policies implemented by the Akufo-Addo-Administration using the Ghana Beyond Aid vision as a guarantee. For a state that virtually depends on the benevolence of the external world for its economic growth and national development, the enactment of policies to wean its political economy from the generosity of industrialized nations and multinational institutions is not only politically expedient, but also socially gratifying. Nonetheless, instead of the government to concentrate on formulating pragmatic policies that form the niches of the Ghana Beyond Aid agenda with public support, it has rather taken a uniquely detested trajectory of dedicating little attention to the vision in pursuit of policies that have lost touch with the public, but which the vision is occasionally cited as the bargaining chip. This article examines these political nuances using the case study strategy. The paper argues that while it is prudent to implement policies towards the attainment of the Ghana Beyond Aid vision, the political leadership should be guided by public opinion and consensus building to reduce the degree of adversities posed by these policies. The study also makes a case for policy initiatives and strategies to make the beyond aid agenda feasible.



**Tweneboah-Koduah, D.; Arah, M. L., & Botchway, T. P. (2023). Globalization, renewable energy consumption and sustainable development. *Cogent Social Sciences*, 9(1), 1-21. <https://doi.org/10.1080/23311886.2023.2223399>**

### **Abstract**

Since the launch of the Brundtland Report in 1987, developing countries continue to face problematic trade-offs between balancing the current use of natural resources and how to minimize the level of harm to their future use. This paper examines how renewable energy consumption and globalization affect sustainable development for a sample of 24 sub-Saharan African countries (SSA) between 1990–2015. Nevertheless, the evidence from the panel ARDL/PMG estimation shows that renewable energy consumption stimulates sustainable development. However, the heterogeneous analysis between our variables reveals that renewable energy is likely to exert a greater impact on countries that have made modest progress in sustainable development agenda, these countries still need to significantly reduce the consumption of non-renewable energy sources in their total energy mix. We further observe that the integration of global economies and society is relevant for sustainable development. Therefore, since SSA countries have a huge potential for renewable energy including solar power, wind, hydro-power, biomass, and geothermal energy, global partnerships in the areas of green policy innovation and research are critical. More importantly, the green partnerships should aim at facilitating unfettered access to clean energy by ensuring that the use of renewables is less expensive than fossil-based energy sources. This is likely to smoothen the path to achieving sustainable development goals in SSA.

**Dzakaklo, T. K., Hlovor, I. K., & Tandoh-Offin, P. (2024). Effectiveness of foreign aid in agricultural development in the Adaklu District of Ghana: A case study of the Modernizing Agriculture in Ghana (MAG) Fund. *Cogent Social Sciences*, 10(1), 2333083. <https://doi.org/10.1080/23311886.2024.2333083>**

### **Abstract**

The debate on the effectiveness foreign aid in Africa continues to take center stage in the development literature. To contribute to this debate, this research sought to investigate the effectiveness of the Modernizing of Agriculture in Ghana (MAG) Fund, a 135 million Canadian dollar foreign aid received by the Government of Ghana for agricultural development. The study employed the qualitative research approach in assessing the utilization effectiveness of the Fund in the Adaklu District of the Republic of Ghana. The researchers purposively selected sixteen (16) informants from the study population and interviewed, using an interview guide. The informants selected for the study consist of technical staff of the Ministry of Food and Agriculture, key staff of the Department of Agriculture of the Adaklu District, core staff of the Adaklu District Assembly, and farmers. The study revealed poor and ineffective utilization of the Fund resulting from cumbersome bureaucratic processes in accessing the Fund, weak institutional collaboration and partnerships, inadequate resource allocation by the Assembly to the Department of Agriculture for Agricultural Development in the district. Consequently, agricultural development in the District is characterized by poor agriculture extension service delivery, poor technological deployment, high cost of inputs and low agricultural production. The study recommends strengthening the institutional and personal capacities of those in charge of the utilization of foreign aid to ensure that funds are applied for their intended purposes. Additionally, the institutionalization of effective monitoring and evaluation mechanisms to track the progress of fund to ensure that they meet their objectives is recommended.



**Dzakaklo, T. K., Hlovor, I. K., & Dah, F. K. (2023). Unpacking decentralization failures in promoting popular participation in the Ketu South Municipality of Ghana. *Heliyon*, 9(8), 1. <https://doi.org/10.1016/j.heliyon.2023.e18900>**

### **Abstract**

Decentralization of governance across the globe, especially in sub-Saharan Africa was precipitated by the need to ensure the participation of the citizenry in the development planning and implementation at the local level. This is to ensure that local problems are identified by those affected and remedied through policies formulated through the participation of the citizenry at the local level. In line with this, subnational government authorities were created at the local level to ensure effective local government administration. Against this backdrop, this study investigated the challenges hindering the active participation of the citizenry in local governance in the Ketu South Municipality of the Volta Region of Ghana. A qualitative research design was adopted. The study purposively selected thirty-five (35) participants in the study area for the purposes of its primary data collection through interviews. This study investigated the fact that citizens were expected to participate in local governance through community engagement forums, budgeting, and financial planning, medium-term development planning, preparation of annual action plans, and participation in district level elections. The results of the study showed that low participation of the citizenry in local government is attributable to citizens' lack of information and education on the need for local-level participation, inadequate political structures of the Metropolitan Municipal and District Assemblies, and inadequate resources at the local government level. To ensure and promote the active participation of the citizenry at the local level, there is the need to educate the citizenry, and ensure that there are adequate and sufficient resources at the local level.

**Hlovor, I. K. (2023). The 'Second U-Turn': Domestic Politics and Foreign Economic Policy Choice in Ghana. *The African Review*, 1(aop), 1-43. <https://doi.org/10.1163/1821889x-bja10084>**

### **Abstract**

After months of grandstanding amidst an economic crisis that has seen prices of basic goods skyrocketed, growing unsustainable public debt levels and the value of the local currency plummeting, the Government of Ghana made a U-turn on its earlier decision of not seeking an IMF bailout and announced on 1st July 2022, the intention to seek an IMF bailout. This paper tries to understand the initial government resistance to an IMF bailout. Using the qualitative research approach and analyzing speeches of political actors, the study makes the case that domestic politics was the main reason for the governments initial resistance to engaging the IMF. An IMF programme would be politically self-defeating for the government and provide a political tool for the opposition in the 2024 election since a similar deal in 2015 was portrayed as evidence of government failure. On the evidence of the current IMF bailout decision, the paper concludes that governments have political interest in making foreign economic policy choices in Ghana. Choices that may not enhance electoral chances are likely to be avoided in favour of those that enhance it. To derive the best outcome from foreign economic policy choices requires building national consensus, which would help to avoid adverse outcomes that may be occasioned by policy choices that enhance a political actor's electoral chances at the expense of the long-term interest of the state.

**Kwode Kaba Achonga Paul, Asekere George, Ayelezuno Jasper. (2024). The erosion of media freedom in Ghana: A signal democratic backsliding?. *Media, Culture & Society*, 46(1), 1-18. <https://doi.org/10.1177/01634437231185933>**

### **Abstract**

Abstract Ghana is a poster child of the consolidation of liberal democracy in Africa, the signal evidence of which is the freedom of the Ghanaian media as the fourth estate of the realm. However, recent developments in the media landscape of the country, such as sustained death threats, assaults, use of unwarranted brute force, suspicions and murder of journalists seem to mar the democratic image of Ghana. These incidents have raised concerns about the erosion of freedom and independence of the media in Ghana, a situation that is worrying enough to ignite a debate on whether the dark days of the culture of silence are returning to the country under democratic governance. Drawing on qualitative data collected through personal in-depth interviews and grey literature of media attacks and intimidations, the article examines the extent of the erosion of press freedom in Ghana. We argue that media freedom seems to be under increasing threat by elements of the state, despite public rhetoric of freedom of the press. Specifically, the threats are coming from officials of state such as national security operatives, the police and political party supporters. Concluding, the article calls for sustained civic activism against these threats.

**Asekere, G., Danso, D. M., Buabeng, M., & Quarshie, L. (2023). Without money, you are technically knock-out in the race: Analyzing the role of money in parliamentary primaries in Ghana. *Equity in Education & Society*, 1–14. <https://doi.org/10.1177/27526461231213661>**

### **Abstract**

Abstract Financial resources – comprising money and other material support – are significant determinants in the prosecution of successful electoral campaigns, especially during intra-party candidate selection in Ghana. Delegates in political parties, largely, vote for candidates who can pay their way out; hence, the financially disadvantaged candidates are technically excluded from the race. The article examines this phenomenon which is incrementally making parliamentary primaries in Ghana the preserve of the rich. Empirical evidence from primary data gathered through interviews and focus group discussions as well as secondary data from published works was analyzed from a rational choice theory perspective. The article found that money does not only serve as a measure of a candidate's success in the two leading political parties in Ghana – the National Democratic Congress (NDC) and New Patriotic Party (NPP) – but also a predictor of their future performance and an exclusionary barrier to the poor. It recommends strong legislation to regulate the funding of parliamentary primaries in Ghana. One of the first essential steps should be limiting the high amount of nomination forms and filing fees charged at the political party level.

**Langnel, Z., & Tweneboah-Koduah, D. (2024). The politics of the targeting and expansion of pro-poor programs in Ghana. *Development in Practice*, 34(5), 597–610.** <https://doi.org/10.1080/09614524.2024.2344514>

**Agomor, K. S., Banini, D. K., & Langnel, Z. (2023). Legislative electoral incumbent defeats: Cues from Ghana. *The Journal of Legislative Studies*, 12(5), 1-20.** <https://doi.org/10.1080/13572334.2023.2226416>

### **Abstract**

The argument that incumbent politicians are frequently reelected into office gained traction in the legislative literature – giving birth to the incumbency advantage theory. This paper investigates why incumbents lost elections they are supposed to win – subjecting the incumbency advantage theory to new scrutiny. Using interview data collected in 2017 examining Ghana’s 2016 parliamentary and presidential elections, including relying on data from the Electoral Commission (EC) and parliamentary archives, the article evaluates the sources of incumbency disadvantage among Ghanaian sitting legislators. It traces the growing trend in incumbency disadvantage to: (a) the overbearing effects of a strong executive arm of government on the legislature, (b) management of primary elections, (c) effective opposition party dynamics, and (d) perceptions of incumbent parliamentarians’ governance effectiveness. The evidence emerging from Ghana shows incumbents are susceptible to electoral defeats as their challengers, contrary to the dominant view that incumbents’ defeats are challenging, especially in African politics.

**Bawole, J. N., & Langnel, Z. (2023). Administrative reforms in the Ghanaian public services for government business continuity during the COVID-19 crisis. *Public Organization Review*, 23, 181-196.** <https://doi.org/10.1007/s11115-022-00687-w>

### **Abstract**

The COVID-19 pandemic caused significant disruptions to public service delivery but heightened citizens demand for services. We examined public sector reforms implemented in the Ghanaian public sector to ensure public service continuity during the COVID-19 pandemic. Using content analysis and key informant interviews we found that reforms such as flexible working schedule, redesign of offices, directorates, and installations of equipment, online monitoring and assessment of targets, and conducting services online were instrumental in ensuring the continuity of government business. We recommend that public sector managers should allocate adequate resources to digital-based public sector reforms to better prepare for wicked transboundary human threats such as Covid-19

**Bawole, J. N., & Langnel, Z. (2023). Corruption-induced inhibitions to business: What business leaders have to say in Ghana. *Journal of African Business*, 24(1), 59-76.** <https://doi.org/10.1080/15228916.2021.2018226>

### **Abstract**

The paper examines how corruption-induced inhibitions influence business-related corruption from the perspectives of business leaders in Ghana. Data were collected through focus group discussion with Chief Executive Officers (CEOs) of multi-national and local companies operating in Ghana. The findings show that business leaders encounter multiple regulatory agencies with duplicated and overlapping functions, multiple charges for virtually the same and duplicated services, multiple law enforcement agencies also performing regulatory

functions at the Ports of entry, inadequate information on processes and costs of services, and inadequate channels for reporting corrupt activities in Ghana. The paper argues that these challenges trigger corruption-induced inhibitors which in turn, negatively affect the growth of the private-sector in Ghana.

**Langnel, Z., Agomor, K., & Abubakari, M. (2023). Reclaiming the Authority to Plan: Recentralization of COVID-19 Response in Ghana. *International Journal of Public Administration*, 5(2), 1-11. DOI: <https://doi.org/10.1080/01900692.2023.2209827>**

### **Abstract**

The paper examines the implications of COVID-19 pandemic on multi-level governance (MLG) in Ghana. Adopting a qualitative document analysis approach supported by 18 key informant interviews, the findings revealed four enablers of recentralization: COVID-19-induced legislations for centralized decision, centralized distribution of relief packages and medical supplies, centralized institutional response, and centralized government communication strategies. Despite the use of centralized policy making, the management of pandemic is fraught with institutional inefficiencies, rigidities, and ambiguities. The paper argues that the recentralization of COVID-19 management is symptomatic of a long period of neglect of MLG in Ghana. Since, local governments are perceived as inept and ill-equipped, there is a mistaken believe that recentralized decisions are more effective during emergencies. To ensure an effective response to public emergencies, its mitigation and post-crisis recovery in developing countries, a MLG approach – where central, local, and other non-state actors work together in equal partnership is crucial.

**Pimpong, S., & Mojom, S. (2024). Digital transformation in Ghana’s public sector: An in-depth analysis of e-governance strategies and service delivery in contrasting institutions. *ADRRRI Journal of Arts and Social Sciences*, Vol. 21 No. 3 (9), 1-16.**

**Pimpong, S., & Mojom, S. (2024). Assessing the determinants of decision-making in public sector organisations: A study of the Kumasi Metropolitan Assembly (KMA). *Irish Journal of Educational Practice*, 7(31), 25-41.**

### **Abstract**

This study sought to ascertain the factors that determine how decisions are made in the public sector organizations and also to investigate the level of subordinate participation in the decision-making process. The Kumasi Metropolitan Assembly (KMA) was the unit of analysis. The study adopted a descriptive research design and the use of a survey approach. Primary data was collected from 84 sampled respondents of the KMA selected through the multistage sampling approach. The study revealed that decision-making in the KMA is mainly determined by the interests and aspirations of the top management. This gives them the leeway to exercise discretion in resource allocation to the various departments. Additionally, it was observed that subordinates exhibit minimal involvement in decision-making processes and seldom receive organizational support to attend decision-making seminars or workshops. The Pearson’s chi-square test proved the prevalence of the elite and iron law of oligarchy theories in the decision-making process of the KMA. Since the level of subordinates’ participation in the decision-making process is very low, the study recommends that the Public Service Commission should institute measures that will institutionalize the bottom-up decision-making model in the Ghanaian public administration practice

**Pimpong, S., & Tei, F. (2023). Politicians' reactions to election results in Ghana's fourth republic: A model to democratic acquiescence? *African Journal of Social Sciences Education*, 2(2), 51-65.**

**Botchwey, G., (2023). Ageing Without Social Security and the COVID Pandemic in Ghana. *African Journal of Ageing Studies*, Volume 1(1), 120-148. <https://journals.ug.edu.gh/index.php/ajas/article/view/2498>**

**Botchwey, G., & Yankey, O. (2023). Small-Scale Mining, Environment and Livelihoods: Perspectives from Mining Communities in Ghana. *African Journal of Social Sciences Education*, Volume 2(2), 87-122. <https://journals.uew.edu.gh/index.php/ajsse/article/view/180>**

### **Article(s)/Chapters in an Edited Book**

**Botchwey, G. (2024). Online higher education in Ghana through Covid-19 and Post-Covid-19: experiences and perceptions of students and academic staff. In Puiiu, S., Idowu, S. O. (Eds.) *Online Education During COVID-19 and Beyond*. Springer Nature, Switzerland. [https://link.springer.com/chapter/10.1007/978-3-031-49353-9\\_13](https://link.springer.com/chapter/10.1007/978-3-031-49353-9_13).**

### **Abstract**

Technology has become an integral part of teaching and learning in higher education, and has spurred the evolution of online higher education. This has occurred alongside face-to-face interactions in class. Online higher education sessions were mostly treated as add-ons to the regular mode of brick-and-mortar lecture room instruction traditionally provided by universities. The on-set of the Covid-19 pandemic and subsequent restrictions prevented face-to-face interactions and altered most existing teaching and learning arrangements. Universities had to find ways to continue teaching and learning online or shut down, forcing most to adopt online education. The purpose of this study was to investigate the experiences and perceptions of students and academic staff about this shift, through Covid-19 and post-Covid-19. Methods involved a cross-sectional design and in-depth interviews with students and academic staff. Findings show that most learning occurred asynchronously, mobile phones were the preferred devices used by students, and reliable internet access was a major challenge. Students and staff want online education to continue post-Covid-19, but with the challenges addressed. These include guaranteed internet access, better compatibility of learning management systems with mobile devices, and real-time interactions among instructors and peers. To curtail cheating in online examinations, higher education managers could consider introducing learning management systems with embedded camera applications to monitor class sessions and protect the integrity of online examinations.

- Botchwey, G., Worlanyo, Z., & Asumda, D. (2023).** Legal education policy in Ghana: New wine in old wineskins?. In A. K. Amoako-Gyampah, B. Lundt, & E. A. Agyeman (Eds.), *Education in Ghana: History and Politics*. Langaa RPCIG/ African Books Collective.
- Debrah, E., Owusu-Mensah, I., Danso, S., & Aidoo, G. A. (2024).** Electoral violence in Ghana's Fourth Republic: The case of party vigilantism. In O. B. Mlambo & E. Chitando (Eds.), *The Palgrave handbook of violence in Africa* (pp. [page range]). Palgrave Macmillan. <https://doi.org/10.1007/978-3-031-40754-3>
- Manteaw, S. O., & Pimpong, S. (2024).** Constitutional provisions and development: Are indigenous institutions relevant? In J. R. A. Ayee, L. G. A. Amoah, & S. M. Alidu (Eds.), *Political institutions, party politics and communication in Ghana: Three decades of the Fourth Republic*. Palgrave Macmillan.
- Pimpong, S., & Agbavade, E. (2024).** The Audit Service as a Supreme Audit Institution in Ghana's Fourth Republic: An assessment. In J. R. A. Ayee, L. G. A. Amoah, & S. M. Alidu (Eds.), *Public sector management and economic governance in Ghana* (pp. [page range]). Palgrave Macmillan.

## **Conferences/Workshops/Symposia/Seminars with Presentations**

- Ntim, E. O., Botchway, T. P., & Aidoo, G. A. (2024, January 31).** Ghana's common core programme: Assessing the impacts and constraints of rented policies on the economy of a developing country [Paper presentation]. *3rd Annual Colloquium (Political Science): Politics Amidst Global Uncertainties: Options for Building a Resilient Society*, University of Education, Winneba, Central Region, Ghana.

### **Abstract**

The purpose of this study was to assess the impacts and constraints of Ghana's Common Core Programme as part of rented policies. Drawing on the dependency theory of integration characterised by an interplay between external influences and the domestic environment in public policy decision making; and deploying the qualitative research approach, the study revealed substantially that the implementation of policies in Ghana is laden with unbridled external influences and domestic challenges. This is due to the status of Ghana as a developing country which requires continuous donor support for the execution of policies. In diverse ways, however, this trend poses inexorable challenges to the socioeconomic development of the country. Ghana's Common Core Programme, a new curriculum for the training of students at the junior high school, was implemented in January 2022. The implementation phase of the curriculum is however riddled with considerable challenges ranging from inadequate resources to teachers' inability to achieve targets of the curriculum. The argument of this paper is that despite the good intent of Ghanaian policy makers, unavailable resources make it quite inexpedient and an unnerving task to attempt to duplicate policy paradigms of the West without considering Ghana's socioeconomic context.

**Keywords:** Donor Support, Ghana's Common Core Programme, Rented Policies, Curriculum, Policy Implementation



**Aidoo, G. A. (2023, November 30). Building a resilient and peaceful Ghana via data-driven education [Paper presentation]. *The Ambassador Programme, 2023* (Institute for Economics & Peace [IEP]/IEP Peace Academy), Winneba, Central Region, Ghana.**

## Books

**Gabriel-Wetley, F., & Pimpong, S. (2024). *Organisational Development and Contemporary Issues in Higher Education*. HASRAF Publishers.**

# Department of Geography Education

## Articles In Journal

**Owusu, A. B., Fynn, I. E. M., Adu-Boahen, K., Kwang, C., Mensah, C. A., & Atugbiga, J. A. (2024). Rate of desertification, climate change and coping strategies: Insights from smallholder farmers in Ghana's Upper East Region. *Environmental and Sustainability Indicators*, 23(100433), 1-20. <https://doi.org/10.1016/j.indic.2024.100433>**

**Adu-Boahen, K. (2024). Analysis of shoreline change and community-based restoration initiatives in Lake Bosomtwe, Ghana. *SN Soc Sci*, 4(97), 1-22. <https://doi.org/10.1007/s43545-024-00900-1>**

**Aninakwah, I., Adu-Boahen, K., Edoh, N., & Aninakwah, E. (2024). Analysis of trends in land utilisation and land cover dynamics in the Kwahu West Municipality, Ghana. *Journal of Asian Geography*, 3(1), 44-53. <https://doi.org/10.36777/jag2024.3.1.6>**

**Dadson, I. Y., Panou, P., & Adu-Boahen, K. (2024). Sediments composition and morphology of the Fosu Lagoon Barrier Beach, Bakaano, Cape Coast, Ghana. *Ghana Journal of Geography*, 16(1), 91-127. <https://doi.org/10.4314/gjg.v16i1.4>**

**Andoh, C. N., Attiogbe, F., Osei, Bonsu, A. N., Antwi, M., & Adu-Boahen, K. (2023). Fourier transform infrared spectroscopy: An analytical technique for microplastic identification and quantification. *Infrared Physics and Technology*, 136(105070), 1-13. <https://doi.org/10.1016/j.infrared.2023.105070>**

**Adu-Boahen, K. (2023). Investigation of abundance and spatial distribution of marine debris on Ghanaian urban coastal beaches: Assessment of marine debris. *Journal of Environmental Geography*, 17(1-4), 29-44. <https://doi.org/10.14232/jengeo-2024-44889>**

**Adu-Boahen, K. (2023). Comparative analysis of ecosystem service delivery between two coastal lagoons in Ghana. *Journal of Applied Life Sciences and Environment*, 56(3), 437-462. <https://doi.org/10.46909/alse-563109>**

- Adu-Boahen, K., Addai, M. O., Hayford, S. C., Adjovu, E. T., Yeboah, D. O., & Mensah, P. (2023). Human-environment nexus: Evaluating anthropo-geomorphology and urban expansion of the Weija Gbawe Municipality, Ghana. *Discov Environ*, 1(21), 1-21. <https://doi.org/10.1007/s44274-023-00022-0>**
- Adu-Boahen K., Boateng, I., Okyere, E. Y., & Kyeremeh S. (2023). An assessment of water quality and the locals' perception of coastal lagoon pollution in Ghana: A case study of Chemu lagoon in Tema. *Asian Review of Environmental and Earth Sciences*, 10(1), 28–39. <https://doi.org/10.20448/arees.v10i1.4440>**
- Adu-Boahen, K. (2023). Smallholder farmers' perception of climate change resilience in the Bosome Freho District Assembly in the Ashanti Region, Ghana. *Ghana Journal of Science, Technology and Development*, 9(1), 51-67. <https://doi.org/10.47881/394.967x>**
- Adu-Boahen, K., Frimpong, K., Mensah, D. K. D., & Okyere, E. Y. (2023). Implications of traditional beliefs and practices on natural resource conservation and management: Evidence from some selected urban rivers in Ghana. *BOHR International Journal of Civil Engineering and Environmental Science (BIJCEES)*, 1(1), 8-24. <https://doi.org/10.54646/bijcees.2023.02>**
- Aninakwah, I., Adu-Boahen, K., & Dadson, I. Y. (2023). Spatio-temporal shoreline movement of the Afram river in Ghana: The application of endpoint rate and net shoreline movement. *Journal of Social Science (JoSS)*, 2(7), 623-638.**
- Aninakwah I., Adu-Boahen K., & Dadson I. Y. (. (2023). Analysing the state of water quality indicators of the Afram river in Ghana: Implication for water resources management. *J Environ Anal Toxicol*, 13(3), 1-8.**
- Atakorah, B. A., Owusu, B. A., & Adu-Boahen, K. (2023). Geo-physical assessment of flood vulnerability of Accra Metropolitan Area, Ghana. *Environmental and Sustainability Indicators*, 100286, 1-11. <https://doi.org/10.1016/j.indic.2023.100286>**
- Ansah-Mensah, K., Adams., O., Yalley, C. E., & Adu-Boahen, K. (2023). Global outlook of the multiplier effect of research and development on environmental sustainability: The multiplier effect of research and development. *PLoS ONE*, 18(9), e0291370, 1-17. <https://doi.org/10.1371>**
- Kyeremeh, S., Adu-Boahen, K. & Addai, M. O. (2023). Economic evaluation of groundwater resources in the Effutu Municipality: An application of the Gisser-Sanchez effect. *Heliyon*, 9, 1-11. <https://doi.org/10.1016/j.heliyon.2023.e16398>**
- Kyeremeh, S., Adu-Boahen, K., & Addai, M. O. (2023). Analysis of groundwater quality in the coastal aquifer of the Effutu municipality, Ghana. *Journal of Chemistry*, 23, 3575183, 1-12. <https://doi.org/10.1155/2023/3575183>**
- Okyere, E. Y., Adu-Boahen, K., Mensah, B. (2023). Man invades nature: Tracing the dynamics and trends of anthropogenic stressors within a coastal wetland environment. *Journal of Social Sciences*, 19(1), 38-51. <https://doi.org/10.3844/jssp.2023.38.51>**

- Okyere, E. Y., Adu-Boahen, K., Boateng, I., Dadson, I. Y., Boanu., N. Y., Kyeremeh, S. (2023). Analysis of ecological health status of the Muni Lagoon: Evidence from heavy metal content in its water and fish samples. *Geo: Geography and Environment*, 10(1), 1-18. <https://doi.org/10.1002/geo2.115>
- Osman A., Owusu, B. A., Adu-Boahen K., & Atamey E. (2023). Space-time cube approach in analysing conflicts in Africa. *Social Sciences & Humanities Open*, 1(100557), 1-16. <https://doi.org/10.1016/j.ssaho.2023.100557>
- Owusu, B. A., Mensah, C. A., Fynn, I. E. M., Kwang, C., Arthur, I. K., & Adu-Boahen, K. (2023). Indicator-based assessment of the liveability of communities in the Accra Metropolitan Area, Ghana: A transdisciplinary approach. *Social Sciences & Humanities Open*, 19(100702), 1-11. <https://doi.org/10.1016/j.ssaho.2023.100702>
- Owusu, A. B., Dadson, I. Y., Adu-Boahen, K., & Osman, A. (2023). Local's perception and coping strategies to flood risks in the coastal zone of the Accra Metropolitan Area, Ghana. *SN Soc Sci*, 3(89), 1-19. <https://doi.org/10.1007/s43545-023-00681-z>
- Owusu, B. A., Adu-Boahen K., & Dadson I. Y. (2023). Institutional arrangement for mitigating and adapting to climate change-related flood risk in Greater Accra Metropolitan Area (GAMA). *City and Environment Interactions*, 21(100129), 1-12. <https://doi.org/10.1016/j.cacint.2023.100129>
- Owusu, V., Adu-Boahen, K., Kyeremeh, S., Demalie, I., & Eshun, P. (2023). Factors influencing compliance of closed fishing season: Lessons from small-scale coastal fisheries in the Central Region of Ghana. *Humanit Soc Sci Commun*, 10(20), 1-8. <https://doi.org/10.1057/s41599-023-01513-4>
- Achonga Kabah Kwode, P., Atanga, R. A., & Acharibasam, J. B. (2024). Meaningful climate change communication: An analysis of women dry season farmers in Kuliyya community of Ghana. *Local Environment*, 29(9), 1 – 13. <https://doi.org/10.1080/13549839.2024.2386957>

## Abstract

Access to climate change information can play a critical role in helping rural women adapt to climate change. Our research investigates the communication channels used for climate education among female dry-season farmers in the Kuliyya community of northern Ghana. Particularly, we address access to climate change information among smallholder female farmers. We adopted a community-based participatory approach to guide the study. To achieve our research objectives of investigating climate change communication channels among smallholder female farmers, specific methods of in-depth interviews and focus group discussions were used to gather knowledge from smallholder female farmers. The research findings provide a well-rounded exploration of the unique climate change communication challenges female farmers face and the innovative approaches they have adopted to share climate change information. Specifically, the findings show that women have adopted innovative oral communication channels to disseminate and transfer climate knowledge among themselves. We also found that there is limited access to radio in the Kuliyya community making them resort to group meetings to share knowledge and ideas empowering them economically in other livelihoods. The study discovered the community utilizes gender inclusivity in decision-making. We recommend that the government and other relevant organizations develop and implement a strategic policy on climate information dissemination

with a focus on supporting farmers in rural communities of Ghana to mitigate climate change effects. Technologies can also be developed to aid in disseminating relevant information to farmers in rural areas as the available oral communication is less effective in disseminating useful information on climate change.

**Atanga, R. A., Kainyande, A., Tankpa, V., & Osumadewa, B. (2024). Perceived status of ecosystem services emanating from a forest reserve: Evidence from Atewa Range Forest Reserve in Ghana. *Environmental Management*, 73, 725–741. <https://doi.org/10.1007/s00267-023-01933-7>**

### Abstract

Forest ecosystem services play an integral part in the realization of global sustainable development goals due to their potential contribution to climate change mitigation and forest-based livelihoods in marginalized rural parts of the world. The Atewa Forest Range Reserve has been recognized to support forest-based livelihoods in adjacent communities and even urban areas of Ghana. While this contribution is acknowledged, information on the current status of the reserve’s ecosystem services which are under serious threats from human-induced activities, remains fragmented. Therefore, through a household survey of 150 respondents complemented by key informant interviews (n=9), this research assessed the awareness and perceptions of people on the current status of the Atewa Forest Range Reserve and its ecosystem services as well as the major drivers of change that seem to threaten the provision of these ecosystem services. Our results point to provisioning services as the most widely utilized ecosystem service, leading to their significant decline with the potential to affect the livelihoods of the local populations. Respondents’ awareness and the relative importance they ascribe to the reserve’s ecosystem services reinforced their appreciation for these services and interest in their sustainable management. Our results suggest the need for understanding local perceptions of ecosystem services to guide the prioritization of management decisions for balancing both utilization and conservation goals. A co-management approach that fosters the strategic inclusion of local communities in decision-making regarding the forest reserve could contribute to collaborative relationships and further increase positive perceptions of locals to preserve the reserve’s ecological functions.

**Atanga, R. A., Tankpa, V., & Acquah, I. (2023). Urbanization and flood risk analysis using geospatial techniques. *PLoS ONE*, 18(10), e0292290. <https://doi.org/10.1371/journal.pone.0292290>**

### Abstract

This research investigates the relationship between urbanization as a land use/land cover change and the increased flood disasters in Accra. Understanding this relationship will provide evidence for urban development planners, policy makers and flood managers to coordinate in responding to the problems effectively. This study maps and analyzes the changes in urbanization from 1991 to 2015. The research reviews the trends of flood events in Greater Accra and analyzes the relationship between the pattern of urbanization and the increase in flood disaster events from 1991 to 2015. The research revealed that there was an increase in urban land use/land cover change of up to 95.51% and 129.14% in the periods 1991–2002 and 2002–2015 respectively. The pattern of urbanization took place in an unplanned style, where physical developments in waterways became high. The findings show that the pattern of flood disasters increased from 1991 to 2015 with evidence showing two years having repeated flood events.

**Mashapa, M. M., & Atanga, R. A. (2023). Geographic Information Systems: A toolbox for sustainable tourism in Southern Africa. *African Journal of Hospitality, Tourism and Leisure*, 12(3), pp. 1192-1209. DOI:10.46222/ajhtl.19770720.425**

**Osman, A., Ansah-Mensah, K., Amoah-Nuamah, J., & Atanga, R. A. (2023). Flood related depression and replacement of damaged household items. *Progress in Disaster Science*, 18((2023)), 100280.**

**Amoah-Nuamah, J., Okyere, E. Y., Ansah-Mensah, K., Acquah, M. M., Addai, M. O., & Gyamfi, R. (2024). Sustainable management of freshwater resources: An analysis of the perspectives of local residents. *Cogent Social Sciences*, 10(1), 1-14. <https://doi.org/10.1080/23311886.2024.2343422>**

### **Abstract**

This study explored the perspectives of community members on the management and ownership of freshwater resources. A mixed-method study was conducted targeting household heads, traditional leaders, and assembly members in communities surrounding the lake. Household heads (309), and 14 focus group discussions were used in the study. There were 46.9% and 29.4% of the respondents who perceived that the lake was owned by the government and the community (chiefs and the indigene) respectively. While 48.2% and 28.8% perceived the traditional authority and the government separately as the managers of the lake. The study found out that, the community perceives the Lake as their resource and hence their traditional leaders should have control over it with support from the government and other NGOs. This implies that activities carried out concerning the Lake should have the approval of people to avoid conflict and power struggles.

**Okyere, E. Y., Adu-Boahen, K., Boateng, I., Dadson, I. Y., Boanu, N. Y., & Kyeremeh, S. (2023). Analysis of ecological health status of the Muni Lagoon: Evidence from heavy metal content in its water and fish samples. *Geo: Geography and Environment*, 10(1), 1-18. <https://doi.org/10.1002/geo2.115>**

### **Abstract**

The study examined the ecological health status of the Muni lagoon amidst increasing development in and around its catchment using a concentration of heavy metals in its water and fish samples as a proxy. Flame atomic absorption spectrophotometer (FAAS) laboratory analysis was employed to determine heavy metals (cadmium [Cd], lead [Pb], iron [Fe], manganese [Mn] and zinc) present in water and fish samples within the Muni Lagoon. The study revealed that the Muni Lagoon and feeder rivers were polluted with heavy metals (Fe = 0.453, Cd = 0.201, Mn = 0.105 and Pb = 0.024) comparing their concentrations with the US Environmental Protection Agency (USEPA) and Water Resources Commission (WRC) limit. Fish within the lagoon were found to pose no harm to consumers as traces of heavy metal concentrations were below the Food and Agriculture Organisation of the United Nations/ World Health Organisation maximum permissible limit. The study further revealed that the application of agricultural inputs such as fertilisers, pesticides and domestic waste as well as unregulated gutter channels were the major source of heavy metals. A paired sample t-test showed a statistically significant difference between the wet and dry season's concentrations of cadmium and lead. For cadmium, the t-test found  $t(5) = -7.265$ ;  $p = .001$  between the wet season's concentration and the dry season's concentration and for lead, the t-test found  $t(5) = 5.061$ ,  $p = .004$  between the wet and dry season concentrations in the lagoon. It is therefore recommended that the Forestry Commission, Municipal Assembly and the local leaders should collaborate in regulating activities occurring in and around the catchment of the lagoon.

**Amoah-Nuamah, J., Okyere, E. Y., Ansah-Mensah, K., Acquah, M. M., Addai, M. O., & Gyamfi, R. (2024). Sustainable management of freshwater resources in Ghana: an analysis of the perspectives of local residents. *Cogent Social Sciences*, 10(1), 1 - 14. <https://doi.org/10.1080/23311886.2024.2343422>**

### Abstract

this study explored the perspectives of community members on the management and ownership of freshwater resources. A mixed-method study was conducted targeting household heads, traditional leaders, and assembly members in communities surrounding the lake. household heads (309), and 14 focus group discussions were used in the study. there were 46.9% and 29.4% of the respondents who perceived that the lake was owned by the government and the community (chiefs and the indigene) respectively. While 48.2% and 28.8% perceived the traditional authority and the government separately as the managers of the lake. the study found out that, the community perceives the lake as their resource and hence their traditional leaders should have control over it with support from the government and other NGOs. this implies that activities carried out concerning the lake should have the approval of people to avoid conflict and power struggles.

**Ansah-Mensah, K., & Asamoah, Y. (2023). Seasonal differences in rainfall distribution within the Bawku Area in the Savanna Belt of Ghana. *Ghana Journal of Geography*, 15(3), 196 - 222. <https://doi.org/10.4314/gjg.v15i3.7>**

### Abstract

Empirical evidence suggests that temperatures are continuously rising in the savannah areas of Ghana and impacting negatively on residents' livelihood activities. However, there is paucity of information on the wet and dry seasons' rate of wetness or dryness in the driest belt of Ghana. Meanwhile, residents of the area are mainly rainfed agriculturalists. We employed gauge station rainfall and temperature data from Ghana Meteorological Agency to assess the seasonal rainfall characteristics of the Bawku area using XLSTAT and DrinC software. Results from the rainfall anomalies show persistent dryness (-0.017) in the area during the dry season and continuous wetness in the wet season (0.021). Evapotranspiration was consistently higher in the dry season at a rate of 2.6% (0.26) yearly as well as a high rate of aridity [AI] ( $0.00 \leq AI \leq 0.09$ ) in the dry season and low aridity ( $0.56 \leq AI \leq 1.13$ ) during the wet season. Following the reduction in the amount of rainfall, we can conclude that Bawku area is continuously drying amidst the changing climate. It is recommended that the ministry of agriculture should prioritise the construction of mechanised dams or wells and expand irrigation projects in the area to reduce the climate change effects on the livelihood of the residents especially in the dry season.

**Ansah-Mensah, K., Osman A, Yalley, C. E., Adu-Boahen, K. (2023). Global outlook of the multiplier effect of research and development on environmental sustainability. *PLoS ONE*, 18(9), 1 - 17. <https://doi.org/10.1371/journal.pone.0291370>**

### Abstract

In a time of severe environmental problems and growing public and private expenditure to promote a sustainable society, studies on the impact of Research and Development (R&D) on environmental sustainability hardly ever exist. This study looked at how R&D promotes the attainment of environmentally sustainable goals, globally. Data at the country level was compiled from the United Nations-Sustainable Development Goals (UN-SDG) database



and the World Bank, then processed and analysed using spatial techniques such as spatial merge, autofill, autocorrelation, and geographic weighted regression. Expenditure on R&D and publications in scientific journals had a positive impact on SDGs 8 and 11 for all nations. R&D expenditure on SDG 8 was higher for Southern African countries. The impact of scientific and technical journal articles was greater for Middle East countries. Also, scientific and technical journal articles had greater effects on attainment of SDG 11 in Africa. Exports of high technology from South America and Europe were important for achieving SDG 15. However, the effect of patent and trademark applications had minimal effect on achieving environmentally sustainable goals. The study recommends boosting R&D expenditure by governments and international organisations, particularly in Africa because the multiplier impact extends beyond economic development to environmental sustainability which is necessary for the continent to abate the challenges of climate change.

**Osman, A., Ansah-Mensah, K., Amoah-Nuamah, J. & Atanga, R. A. (2023). Flood related depression and replacement of damaged household items. *Progress in Disaster Science*, 18(100280), 1 - 10. <https://doi.org/10.1016/j.pdisas.2023.100280>**

### Abstract

Despite the extensive literature on flood-related depression, depression severity for individual damaged household items is unclear. Furthermore, the effect of depression levels on the time taken to replace damaged household items is equivocal. To resolve these research gaps, this study employed a questionnaire to collect data from slum dwellers in Old Fadama and analysed using a Wilcoxon signed-rank test and stepwise multinomial regression techniques. The findings revealed that flood-affected persons ranked depression levels associated with damaged furniture/chairs/tables/sofa more severe than other household items such as Electronic: Fan/Iron, Electronic: Fridges/deep freezers/coolers/food storage, Beds/Mattresses/other sleeping mats. Damaged items considered to have moderate cost generated mild depression levels while affordable items were less likely to generate severe depression. Concerning the replacement of damaged items, younger respondents, with lower income, in rent-free apartments and with low depression levels replaced damaged items after a year and more. The study recommends that National Disaster Management Organisation [NAMDO] should include the provision of psychological assistance to flood victims and spearhead the establishment of a national flood insurance policy, while insurers support with packages for slum areas in Ghana.

**Osman, A., Boateng, I., Ansah-Mensah, K. & Owusu, A. B. (2023). Wetland restoration challenges and eco-volunteerism. *Journal for Nature Conservation*, 73(126411), 1 - 11. <https://doi.org/10.1016/j.jnc.2023.126411>**

### Abstract

Depending on planned behaviour theory most studies have assumed a direct effect between socio-demographics and biophilia attitudes on eco-volunteerism without considering prior eco-restoration challenges. Using the expectancy motivation theory, this study assessed the challenges eco-volunteers faced during an eco-restoration exercise within the Muni-Pomadze Ramsar Site (Ghana) and its effects on future eco-volunteerism. The study collected data from eco-volunteers and analysed it using a paired-sampled t-test and generalised linear modelling. Per the results, eco-volunteers face challenges including transportation difficulties, limited refreshment, inadequate equipment, and interpersonal conflict with other eco-volunteers. Ecological reasons superseded social reasons as a motivating factor for

eco-volunteering. Expectancy motivation theory influence of valence played out when the combined effect of transportation difficulties, limited refreshment, inadequate equipment, and interpersonal conflicts on social reasons negatively affected future eco-volunteering. The study recommends that organisers of eco-restoration exercises should be more sensitive to the needs of eco-volunteers and address these challenges to help encourage future eco-volunteering.

**Amoah-Nuamah, J., Yeboah, O. E., Ansah-Mensah, K., Acquah, M. M., Addai, O. M., & Gyamfi, R. (2024). Sustainable management of freshwater resources in Ghana: An analysis of the perspectives of local residents. *Cogent Social Sciences*, 10(1), 2343422. <https://doi.org/10.1080/23311886.2024.2343422>**

### Abstract

This study explored the perspectives of community members on the management and ownership of freshwater resources. A mixed-method study was conducted targeting household heads, traditional leaders, and assembly members in communities surrounding the lake. Household heads (309), and 14 focus group discussions were used in the study. There were 46.9% and 29.4% of the respondents who perceived that the lake was owned by the government and the community (chiefs and the indigene) respectively. While 48.2% and 28.8% perceived the traditional authority and the government separately as the managers of the lake. The study found out that, the community perceives the Lake as their resource and hence their traditional leaders should have control over it with support from the government and other NGOs. This implies that activities carried out concerning the Lake should have the approval of people to avoid conflict and power struggles.

**Sam, E. F., Odame, P. K., & Amoah-Nuamah, J. (2023). Predictors of distractive activities to walking in Accra, Ghana. *Urban, planning and transport research*, 11(1), 2220574. <https://doi.org/10.1080/21650020.2023.2220574>**

### Abstract

Walking is a fundamental mode of transport for many people globally, with immense health and environmental benefits. However, increased walking is associated with an increased risk of road traffic crashes and injuries, especially where traffic enforcement is poor, and pedestrians could easily be distracted. Despite this, a plethora of evidence exists on driver distraction; however, there is a dearth of evidence of pedestrian distraction (i.e. distracted walking), particularly in Africa. This paper uses a quantitative methodology to examine the predictors of distractive activities to walking in Accra, Ghana. The study surveyed 400 pedestrians within Accra's Central Business District (CBD). A questionnaire was deployed via Kobo Toolkit and Jamovi was used in analysing the data. The study observed that three of the top four distractive activities to walking were digital devices-related (e.g. the use of mobile phones). We found that listening to music, making, receiving phone calls, and conversing with other people while walking are the main distractive activities. The binary logistic regression model found sex, age, level of education, occupation, reasons for walking, weekly time for walking and time for common trips as significant predictors of distractive activities to walking.

**Amoah-Nuamah, J. (2023). Exploring the local perceptions of the ecological services of Lake Bosomtwe, Ghana. *African Geographical Review*, 10(1), 1-15. <https://doi.org/10.1080/19376812.2023.2297710>**

**Amoah-Nuamah, J., Agyemang-Duah, W., Prosper Ninorb, G., & Gladstone Ekeme, B. (2023). Analysis of Spatial Distribution of Health Care Facilities and its Effects on Access to Primary Healthcare in Rural Communities in Kpandai District, Ghana. *Cogent Public Health*, 10(1), 2183566. <https://doi.org/10.1080/27707571.2023.2183566>**

### **Abstract**

Despite collaborative efforts by the government and the private sector in the provision of health facilities in Ghana, a substantial proportion of communities in rural Ghana still have poor access to primary health care. Employing a case study research design, this study presents an overview of the geographic distribution of healthcare facilities in Kpandai District and access to primary health care. Focus group discussions and interviews were conducted with randomly selected households, opinion leaders, healthcare and in-charges of health facilities to ascertain their perception of accessibility to health services. Geographic Information System (GIS) (ArcMap) was used to model the spatial distribution of health facilities. Spatially, 139 communities representing 50.5% of the communities are not accessible health facilities per World Health Organization and Ghana Health Service Survive distance threshold to health centers and Community-based Health Planning and Services (CHPS), and hospitals, respectively. Ideally, this implies that the majority of the population have to travel for more than 5 km to access health care services. This study found that the poor spatial distribution of health facilities has negative implications on access to primary health care in the district. Poor conditions of roads were a major barrier to the household's accessibility to district hospitals. In addition to this, the availability, affordability, adequacy and acceptability which are major determinants of access to primary health care delivery were found to be fairly good. These findings have implications for the realization of the United Nations' health-related Sustainable Development Goals.

**Osman, A., Ansah-Mensah, K., Amoah-Nuamah, J., & Atanga, R. A. (2023). Flood related depression and replacement of damaged household items. *Progress in disaster science*, 18(2023), 100280. <https://doi.org/10.1016/j.pdisas.2023.100280>**

### **Abstract**

Despite the extensive literature on flood-related depression, depression severity for individual damaged household items is unclear. Furthermore, the effect of depression levels on the time taken to replace damaged household items is equivocal. To resolve these research gaps, this study employed a questionnaire to collect data from slum dwellers in Old Fadama and analysed using a Wilcoxon signed-rank test and stepwise multinomial regression techniques. The findings revealed that flood-affected persons ranked depression levels associated with damaged furniture/chairs/tables/sofa more severe than other household items such as Electronic: Fan/Iron, Electronic: Fridges/deep freezers/coolers/food storage, Beds/Mattresses/other sleeping mats. Damaged items considered to have moderate cost generated mild depression levels while affordable items were less likely to generate severe depression. Concerning the replacement of damaged items, younger respondents, with lower income, in rent-free apartments and with low depression levels replaced damaged items after a year and more. The study recommends that National Disaster Management Organisation [NAMDO] should include the provision of psychological assistance to flood victims and spearhead the

establishment of a national flood insurance policy, while insurers support with packages for slum areas in Ghana.

**Andriess, E., Kim, J., Thipakorn, S., Pham, Pham, T.N.Q., Karunarathne, A.Y. & Owusu, V. (2024). The forum on the COVID-19 pandemic and international migrant workers: Geographies of (im)mobility and governance challenges. *Geographical Review*, 2024.2387220, 1-29. <https://doi.org/10.1080/0167428.2024.2387220>**

### **Abstract**

In this forum, we focus on precarious international migrant workers and examine the impact of the COVID-19 pandemic in four middle-income economies in the Global South: Ghana, Sri Lanka, Vietnam, and Thailand. In this way we consider varying geographies of (im) mobilities, responses, and governance. During the global struggle to cope with the pandemic, the world witnessed that the quality of governance at multiple levels played a crucial role. In these uncertain times, it is imperative that awareness, prevention, and resilience improves. Collectively, the four essays reveal a multitude of challenges. We address important issues such as the relationship between sociocultural factors and digital pandemic governance, the need to improve services and support for female migrants, the complex issue of return migration, the specific challenges associated with sudden and temporary immobility, and the increasingly prevalent status of middle-income economies in the Global South as both sending and receiving countries.

**Nyavor, S., Amposah, S., Owusu, V., & Kwame, B. J. (2023). Compensation payment for fisherfolk during closed-season fishing: Lessons from small-scale fisherfolk in Ghana. *Cogent Social Sciences*, 9(2282502), 1-17. <https://doi.org/10.1080/23311886.2023.2282502>**

### **Abstract**

This study contributes to the literature on marine conservation, fisheries management, and coastal development. The study investigated the distribution mechanism of government-led compensation payment schemes for small-scale coastal fisherfolk in Ghana during the closed season. We also sought to explore the perception of fisherfolk concerning equity and fairness in the distribution of the compensation scheme. The empirical data consisted of 220 household surveys and 20 in-depth interviews with relevant stakeholders from the Central Region of Ghana. The findings from our study indicate that significant controversies exist about the selection of beneficiaries for compensation payment. There is a lack of transparency in the compensation schemes targeting criteria. The distribution process was widely perceived to be unfair. The results from the study show that there are high levels of politics and nepotism in compensation distribution. Access to compensation packages is largely influenced by political party affiliation. A more transparent and precisely targeted scheme may go a long way to improving perceptions of fairness and compliance. The paper calls for the introduction of alternative livelihoods for fishing households during the closed season.

**Owusu, V., Lawer, T. E., Adjei, M., & Ogbe, M. (2023). Impact of offshore petroleum extraction and “ocean grabbing” on smallscale fisheries and coastal livelihoods in Ghana. *Maritime Studies*, 22(17), 1-17. <https://doi.org/10.1007/s40152-023-00307-3>**

## **Abstract**

In recent years, there has been increasing scholarly attention to the relationship between offshore oil extraction and the well-being of communities along the coast whose livelihoods directly depend on the ocean. In this paper, we show how offshore petroleum extraction activities, associated ocean space regulations, and fishery conservation discourses lead to “ocean grabbing” in Ghana. Based on interviews with fisherfolk, government officials, environmental NGOs, and officials from the petroleum industry in Ghana, we address the above issues using Harvey’s framework of “accumulation by dispossession.” The offshore petroleum industry and fisheries utilize different resources. Fishers catch fish from the waters, whereas petroleum companies extract petroleum products from the seabed. Hence, the claim of dispossession often made by fishers is largely contested by petroleum corporations and state institutions. However, due to their spatial coexistence, user rights claims, tensions, and conflicts over facts, opposing interests, and values persist. In these contestations, there exists clear power inequity between fisherfolk and oil companies, with isolated cases of violence and punishment of fishers for flouting marine regulations. This paper calls for institutional strengthening to resolve the impending tensions and address the growing imbalance in the power relations among the different marine resource users.

**Boakye, D. S., Amoah, V. M. K., Amoah, C., Damte, F. K., Poku, A. A., Boateng, E. A. Ataara, N., Gyekye, S. T., & Dzomeku, V. (2024). Perceptions and attitudes of women in the perinatal period towards male midwives in a rural district of Ghana: A descriptive, exploratory qualitative study. *BMJ Open*, 14(e070841), 1-10. <http://dx.doi.org/10.1136/bmjopen-2022-070841>**

**Osman, A., Mensah, B., Yalley, C. E., & Poku, A. A. (2023). Personal computer usage and teasing among geographic information systems students. *Social Sciences & Humanities Open*, 8, 1–7. <https://doi.org/10.1016/j.ssaho.2023.100600>**

**Mensah, B., Damte, F. K., Okyere, E. Y., Andoh, I., Poku, A. A., & Gyabaah, K. O. Y. (2023). Cushioning the impact of COVID-19 on livelihoods: Africa’s socioeconomic policies so far. *Ghana Journal of Geography*, 15(1), 226–251. <https://dx.doi.org/10.4314/gjg.v15i1.4>**

**Duah, R. K., Gyabaah, K. O. Y., Mensah, B., Poku, A. A., & Damte, F. K. (2023). Effects of increasing student enrollment on teaching and learning in Senior High Schools in Ghana: The free Senior High School policy in retrospection. *Social Education Research*, 4(2), 227-239. <https://doi.org/10.37256/ser.4220232849>**

**Kutor, S. K., Annan-Aggrey, E., Ablo, A. D., Poku, A. A., & Kyeremeh, E. (2023). Harnessing the tenets of health promotion and wise reasoning in managing COVID-19 pandemic in Ghana and similar contexts. *African Geographical Review*, 42(5), 607-616. <https://doi.org/10.1080/19376812.2022.2092160>**

## Abstract

The emergence of COVID-19 in December 2019 produced new geographic spaces characterized by physical and social distancing with concomitant surprises. In Ghana, management of the first and second waves of the pandemic garnered mixed reactions from the populace. Against these perspectives, this commentary explored the critical role of health promotion and wise reasoning tenets in dealing with the COVID-19 pandemic in Ghana, specifically through the following eight principles: intellectual humility; acknowledging uncertainty and change; perspective-taking of different viewpoints; integration of diverse perspectives; intersectorality; sustainability; empowerment and public health engagement; and equity. Our analysis demonstrate that wise reasoning and health promotion from Ghana's political authorities are critical to ensure citizens' compliance with several measures that require a change of behavior.

**Poku, A. A. (2023). 'Abstinence-be-faithful-condom-use' model of HIV/AIDS preventive knowledge and practices in Lower Manya Krobo Municipality in Ghana. *International Journal of Research and Innovation in Social Science*, 7(3), 1028-1046. <https://www.rsisinternational.org/journals/ijriss/>**

**Dadson, I. Y, Panou, P. S., & Adu-Boahen, K. (2024). Sediments composition of the Fosu lagoon barrier beach at Bakaano in Cape Coast. *Ghana Journal of Geography*, 16(1), 91-127. <https://ajol.gjg/10.4314/gjg.v16i1.4>**

## Abstract

Abstract This research examined the Fosu Lagoon Barrier Beach sediment composition at Bakaano in the Cape Coast Metropolis. The researchers focused on the physical attributes of the Fosu Lagoon Barrier Beach at Bakaano in Cape Coast and analysed its sediment composition. The paper analysed twelve (12) samples or specimens of soils/sediments at the laboratory to determine the sediment composition of the barrier beach. The physical dimensions of the barrier beach were measured in the field with a tape measure and a Global Positioning System (GPS). The study established that the Fosu Lagoon Barrier Beach is approximately 130m long and 58m wide. It is shallow in height, about 10m above sea level and composed mainly of coarse sand particles. The granulated sand composition has made this barrier beach fragile. Aside from wave action, human-induced factors were prominent in the catchment area, such as sand mining and artificial breaching of the barrier, accounting for the temporal changes in its physical characteristics. The paper recommends that the Cape Coast Metropolitan Assembly should play a critical role in protecting and maintaining the feature by regulating threatening human activities carried out on it.

**Danso, S. Y., Ma, Y., Osman, Y., & Addo, I. Y. (2024). Integrating multi-criteria analysis and geospatial applications for mapping flood hazards in Sekondi-Takoradi Metropolis, Ghana. *Journal of African Earth Sciences*, 209, 1-12. <https://doi.org/10.1016/j.jafrearsci.2023.105102>**

## Abstract

Despite numerous structural and non-structural measures to curb the problem, flood disasters have become a recurring theme globally. Reducing vulnerability to flooding requires a constant reassessment of flood hazard areas since their spatial extent keeps changing. This paper sought to map flood hazards in the Sekondi-Takoradi Metropolis (STM) of Ghana. STM experiences frequent flooding incidents, rapid urbanization, and massive encroachment of lands, partly



due to a booming petroleum industry. However, an empirical spatial assessment of its flood hotspots is non-existent. We applied a multi-criteria analysis (specifically the Analytical Hierarchy Process [AHP]) to address this issue by processing causative flood parameters derived from remotely sensed images using a geographical information system. The principal results show that about 12% and 24% of STM lands are in very high and high flood zones, respectively. The rest of the land is in moderate (24.6%), low (24.3%), and very low (15%) flood zones. Areas along the lower portions of STM are identified as most susceptible to inundation. A computed consistency ratio of 0.03 is indicative of the efficiency of the study's model. These findings provide relevant stakeholders with an extensive understanding of the different flood zones for effective flood planning and prevention in STM.

**Osman, A. (2024). Changing land cover: Clustering of agents per moral responsibility and culpability. *Environmental Challenges*, 14(100821), 1-9. <https://doi.org/10.1016/j.envc.2023.100821>**

### Abstract

Are all humans morally responsible and deserving of blame for land cover change? Land cover change research has yet to provide an answer to this moral question. The purpose of this study was to answer the moral question of land cover change by conducting a land cover change analysis in six sampled metropolitan/municipal/districts [MMDAs] in Ghana, identify the agents of land cover change, and cluster the agents based on their moral responsibility and culpability. Supervised classification of Landsat images from 1987 to 2022 for the six MMDAs indicated that farmlands increased the most in area size although one-third of the respondents (agents) were into farming and agro-processing occupation. Based on respondents actions, knowledge and norms they were clustered into seven groups (“responsible and culpable”-25.1 %, “responsible due to culpable ignorance”-17.7 %, “responsible although lack knowledge”-14.1 %, “responsible due to weak norms”-9.1 %, “not responsible”-11 % and “not responsible due to culpable ignorance”-9.3 %) using Mason moral responsibility and culpability decision tree. The large number of respondents found to be responsible and culpable was because they had less knowledge about the consequences of land cover change, which limited their participation in environmental protection initiatives. The findings give sufficient evidence to promote educational programs for responsible land cover conservation and alternative livelihoods programs in Ghana.

**Osman, A., Adu-Boahen, K., Arko, B., & Okyere, E. I. (2023). Analysis of planting practices and post-planting stewardship intention of participants of Arbor Day. *Restoration Ecology*, 31(8), e13838. <https://doi.org/10.1111/rec.13838>**

### Abstract

Arbor Day (World Tree Planting Day) is an action to help replace dwindling tree cover globally. However, millions of the seedlings planted do not survive because of low regard for best planting practices and post-planting maintenance activities. This study focused on the planting practices of Arbor Day participants at the Muni-Pomadze Ramsar Site in Ghana and how that influenced their perception about seedling survival rate and their stewardship intention. The study used electronic questionnaire to solicit information from 229 participants (university students) at a 2021 Arbor Day planting event organized by the Forestry Commission and the Department of Geography Education, University of Education, Winneba. The study found four components of planting practices influenced perceptions including assessment of

seedling quality, soil characteristics, surrounding environmental characteristics and planting operation. A multivariate analysis of variance showed that the academic year of participants influenced planting practices specifically planting operations with a post hoc test indicating respondents in academic year 1 observed better planting operations than third year students. A generalized linear model showed that respondents who planted seedlings within areas with good surrounding characteristics (enough spacing between successive seedlings and trees) perceived seedlings survival rate to be higher. Respondents who planted more seedlings were likely to provide time and money for post-Arbor Day tree monitoring and maintenance. The findings also suggest that organizers of Arbor Day tree planting exercises should educate participants on proper planting practices and organize days for monitoring and maintenance of planted trees to improve participant perceptions and on-going involvement.

**Odame, P. K., Sam, E. F., & Fiangor, A. (2024). Exploring the Nature of Road Safety Education in Basic Schools and School Children’s Travel Mode Options in Winneba, Ghana. *Ghana Journal of Geography*, 16(1), 128-161. <https://dx.doi.org/10.4314/gjg.v16i1.5>**

### Abstract

Road safety education among school children is a critical issue that needs to be addressed as African countries record more road traffic-related deaths and disabilities. Despite efforts to increase road safety education across various mediums, basic schools in Ghana have received little of such attention despite their role in socialisation. This study explored the nature of road safety education and school children’s travel mode opinions in Winneba. The study adopted a quantitative research approach which sampled 400 school children within Class 4 to 9 (Junior High 3) from 5 basic schools. Questionnaires were filled after class hours after receiving approval from school heads. Jamovi was used to analyse the data and presented using frequency, cross-tabulation and chi-square test of independence. The study found that walking constitutes a major travel option for children in Winneba as this mode comes at no cost. Even though schools constituted a primary source of knowledge, road safety education was not assigned to a dedicated subject teacher(s) and was seldom taught in school. The study found a significant relationship between the impact of road safety education and school children’s frequently used travel mode option. The study recommends efforts to dedicate road safety lessons to subjects like Social Studies and Our World Our People since such subject’s touch on Ghanaians’ daily living situations.

**Odame, P. K., Sam, E. F., Amoako-Sakyi, R. O., & Arko, B. (2023). State of public transport services to Ghana’s disability population: Lessons from public transport operators in the Accra Metropolitan Assembly. *Social Sciences & Humanities Open*, 7, 100413. <https://doi.org/10.1016/j.ssaho.2023.100413>**

### Abstract

Access to public transport services is crucial to the enjoyment of various life-enhancing opportunities by persons with disabilities (PWDs). However, the attainment of such services is confronted with varying levels of difficulties due to the non-conformity between transport service delivery and PWDs’ needs. While many players like transport operators and vehicle manufacturers contribute to the delivery of transport services, this study examines the responsiveness of public transport operators to the travel needs of commuters with disabilities in Accra. Using a qualitative research approach, 24 public transport operators

were conveniently sampled from 3 popular and busy transport terminals in Accra, the capital city of Ghana. Thematic content analysis was employed using key constructs that emanated from the transcripts. The findings reveal that none of the public transport providers/operators had any knowledge of Ghana's Disability Act of 2006 and its transport provision. By this, all activities tailored to the disability population were generally informed by common sense despite refuting calls to acquire disability-friendly vehicles or support systems. It is recommended that sensitization on the transport provision of Ghana's Disability Act should be heightened by the Ministry of Transport given its ability to improve transport services to the disability population.

**Sam, E. F., Odame, P. K., & Amoah-Nuamah. (2023). Predictors of distractive activities to walking in Accra, Ghana. *Urban, Planning and Transport Research*, 11(1), 2220574. <http://doi.org/10.1080/21650020.2023.2220574>**

### **Abstract**

Walking is a fundamental mode of transport for many people globally, with immense health and environmental benefits. However, increased walking is associated with an increased risk of road traffic crashes and injuries, especially where traffic enforcement is poor, and pedestrians could easily be distracted. Despite this, a plethora of evidence exists on driver distraction; however, there is a dearth of evidence of pedestrian distraction (i.e. distracted walking), particularly in Africa. This paper uses a quantitative methodology to examine the predictors of distractive activities to walking in Accra, Ghana. The study surveyed 400 pedestrians within Accra's Central Business District (CBD). A questionnaire was deployed via Kobo Toolkit and Jamovi was used in analysing the data. The study observed that three of the top four destructive activities to walking were digital devices-related (e.g. the use of mobile phones). We found that listening to music, making, receiving phone calls, and conversing with other people while walking are the main distractive activities. The binary logistic regression model found sex, age, level of education, occupation, reasons for walking, weekly time for walking and time for common trips as significant predictors of distractive activities to walking.

**Agyemang, K. K., Odame, P. K., Obilie, R., Mensah, E. A., & Abane, A. M. (2023). Perception of commuter rail transit riders/users of train services on the Accra-Nsawam Corridor. *Urban, Planning and Transport Research*, 11(1), 12-26. <https://doi.org/10.1080/21650020.2023.2204920>**

### **Abstract**

Commuter trains are a popular mode of transportation among low- income earners in Ghana. However, due to the economic turmoil of the 1970s, the government struggled to invest in and manage this travel option effectively. With the increasing trend towards mass commuter services worldwide, this study aimed to examine how commuters perceive the quality of railway services in Ghana, using the Accra-Nsawam corridor as a case study. The study involved an on-board survey of 430 passengers using questionnaires. The results showed that factors such as speed, punctuality, safety, comfort, and improved customer care were significant predictors of commuters' preference for commuter services. However, variables such as advanced technology and ticketing systems were found to be less important. The study recommends expanding rail services to other parts of the country while simultaneously improving technology.

**Odamé, P. K., Amoako-sakyi, R. O., Abane, A., & Mensah, M. N. (2023). Alternative travel mode for commuters with disability in Accra: The lived experiences of Uber and taxi users. *Case Studies on Transport Policy*, 11(1), 100968. <https://doi.org/10.1016/j.cstp.2023.100968>**

### **Abstract**

This paper explores the alternative travel mode choice among persons with disabilities (PWDs) in the city of Accra. With a limitation in the ownership of private cars among PWDs, public transport plays a critical role in connecting them to various life enhancing opportunities. Despite its importance, the unresponsive nature of Ghana's public transport services and poor attitudes towards the disability community have induced the need for a reliable alternative travel mode hence the need to examine factors that influence this trend in Accra. Using a qualitative research design, this study engaged 28 visually and 22 physically impaired participants through convenience sampling and snowballing. Findings revealed that the lower fees charged for conventional public transport services informed their patronage but the ease, convenience, exclusive services and the friendly reception from Uber drivers remained the key attraction for the increasing trend in their patronage of such services. Unfortunately, higher fees associated with Uber services translated to few trips and fewer social en- gagements. The study recommends an overhaul of Ghana's public transport system by ensuring strict compliance to the transport provision of Ghana's Disability Act given its potential to increase PWDs' travel options as seen in the enjoyment of lower transport fares.

**Odamé, P. K., Sam, E. F., Amoako-Sakyi, R. O., & Arko, B. (2023). State of public transport services to Ghana's disability population: Lessons from public transport operators in the Accra Metropolitan Assembly. *Social Sciences & Humanities Open*, 7(1), 100413. <https://doi.org/10.1016/J.SSAHO.2023.100413>**

### **Abstract**

Access to public transport services is crucial to the enjoyment of various life-enhancing opportunities by persons with disabilities (PWDs). However, the attainment of such services is confronted with varying levels of diffi- culties due to the non-conformity between transport service delivery and PWDs' needs. While many players like transport operators and vehicle manufacturers contribute to the delivery of transport services, this study ex- amines the responsiveness of public transport operators to the travel needs of commuters with disabilities in Accra. Using a qualitative research approach, 24 public transport operators were conveniently sampled from 3 popular and busy transport terminals in Accra, the capital city of Ghana. Thematic content analysis was employed using key constructs that emanated from the transcripts. The findings reveal that none of the public transport providers/operators had any knowledge of Ghana's Disability Act of 2006 and its transport provision. By this, all activities tailored to the disability population were generally informed by common sense despite refuting calls to acquire disability-friendly vehicles or support systems. It is recommended that sensitization on the transport provision of Ghana's Disability Act should be heightened by the Ministry of Transport given its ability to improve transport services to the disability population.

**Sam, E. F., Odame, P. K., & Amoah-Nuahman, J. (2023). Predictors of distractive activities to walking in Accra, Ghana. *Urban, Planning and Transport Research, 11*, 102332. <https://doi.org/10.1080/21650020.2023.2220574>**

### **Abstract**

Walking is a fundamental mode of transport for many people globally, with immense health and environmental benefits. However, increased walking is associated with an increased risk of road traffic crashes and injuries, especially where traffic enforcement is poor, and pedestrians could easily be distracted. Despite this, a plethora of evidence exists on driver distraction, however, there is a dearth of evidence of pedestrian distraction (i.e., distracted walking), particularly in Africa. This paper uses a quantitative methodology to examine the predictors of distractive activities to walking in Accra, Ghana. The study surveyed 400 pedestrians within Accra's Central Business District (CBD). A questionnaire was deployed via Kobo Toolkit and Jamovi was used in analysing the data. The study observed that three of the top four distractive activities to walking were digital devices-related (e.g., the use of mobile phones). We found that listening to music, making, receiving phone calls, and conversing with other people while walking are the main distractive activities. The binary logistic regression model found sex, age, level of education, occupation, reasons for walking, weekly time for walking and time for common trips as significant predictors of distractive activities to walking.

**Appiah-Otoo, I., Chen, X., & Kursah, M. B. (2023). Modelling the impact of renewable energy investment on global carbon dioxide emissions. *Energy Reports, 10*, 3787–3799. <https://doi.org/10.1016/j.egy.2023.10.043>**

### **Abstract**

The adversities of climate change facing the world highlight the importance of reducing the rise of global carbon emissions (CO<sub>2</sub>E), which is a top priority for policymakers and researchers. Renewable energy is hailed as a remedy to the rise in global CO<sub>2</sub>E. However, there are persistently low levels of global renewable energy investment (REI). This study, therefore, examines the linear and non-linear effect of REI (measured by solar, wind, small hydropower, geothermal, biomass, marine, and biofuel energy investment) on CO<sub>2</sub>E using a global dataset from 2004Q1 to 2018Q1. The study also examines the economic growth mechanism through which REI influences CO<sub>2</sub>E. Using the Ordinarily Least Squares model, the findings show that all the measures of REI significantly increase CO<sub>2</sub>E from the linear analysis. However, the non-linear analysis showed that solar and wind energy investment have a statistically significant inverted U-shaped relationship with CO<sub>2</sub>E while small hydropower and biofuel energy investment have a statistically significant U-shaped relationship with CO<sub>2</sub>E. Thus, solar and wind energy investment reduce CO<sub>2</sub>E only after attaining a threshold of investment with the threshold value of solar and wind energy investment being 28.125 (representing about \$1.64 trillion) and 26.308 (representing about \$266.3 billion), respectively. Also, the threshold value of small hydropower and biofuel energy investment beyond which they increase CO<sub>2</sub>E are 20.071 (representing about \$520.9 million) and 22.8 (representing about \$7.978 billion), respectively. Finally, solar, wind and geothermal energy investment indirectly reduce CO<sub>2</sub>E by increasing green economic growth while the reverse exists for biofuel energy investment. Solar and wind energy investment is, therefore, recommended for attaining carbon neutrality targets. Policymakers should incentivize production tax credits, investment tax credits, feed-in-tariffs, subsidies, affordable loans, and research and development to drive solar and wind energy investment.

**Kursah, M. B. (2023). Satellite image analysis of thermal comfort for a sustainable urban ecology of Winneba, Ghana. *Urban Climate*, 52, 101685. <https://doi.org/10.1016/j.uclim.2023.101685>**

### Abstract

To mitigate thermal heat effects for a sustainable urban living environment through planning and interventions, studies on land surface temperature (LST) in urban settings are crucial. Thus, the relationship between LST and surface landscape must be established to accurately assess the impacts of surface temperature changes for planning purposes. This will help gain knowledge about the spatial concentration of the heat effects and to design practical needs of urban planning. The study aimed to analyse and reveal the spatial dynamics of LST and its statistical relationship with two normalised satellite indices using Landsat satellite data. The Landsat-derived LST is validated using the MODIS surface temperature data. It also mapped the heat spots (HS) and evaluated the ecological evaluation index and thermal comfort using the thermal field variance index (TFVI). The results showed spatial variation in LST even within the built-up areas due to heterogeneity in the surface characteristics. Thus, localised heat islands (HIs) exist within short distances. The analysis established an inverse correlation for LST-NDVI and a direct correlation for LST-NDBI. The vegetation and water surfaces served as important heat reduction sinks while heavily built-up areas and the hardened-clayey bare surfaces served as heat-enhancing sources. More than half (52.80%) of the study area enjoys an excellent (48.57%) and good (4.23%) ecological evaluation index, indicating excellent to good thermal comfort. Much of these areas are in the urban periphery. Also, more than one-third (38.96%) enjoy the worst (34.85%) and worse (4.11%) ecological evaluation index and thus high thermal discomfort. Identifying these HS areas and evaluating the thermal comfort will help the planners and decision-makers to fully evaluate the thermal consequences of different land use or land development scenarios and therefore improve the scientific basis of future planning and regulations.

**Boakye, D. S., Amoah, V. M. K., Amoah, C., Damte, F. K., Poku, A. A., Boateng, E. A., Ataara, N., Gyekye, S. T., & Dzomeku, V. (2023). Perceptions and attitudes of women in the perinatal period towards male midwives in a rural district of Ghana: a descriptive, exploratory qualitative study. *BMJ Open*, 14(2). <https://10.1136/bmjopen-2022-070841>**

### Abstract

**Objective** The study sought to explore the perceptions and attitudes of women in the perinatal period towards the reproductive health services of male midwives. **Design** The study adopted an in-depth exploratory descriptive design for data collection and themes extracted using thematic analysis. **Setting** Antenatal and postpartum units of two primary healthcare facilities in the Kwabre-East District of Ghana. **Participants** 20 women in the perinatal period who were receiving antenatal care and delivery services from the facilities included in the study were recruited through purposive sampling. **Findings** Divergent views emerged among our participants regarding the acceptability and utilisation of perinatal services provided by male midwives. Some participants perceived male midwives as patient, supportive, caring, compassionate and skilful at their work while the negative attitude related to some participants perceiving their interactions with male midwives as an opportunity for sexual violation. Positive attitudes emanated from male midwives' empathetic behaviour, reception, privacy and confidentiality of information. Conversely, negative attitudes arose from a lack of awareness of the changing female gender domination in midwifery, fear and misconceptions. Finally, participants faced various challenges, rooted in culture, which impacted their



acceptance of male midwifery services. Conclusions Factors influencing participants' negative perceptions and attitudes towards male midwives were born out of culturally motivated and gender-sensitive stereotyping rather than male professional midwifery competencies. The study outcome provides the basis and the need for a community-based intervention to effect changes in the perception and attitude of women in the perinatal period towards male midwifery practice in the affected communities. Increasing awareness of the existence of male midwives in the communities would contribute to increasing acceptance and utilisation of their services among women in the perinatal period in Ghana.

**Duah, R. K., Gyabaah, K. O. Y., Mensah, B., Poku, A. A., & Damte, F. K. (2023). Effects of increasing student enrollment on teaching and learning in Senior High Schools in Ghana: The free Senior High School policy in retrospection. *Social Education Research*, 4(2), 227-239. <https://doi.org/10.37256/ser.4220232849>**

### **Abstract**

Senior high school education in Ghana has experienced tremendous growth following the introduction of the Free Senior High School (FSHS) policy. Several studies have proven that increased student enrollment presents challenges to effective teaching and learning and academic performance. In view of this, the study explored how teaching and learning are reacting to the recent increase in student enrollment in Ghanaian Senior High Schools (SHSs). In this study, 181 teachers were selected from six SHS within the Ejisu Municipality using the cluster sampling technique in order to examine how changes in student enrollment following the implementation of the FSHS policy have affected teaching and learning. The study adopted trend analysis, with data analyzed using SPSS. The findings showed an impressive, steady increase in student enrollment. It was also found that students' academic performance generally dipped in the introductory years of the FSHS policy, while some improvements were observed from 2019 forward. However, the study revealed that schools experienced classroom and dining hall congestion, inadequate teaching and learning materials, inadequate hostel infrastructure, and a high student-teacher ratio. The study recommends a multistakeholder collaboration to salvage the infrastructure deficits and their associated challenges that characterize SHSs in Ghana

**Mensah, B., Damte, F. K., Okyere, E. Y., Andoh, I., Poku, A. A., & Gyabaah, K. O. Y. (2023). Cushioning the Impact of COVID-19 on Livelihoods: Africa's Socio-Economic Policies so far. *Ghana Journal of Geography*, 15(1), 226-251. <https://10.4314/gjg.v15i1.4>**

### **Abstract**

The devastating impacts resulting from the coronavirus pandemic cannot be underestimated. The economies of most countries on almost all continents have been adversely impacted by the coronavirus pandemic (COVID-19). With Africa's existing socio-economic challenges, the emergence of the pandemic has further weakened and worsened economies and livelihoods within the sub-region. Dwelling on secondary data sources, including journal articles, online news items, and reports, this paper examines socio-economic support programmes implemented by African governments to cushion the pandemic's impact on the already-vulnerable livelihoods in Africa. The study establishes that several successful and some ineffective socio-economic interventions have been implemented so far by countries,

including but not limited to Ghana, Botswana, Kenya, and Morocco. These interventions include suspending public gatherings, lockdown regimes, strengthening healthcare systems through increased investment, cash transfers to the most vulnerable groups, free food distribution, reduction of different tax forms and distribution of Personal Protective Equipment (P.P.E.) to households. However, implementing these measures has put high economic burdens on governments due to their associated cost. It is therefore projected that, beyond the COVID-19 regime, most African governments will pursue internal economic policies to chart the course towards economic recovery. The paper recommends that case-by-case empirical studies be conducted to gauge the level of impact the identified COVID-19-driven socio-economic policies had on livelihoods within the African context.

**Davies-Vollum, S., Ribchester, S., Danso-Wiredu E. Y., & Debadayita, R. (2023). (2023). Virtual mobility to enhance intercultural competencies for a more sustainable future. *Innovations in Education and Teaching International, Taylor and Francis, 1, 1-15.* <https://doi.org/10.1080/14703297.2023.2224770>**

### Abstract

The UN locates education at the heart of the process to achieve a more sustainable future and deliver the 17 Sustainable Development Goals (UN-SDGs) by 2030. Within this context, this paper outlines the experience of designing and delivering an international virtual mobility workshop which brought together university students from the UK and Ghana. It offers a critical evaluation of the extent to which the workshop's objectives were achieved, through comparison of pre- and post-workshop survey results, with a particular emphasis on changing levels of understanding of the UN-SDGs and the development of key intercultural competencies. The discussion highlights positive trajectories of change in student learning, and the challenges of delivering workshops of this nature. It is concluded that such challenges can be embraced as learning opportunities and that the associated discomfort and uncertainty is important to facilitate impactful learning experiences.

**Duah, R. K., Gyabaah, K. O. Y., Mensah, B., Poku, A. A., & Damte, F. K. (2023). Effects of increasing student enrollment on teaching and learning in Senior High Schools in Ghana: The free Senior High School policy in retrospection. *Social Education Research, 4(2), 227-239.* <https://doi.org/10.37256/ser.4220232849>**

### Abstract

Senior high school education in Ghana has experienced tremendous growth following the introduction of the Free Senior High School (FSHS) policy. Several studies have proven that increased student enrollment presents challenges to effective teaching and learning and academic performance. In view of this, the study explored how teaching and learning are reacting to the recent increase in student enrollment in Ghanaian Senior High Schools (SHSs). In this study, 181 teachers were selected from six SHS within the Ejisu Municipality using the cluster sampling technique in order to examine how changes in student enrollment following the implementation of the FSHS policy have affected teaching and learning. The study adopted trend analysis, with data analyzed using SPSS. The findings showed an impressive, steady increase in student enrollment. It was also found that students' academic performance generally dipped in the introductory years of the FSHS policy, while some improvements were observed from 2019 forward. However, the study revealed that schools

experienced classroom and dining hall congestion, inadequate teaching and learning materials, inadequate hostel infrastructure, and a high student-teacher ratio. The study recommends a multistakeholder collaboration to salvage the infrastructure deficits and their associated challenges that characterize SHSs in Ghana. Keywords: Free Senior High School (FSHS), student enrollment, class size effect, academic performance, Ghana

**Mensah, B., Damte, F. K., Okyere, E. Y., Andoh, I., Poku, A. A., & Gyabaah, K. O. Y. (2023). Cushioning the Impact of COVID-19 on Livelihoods: Africa's Socio-Economic Policies so far. *Ghana Journal of Geography*, 15(1), 226-251. <https://10.4314/gjg.v15i1.4>**

### **Abstract**

The devastating impacts resulting from the coronavirus pandemic cannot be underestimated. The economies of most countries on almost all continents have been adversely impacted by the coronavirus pandemic (COVID-19). With Africa's existing socio-economic challenges, the emergence of the pandemic has further weakened and worsened economies and livelihoods within the sub-region. Dwelling on secondary data sources, including journal articles, online news items, and reports, this paper examines socio-economic support programmes implemented by African governments to cushion the pandemic's impact on the already-vulnerable livelihoods in Africa. The study establishes that several successful and some ineffective socio-economic interventions have been implemented so far by countries, including but not limited to Ghana, Botswana, Kenya, and Morocco. These interventions include suspending public gatherings, lockdown regimes, strengthening the healthcare systems through increased investment, cash transfers to the most vulnerable groups, free food distribution, reduction of different tax forms and distribution of Personal Protective Equipment (P.P.E.) to households. However, implementing these measures has put high economic burdens on governments due to their associated cost. It is therefore projected that, beyond the COVID-19 regime, most African governments will pursue internal economic policies to chart the course towards economic recovery. The paper recommends that case-by-case empirical studies be conducted to gauge the level of impact the identified COVID-19-driven socio-economic policies had on livelihoods within the African context. Keywords: COVID-19, cushioning, socio-economic impact, livelihoods, Africa

**Odame, P. K., Sam, E. F., Amoako-Sakyi, R. O., Arko, B. (2023). State of public transport services to Ghana's disability population: Lessons from public transport operators in the Accra Metropolitan Assembly. *Social Sciences & Humanities Open*, 7, 100413. <https://www.sciencedirect.com/science/article/pii/S2590291123000189>**

### **Abstract**

Access to public transport services is crucial to the enjoyment of various life-enhancing opportunities by persons with disabilities (PWDs). However, the attainment of such services is confronted with varying levels of difficulties due to the non-conformity between transport service delivery and PWDs' needs. While many players like transport operators and vehicle manufacturers contribute to the delivery of transport services, this study examines the responsiveness of public transport operators to the travel needs of commuters with disabilities in Accra. Using a qualitative research approach, 24 public transport operators were conveniently sampled from 3 popular and busy transport terminals in Accra, the capital

city of Ghana. Thematic content analysis was employed using key constructs that emanated from the transcripts. The findings reveal that none of the public transport providers/operators had any knowledge of Ghana's Disability Act of 2006 and its transport provision. By this, all activities tailored to the disability population were generally informed by common sense despite refuting calls to acquire disability-friendly vehicles or support systems. It is recommended that sensitization on the transport provision of Ghana's Disability Act should be heightened by the Ministry of Transport given its ability to improve transport services to the disability population.

**Osman, A., Adu-Boahen, K., Arko, B., & Okyere, E. I. (2023). Analysis of planting practices and post-planting stewardship intention of participants of Arbor Day. *Restoration Ecology*, 31(8), e13838. <https://doi.org/10.1111/rec.13838>**

### **Abstract**

Arbor Day (World Tree Planting Day) is an action to help replace dwindling tree cover globally. However, millions of the seedlings planted do not survive because of low regard for best planting practices and post-planting maintenance activities. This study focused on the planting practices of Arbor Day participants at the Muni-Pomadze Ramsar Site in Ghana and how that influenced their perception about seedling survival rate and their stewardship intention. The study used electronic questionnaire to solicit information from 229 participants (university students) at a 2021 Arbor Day planting event organized by the Forestry Commission and the Department of Geography Education, University of Education, Winneba. The study found four components of planting practices influenced perceptions including assessment of seedling quality, soil characteristics, surrounding environmental characteristics and planting operation. A multivariate analysis of variance showed that the academic year of participants influenced planting practices specifically planting operations with a post hoc test indicating respondents in academic year 1 observed better planting operations than third year students. A generalized linear model showed that respondents who planted seedlings within areas with good surrounding characteristics (enough spacing between successive seedlings and trees) perceived seedlings survival rate to be higher. Respondents who planted more seedlings were likely to provide time and money for post-Arbor Day tree monitoring and maintenance. The findings also suggest that organizers of Arbor Day tree planting exercises should educate participants on proper planting practices and organize days for monitoring and maintenance of planted trees to improve participant perceptions and on-going involvement.

**Otoo, S. Bordoh, A. Gyasi, K., & Shirley Dankwa. (2023). An appraisal of work-family conflict on management staff of star-rated hotels. *Universal Journal of Business and Management*, 3, 28-41. <http://doi.org/10.31586/ujbm.2023.804>**

### **Abstract**

The objective of this research was to investigate work-family conflict among management staff of hotels in the Accra Metropolis of Ghana. The study employs the pragmatism approach and Convergent parallel mixed methods research technique. The population of the study is all-star-rated management staff of star-rated hotels in the Accra metropolis. Stratified, random and convenient sampling techniques were used to select 182 out of 356 respondents. One hundred (100) were sampled using a formula and a table determination of sample size based on the confidence level needed from a given population as provided by Krejcie and Morgan in 1970 for the study. Ten managers were conveniently interviewed on the issues of

work-family conflict. The main instruments for data collection were a questionnaire and a semi-structured interview guide. This study adopted factor analysis and a structural equation model to examine factors that influence work-family conflict. This statistical technique was used in the research to investigate the factorability of the variables of work-related and family-related factors separately and a structural equation model was used to combine both factors to better understand the relationship. Linear regression was used to determine the relationship between work-family conflict. Pearson product-moment Correlation and structural equation model were used to determine the consequences of work-family conflict. It can be concluded that both work-related such as work overload, job type and involvement as well as family-related factors such as life cycle stage, and childcare arrangement predict work-family conflict among managers of hotels in the Accra metropolis. It is also deduced WFC affect managers' performance on the job, exhaust them emotionally and also influences their intentions to leave the job for another. Managers usually feel fatigued to prepare for work and physically drained after work. They also feel depressed and emotionally drained sometimes. It is recommended that top management of hotels should allocate a budget to build an organisational culture that encourages work-family balance. Frontline managers should be trained to be aware of the benefit of providing support in the work environment that will help staff balance work and family. It is also recommended that hotel jobs be redesigned by the human resource unit to reduce workload and make it more interesting for managers so they may not feel overworked. Overworking of managers will enhance their intentions to quit the job and this will be costly for hotels.

**Otoo, S. Dankwa S. Annan-Nunoo S. & Gyasi, K. (2023). An Assessment of Coping Strategies on Work-family Conflict and Job Performance in Ghana. *Universal Journal of Social Sciences and Humanities*, 3, 46-60. <http://doi.org/10.31586/ujssh.2023.73>**

## Abstract

The purpose of this study was to examine coping strategies for managing the effects of work-family conflict on the management staff of hotels in the Accra metropolis of Ghana. The study adopted a Convergent parallel mixed methods research technique. The population of the study is all-star-rated management staff of star-rated hotels in the Accra metropolis. multi-stage sampling. The estimation of the sample size for the hotel managers was based on Krejcie and Morgan's table for the determination of the sample size for a given population. The population of 100 managers were stratified and randomly sampled out of the 182 managers. The main instruments for data collection were questionnaires and an interview. Statistical Package for Social Sciences (SPSS) version 22.0 was used to determine simple percentages and frequencies of responses. Pearson product-moment Correlation and structural equation model were used to determine the consequences of work-family conflict as well as coping strategies adopted by managers. Amos PLS was used to determine the moderating effect of coping strategies on work-family conflict and job performance. Hotel managers in the Accra metropolis combine the strategies of structural role redefinition, personal role redefinition, cognitive restructuring and reactive role redefinition to curb work-family conflict. The study demonstrated a positive relationship between coping strategies and job performance. Coping strategies had a moderating effect on the relationship between work-family conflict and the job performance of hotel managers. Thus, to improve the job performance of hotel managers, there should be the application of coping interventions to help them perform on the job. The study also determined that work-family conflict had a significant positive relationship with job performance. Similarly, the study established that coping strategies significantly moderate the relationship between work-family conflict and job performance among hotel managers in the Accra metropolis. Although coping strategies were employed by hotel managers in the

Accra metropolis, it is recommended that training sessions on the use of coping strategies and stress management techniques should be considered by management to address psychological and emotional work environment stressors since they have been proven to reduce stress and WFC. It is also recommended that there should be an inter-hotel collaboration to offer smaller hotels which do not have the resources some leverage the impact of work-family conflict. This platform can be provided by the Ghana hotels association to impact knowledge of coping strategies in smaller hotels. The government must be encouraged to liaise with the Ghana hotels association to enforce the mandatory eight-hour work per day to avoid overworking of hotel managers.

**Ansah-Mensah, K., & Asamoah, Y. (2023). Seasonal differences in rainfall distribution within the Bawku area in the Savanna Belt of Ghana. *Ghana Journal of Geography*, 15(3), 196-222. <https://dx.doi.org/10.4314/gjg.v15i3.7>**

### **Abstract**

Empirical evidence suggests that temperatures are continuously rising in the savannah areas of Ghana and impacting negatively on residents' livelihood activities. However, there is paucity of information on the wet and dry seasons' rate of wetness or dryness in the driest belt of Ghana. Meanwhile, residents of the area are mainly rained agriculturalists. We employed gauge station rainfall and temperature data from Ghana Meteorological Agency to assess the seasonal rainfall characteristics of the Bawku area using XLSTAT and DrinC software. Results from the rainfall anomalies show persistent dryness (-0.017) in the area during the dry season and continuous wetness in the wet season (0.021). Evapotranspiration was consistently higher in the dry season at a rate of 2.6% (0.26) yearly as well as a high rate of aridity [AI] ( $0.00 \leq AI \leq 0.09$ ) in the dry season and low aridity ( $0.56 \leq AI \leq 1.13$ ) during the wet season. Following the reduction in the amount of rainfall, we can conclude that Bawku area is continuously drying amidst the changing climate. It is recommended that the ministry of agriculture should prioritise the construction of mechanised dams or wells and expand irrigation projects in the area to reduce the climate change effects on the livelihood of the residents especially in the dry season.

### **Article(s)/Chapters in an Edited Book**

**Acharibasam, J. B., Ranjan Datta, R., Atanga, R. A., & Kode, P.K. A. (2024). Community-based participatory research design relevance for decolonizing postgraduate education. In Mishack T Gumbo, *Global Perspectives on Decolonizing Postgraduate Education*. Global IGI. <https://www.org/10.4018/979-8-3693-1289-6.ch002>.**

### **Abstract**

The chapter explores the relevance of community-based participatory research design for decolonizing postgraduate programs. The ability of the participatory approach to create authentic partnerships and prioritize community needs has implications for decolonizing postgraduate programs. This chapter presents lessons from a community-based study that engaged rural women from northern Ghana in a dry-season gardening project. The chapter shows how decolonization can be achieved within educational institutions when communities are meaningfully engaged in research activities. The findings highlight that community-based research approaches can be crucial in decolonizing postgraduate programs.



**Atanga, R. A., Acharibasam, J. B., Jachan, S. K., Gaffi, M. K., & Poku, G. A. (2024). Land-based Learning and Its Implications for Preserving Traditional Ecological Knowledge in Ghana. In Ranjan Datta, Jebunnessa Chapola, John Bosco Acharibasam, *Indigenous land-based knowledge and sustainability*. Routledge: Taylor and Francis Group.**

**Afeti, R., Anane, F., Baidoo, P., Mensah, B., Okyere, E. Y., Gyasi, K., & Donkor, F. (2024). Youth and natural resource management: Empowering the next generation for a sustainable future. In R. Brears (Ed.), *The Palgrave Encyclopedia of Sustainable Resources and Ecosystem Resilience*. Palgrave Macmillan, UK. [https://doi.org/10.1007/978-3-030-67776-3\\_48-1](https://doi.org/10.1007/978-3-030-67776-3_48-1).**

## **Abstract**

Youth have a critical role in the conservation and sustainable management of natural resources, as highlighted in the article “Youth and Natural Resource Management: Empowering the Next Generation for a Sustainable Future.” It explores a number of topics, including youth empowerment and leadership development, youth empowerment and technology, young involvement in conservation programs, and environmental education. The entry highlights the transformative power of adolescents and advocates for their active involvement in crafting a resilient and sustainable future by drawing on a multitude of research and projects. Young people’s enthusiasm, creativity, and resolve can be harnessed to produce creative solutions, improve intergenerational collaboration, and strike a harmonious balance between the protection of natural resources and human advancement. By making investments in youth now, the foundation is created for the future generations to build on.

**Afete, R., Anane, F., Baidoo, P., Mensah B., Okyere Y. E., Gyasi, K., & Donkor, F. (2024). Youth and natural resource management. In R. Bears (Ed.), *The Palgrave Encyclopedia of Sustainable Resources and Ecosystem Resilience*. Palgrave Macmillan. [https://doi.org/10.1007/978-3-030-67776-3\\_48-1](https://doi.org/10.1007/978-3-030-67776-3_48-1).**

## **Abstract**

Youth have a critical role in the conservation and sustainable management of natural resources, as highlighted in the article “Youth and Natural Resource Management: Empowering the Next Generation for a Sustainable Future.” It explores a number of topics, including youth empowerment and leadership development, youth empowerment and technology, young involvement in conservation programs, and environmental education. The entry highlights the transformative power of adolescents and advocates for their active involvement in crafting a resilient and sustainable future by drawing on a multitude of research and projects. Young people’s enthusiasm, creativity, and resolve can be harnessed to produce creative solutions, improve intergenerational collaboration, and strike a harmonious balance between the protection of natural resources and human advancement. By making investments in youth now, the foundation is created for the future generations to build on.

**Eze, B. E., Dadson, I. Y., & Adu-Boahen, K. (2023). Geographical location and physical characteristics of Winneba. In Danso Wiredu, E. Y., & Weiler, J., *Winneba: The geography, peoples and systems*. Digibooks Ghana Ltd.**

**Abotsi, A. K., & Kursah, M. B. (2023). The economic history of Winneba. In Y. Danso-Wiredu & J. Weiler, *Winneba: The Geography, Peoples and Systems*. Digibooks Ghana.**

### **Abstract**

The chapter 3 looks at the economy of Winneba, thus, the major economic activities in the municipality which are fishing, farming, wholesale/retail trade, services, manufacturing, salt mining (white gold), and agro-processing. Typically, towns located along the coast such as Winneba rely heavily on fishing

**Kursah, M. B., Biniyam, S. B., Tarawally, M., Segbefia, D., Kunji, S. B., Nyametso, J. K., Agbozo, M. S., Kicheek, C., Owusu-Ansah, E., & Afriyie, A. A. (2023). Analysing landcover and green cover change in Winneba using remote sensing and geospatial techniques. In Y. Danso-Wiredu & J. Weiler *Winneba: The Geography, Peoples and Systems*. Digibooks Ghana.**

### **Abstract**

The chapter 5 is on the understanding of the landcover types and how the rate of change over time can provide an effective basis for environmental and ecological protection and restoration. In this paper, Landsat historical images in 1990 and 2017 are analysed to identify and quantify the landcover change and the level of green in Winneba and its immediate environs using a normalised satellite index (NDVI-derived greenness index) and differencing approach. The results showed for example that the landcover has reduced in both coverage and the level of greenness especially in the east and northern parts. The implications of the landcover change on the socio-economic life in Winneba are also discussed in the chapter.

**Damte, F. K., Cada, L. F. J, Kingston, C. L., Polinar, M. A. N & Ahundu, M. O. (2023). Beyond rhetoric: An assessment of universal health coverage implementation in Ghana. In In J. M. Asio, A. Ratković, N. Sepillo, G. S. Cutillas, A. L. de Guzman, & K. W. A. Siahaan (Eds.), *Sustainable Development Goals 2*. FSH-PH Publications. <https://fsh-publication.com/public>**

### **Abstract**

This research paper examines the implementation of Universal Health Coverage (UHC) in Ghana and evaluates its progress, challenges and outcomes. UHC aims to ensure that all individuals have access to essential health services without experiencing financial hardship. The study analyzes Ghana's commitment to UHC through policy frameworks. The findings reveal achievements in expanding health service coverage, improving financial protection, funding, resource allocation, service quality, regional disparities and healthcare delivery systems. However, challenges related to the factors achieved persist. The study proposes recommendations, including increased domestic health financing, exploring innovative financing models, strengthening primary healthcare systems, improving the quality of care, addressing regional disparities and promoting community participation in decision-making processes to enhance UHC implementation in Ghana. The outcomes of this research

contribute to the existing knowledge on UHC in low- and middle-income countries, providing insights for policymakers, healthcare practitioners and international organizations involved in healthcare development.

**Danso-Wiredu, E. Y., & Eshun, E. S. (2023). Migration and language dynamics: Reflections from the University of Education community, Ghana. In S. Jones, R. Schmor, & K. Kerekes (Eds.), *Reconceptualizing language norms in multilingual contexts*. IGI Global. <https://www.igi-global.com/chapter/migration-and-language-dynamics/335627>**

### Abstract

Many different cultural traits are assimilated through migration; one such trait is language. In the processes of migration, many languages are moved from their ecological domain to new ecologies. About 60 known languages are spoken in the country of Ghana, and language experts argue that at the initial stages of migration, migrants might keep their indigenous languages. However, with time, the intents of maintaining the original language become wobbly. This study examines language dynamics in migration at University of Education, a multilinguistic community with diverse migrants. This case study uses a mixed methods approach. Findings indicate evidence of code-switching, code-mixing, dilution of original language, language shift, and total loss of original language and development of a new language. Negotiation of language use among migrants is paramount in or during migration so that existing indigenous languages will be saved from extinction as well as to maintain their vitality and the identity of the people who owns it.

**Danso-Wiredu, E. Y. (2023). The geography and socio-cultural dynamics of housing differentials in Winneba, Ghana. In E. Y. Danso-Wiredu & J. Weiler (Eds.), *Winneba: The geography, peoples and systems*. DigiBooks Ghana Ltd. <https://www.researchgate.net/publication/369658557> THE GEOGRAPHY AND SOCIO-CULTURAL DYNAMICS OF HOUSING DIFFERENTIALS IN WINNEBA\_GHANA**

### Abstract

The chapter investigates the housing differentials in Winneba, focusing on the features that inform landlords/ladies or renters to choose certain geographical areas as well as the socio-cultural dynamics that inform such choices. A number of residents and stakeholders were therefore interviewed to elicit respondents' views on the various factors which motivate people to live in their said communities, challenges they face in the communities and their future intentions to either remain or move away from the communities. The study was based on the information received from respondents, including the municipal planning coordinator and the researcher's personal observation. The central argument of this paper is that as some scholars and theories tend to be specific on the issues of attributes (amenities), economics and geographical locations, as the main determinants in housing acquisition in respect, this paper uses Winneba as a case study to argue that in Ghana, socio-cultural factors also greatly influence location of housing; and people's willingness to live at certain places might not necessarily be linked to economic factors. This alternative explanation to the norm is common in poor (indigenous and migrant) communities used in this study.

**Darkwa, I. O., & Danso-Wiredu, E. Y. (2023). Land repossession: An analysis of migrant farmer vulnerabilities and alternative livelihood strategies in Ghana. In J. Rolle, & M. Crump (Eds.), *Socio-Economic Disparities, Vulnerable Communities, and the Future of Work and Entrepreneurship*. IGI Global. <https://doi.org/10.4018/978-1-6684-6990-3.ch009>.**

### Abstract

The increasing population and urbanization in peri-urban Ghana have affected migrant farmers' land resource and livelihoods. The high demand of land for residential and developmental purposes has resulted in re-possession of farmlands in peri urban areas by land owners, at the expense of migrant farmers. This study analyses the extent of vulnerability challenges that affect migrant farmers as a result of land repossession, and alternative strategies employed to curb the challenge. A mixed method approach research was conducted in three communities: Oda, Asene, and Aboabo. The study adapted the sustainable livelihood approach in analyzing vulnerability challenges, and livelihood strategies. The study findings revealed that migrant farmers become economically and socially vulnerable temporarily because of land repossession, but consequently, devise alternative livelihood strategies to ameliorate the problems. The study recommends that migrant farmers should have their farmlands registered to cover all contractual agreements with landowners to secure land for farming activities.

**Danso-Wiredu, E. Y., & Osaе, D. K. (2023). Geography in Ghana, teaching, policy, and curricular transformation through time. In A. K. Amoako-Gyampah, B. Lundt, & E. A. Agyeman (Eds.), *Education in Ghana: History, policy and the future*. Langaa RPCIG. [https://books.google.com.gh/books?hl=en&lr=&id=FFPeEAAAQBAJ&oi=fnd&pg=PA307&dq=Geography+in+Ghana,+Teaching,+Policy+and+Curricular+Transformation+Through+Time&ots=Hp2Tp5-spn&sig=\\_zpgHTh82XIAWwGGEi63IESR9GA&redir\\_esc=y#v=onepage](https://books.google.com.gh/books?hl=en&lr=&id=FFPeEAAAQBAJ&oi=fnd&pg=PA307&dq=Geography+in+Ghana,+Teaching,+Policy+and+Curricular+Transformation+Through+Time&ots=Hp2Tp5-spn&sig=_zpgHTh82XIAWwGGEi63IESR9GA&redir_esc=y#v=onepage)**

### Abstract

Geography, as a school subject, is expressed in a variety of ways across different national jurisdictions. This article is concerned with analysing the ways in which geography is expressed in Ghanaian curricular standards for secondary schools. The study poses important questions on how the subject of geography has transformed in terms of policy and curricular changes. It is important that the Ghanaian geography curriculum does not operate with an outmoded view of knowledge, which means it needs to change to suit global spatial changes. All of these ideas about knowledge raise important questions on how schools and the school curricula are organised, the most important of which is: what should we teach and at what time should we teach it? It is therefore important that government policymakers do not lose interest in the 'fine tuning' of the geographic academic content of subjects taught in schools. This study employed the qualitative approach, which uses both document analysis and interviews to analyse the teaching, policy, and curricular transformation of the discipline of geography in Ghanaian schools through time. Views of geography teachers across the country were sought to fine-tune answers to the research set objectives. The study concludes that the WAEC syllabus is developed basically for the purpose of examination. It is skewed but undergoes changes regularly, mostly every four years. Teachers are therefore in the constant dilemma having to teach all the topics in the GES syllabus, some of which are not examinable but deepen the students' knowledge in geography and prepare the students for the tertiary level.

## **Conferences/Workshops/Symposia/Seminars with Presentations**

**Aliaksei Laureshyn, Haneen Farah, Jaqueline Masaki, Enoch F. Sam, Ronald Fisa, Filbert Francis, Marjan Hagenzieker, Laxman Singh Bisht, Carmelo D'Agostino, Andras Varhelyi, Torkel Bjørnskau, Aslak Fyhri, Tor-Olav Nævestad, Sonja Forward, Joh. (17-18 October 2024). *Re-thinking how we teach traffic safety: Safe System curriculum* [Paper presentation]. **Inclusive and interdisciplinary road safety research, The Hague****

### **Abstract**

**Background** This work has been done within the scope of the Horizon Europe project ‘AfroSAFE: Safe System for radical improvement of road safety in African countries’ ([www.afrosafe-eu.africa](http://www.afrosafe-eu.africa)). The project is focused on finding effective and sustainable ways of building the local capacity in African countries, which to high degree has to do with education of traffic safety professional. With this task in mind, the project team develops a curriculum and supporting materials for an academic course that will be freely available for African (though we see our target audience much broader than just Africa) universities willing to engage in traffic safety education. It is our intention to firmly base the course on the Safe System approach to traffic safety, which is currently considered to be the state-of-the-art and is endorsed by the leading experts worldwide.

**Method** While many traffic safety researchers are also involved in teaching the subject, it became apparent that we do not always do as we preach. A small survey among universities providing some kind of education in ‘traffic safety fundamentals’ revealed that the traditional view on the subject is still quite prominent. For example, motor vehicle accidents are often in focus and engineering-enforcement-education are seen as the main solutions, while the ‘soft aspects’ such as pre-requisites for effective traffic safety management, social, organizational and cultural aspects of traffic safety are often neglected. Therefore, the work started with an open brainstorming on what topics are relevant to provide a holistic coverage of the Safe System view on traffic safety. The list was further structured into 24 topic areas, and the contents and organization was elaborated in a series of iterative discussion sessions. Finally, the curriculum draft was shared with several leading experts in traffic safety and Safe System for additional feedback.

**Results** The course consists of three major themes with corresponding sub-topics:

- Framing the challenge:
  - o Traffic safety—problem scope
  - o Evolution of traffic safety theory and practice
  - o Safe System approach
  - o How to measure traffic safety
  - o Traffic safety data
  - o Why accidents happen?
  - o Accident typology
  - o Injury biomechanics
- Solutions and implementation areas
  - o Traffic safety measures: principles
  - o Where traffic safety knowledge comes from?
  - o Pillar 1: Traffic safety management
  - o Pillar 2: Safe speeds
  - o Pillar 3: Safe road users
  - o Pillar 4: Safe vehicles
  - o Pillar 5: Safe infrastructure
  - o Pillar 6: Post-crash care
- Perspectives
  - o Traffic safety as part of sustainable development
  - o Meeting preconditions of various groups
  - o Economical aspects of traffic safety
  - o Social aspects of traffic safety

Additionally, some of the topics were found to fit better not as individual units, but rather integrated across already existing topics. Such cross-sectional themes include:

- o Traffic safety in low- and middle-income countries
- o Active mobility
- o ITS and technology
- o Suicide in traffic

For each of the topics, supporting materials including summary of take-away messages, suggestions for practical exercises, knowledge-testing quizzes, and recommended reading for students as well as the teachers are compiled.

**Blom, J., Egner, L. E., Enoch, F. S., Nævestad, T.-O., & Fiangor, A. (2024, October 17–18). *Fatigue among bus drivers in Ghana and Norway: Examining the influence of working conditions and national road safety culture* [Paper presentation]. Inclusive and interdisciplinary road safety research, The Hague.**

## Abstract

Introduction Fatigue has been identified as a significant contributing factor to many accidents involving professional drivers in road transport (Nævestad et al., 2021; Phillips et al., 2015). Studies have reported that fatigue poses a risk factor in approximately 10-25% of all crashes. International research indicates that between 36 and 64% of professional drivers admit to falling asleep behind the wheel at some point (Sagberg & Bjørnskau, 2004). This issue is more prevalent among professional drivers than private drivers (23-52%) due to the former's longer driving distances. To effectively implement measures to control this critical risk factor, it is crucial to develop a comprehensive understanding of the factors influencing driver fatigue.

Aim The present study examines the factors influencing fatigue among professional drivers in Ghana and Norway, focusing on the role of national road safety culture and working conditions. Ghana and Norway are interesting countries to compare since the road safety record of the two countries differs significantly. The road fatality rate of Norway was the lowest in the world in the last seven years (15 fatalities per million population in 2021) (WHO, 2023b), the fatality rate in Ghana has been more than four times higher (88 fatalities per million population in 2020) (WHO, 2023a). Based on previous research of professional drivers in countries with differing national road safety culture we hypothesize that 1) individual factors like driver age and years of experience to influence fatigue, 2) work-related variables such as work pressure, working hours or commission pay contributed significantly to bus driver fatigue, 3) a relationship between national road safety culture and fatigue. The assumed relationship between culture and fatigue is that bus drivers are more fatigued by a more aggressive national road safety culture, i.e. with higher levels of aggressive violations.

Method In this study, we interviewed and distributed surveys to Ghanaian (n = 281) and Norwegian (n = 285) bus drivers, examine the factors influencing fatigue among professional drivers in Ghana and Norway, focusing on the role of national road safety culture and work pressure. In the survey we measure national road safety culture as descriptive norms, reflecting bus drivers' perceptions of what other drivers in their country do. We included items to measure aggressive driving culture, stress and pressure on the job, safety management and safety culture in the bus companies. Fatigue was measured by means of the question: "Have you in the past three months experienced falling asleep (or drowsed for a short moment) driving a bus?". We employed hierarchical logistic regression analyses to examine the factors influencing whether respondents had fallen asleep or dozed off.

Results We found that Norwegian bus drivers report considerably fewer incidents of dozing off or falling asleep during the past 3 months compared to the Ghanaian bus drivers. In Ghana, drivers affirmatively answered this question nearly five times as often as Norwegian drivers. The analysis revealed that aggressive driving culture, longer working hours, and having fixed pay were associated with increased fatigue. However, when controlling for country of residence, the associations diminished and were no longer statistically significant. Amongst drivers that are not self-employed, stress and pressure also played a considerable role in fatigue, while a higher company safety culture was associated with reduced fatigue. The qualitative data indicates crucial differences in national framework conditions influencing fatigue bus drivers' work situation in is far less regulated in Ghana, with low regulation and enforcement of bus drivers' working hours, and a higher prevalence of pay based on the number of passengers, which motivates long working hours and speeding. Quantitative data



indicates longer working hours among bus drivers in Ghana, and we should expect this to lead to higher fatigue levels in Ghana. Surprisingly, multivariate analyses of the survey data do not show this.

Discussion and conclusions Ultimately, country (i.e. Ghana vs Norway) had the most significant influence on the likelihood of drivers falling asleep or dozing off, with Norwegian drivers being considerably less likely to experience this. Surprisingly, few other variables could explain the difference between the two countries. We might suppose that the country variable is a proxy for the relatively unregulated nature of bus transport in Ghana, compared with Norway. Future research should examine this further. Bus driving in Norway and Ghana are substantially different things. The buses are different, e.g., in size and the organization of public transport. In Norway, bus transport schedules and drivers' working conditions are strictly regulated. This is not the case in Ghana, where routes, schedules and working conditions are far more arbitrary. This creates different working conditions for bus drivers in the two countries, influencing fatigue. Our study shows that the Ghanaian bus companies generally have few formal safety measures in place. This indicates that working with safety commitment and focusing on drivers' driving style and seat belt use might be effective measures to reduce fatigue. We discuss, however, whether it is sufficient for the Ghanaian bus companies to focus on organisational safety management, given the framework conditions that are negative to safety. In our qualitative data we found that the most important framework condition for bus drivers in Ghana is type of employer (commercial or institutional), which influence whether drivers have bonus wage arrangements (which lead to speeding, driving while tired), and which also influence rest rules, vehicle standard etc. The safety commitment of managers might not be sufficient, if the drivers need to maximize the bonus pay arrangement to earn their living. Thus, we also point to authorities' responsibility to change these framework conditions. A policy implication of our research is to regulate the working conditions of bus drivers in Ghana more, e.g., stricter regulation and enforcement of driving hours and work schedules. We see a connection between work stress and pressure and fatigue events, and a reasonable way of reducing driver stress is better working conditions. Our qualitative data indicates that arbitrary routes and working conditions, low enforcement of regulations, and speeding should be closer investigated. Which measures to implement and who should be responsible for following up on measures over time, like e.g the Unions, the authorities or public bus operators should also be further discussed. Future research should examine this further and discern more clearly between public and private categories of bus drivers in Ghana.

**Egner, L. E., Blom, J., Naevestad, T., Sam, E. F., & Fiangor, A. (2024, March 5-7). *Fatigue among bus drivers in Norway and Ghana: Examining the influence of working conditions and national road safety culture* [Paper presentation]. African Transport Research Conference, Cape Town.**

**Egner, L. E., Blom, J., Naevestad, T., Sam, E. F., & Fiangor, A. (2024, March 5-7). *Framework conditions, driving style, and passenger falls among bus drivers in Ghana and Norway* [Paper presentation]. African Transport Research Conference, Cape Town.**

**Naevestad, T., Sam, E. F., Blom, J., Fiangor, A., Egner, L. E., & Elvik, R. (2024, March 5-7). *Comparing national road safety culture among bus drivers in Norway and Ghana* [Paper presentation]. African Transport Research Conference, Cape Town.**

**Naevestad, T., Sam, E. F., Blom, J., Fiangor, A., Egner, L. E., & Elvik, R. (2024, March 5-7).** *Developing a simplified model for safety management system in African transport companies* [Paper presentation]. African Transport Research Conference, Cape Town.

**Naevestad, T., Sam, E. F., Farah, H., Mwamba, D., Masaki, J., Laureshyn, A., Magnusson, M., Elvik, R., & Blom, J. (2024, March 5-7).** *Potential for implementation of safe systems principles in African countries: Recommendations based on a systematic comparison of six countries* [Paper presentation]. African Transport Research Conference, Cape Town.

**Odame, P. K., Sam, E.F., Danso-Wiredu, E. Y., Hayford, S. K., Wamuchiru, E., Osman, A., & Munene, M. (2024, March 5-7).** *The journey from home: Experiences of persons with disabilities of the urban transport system in Accra Metropolis, Ghana* [Paper presentation]. African Transport Research Conference, Cape Town

**Tor-Olav Nævestad, Enoch F. Sam, Haneen Farah, Daniel Mwamba, Jaqueline Masaki, Laxman Sing Bisht, Thomas Osman Myioba, Aliaksei Laureshyn, Matilda Magnusson, Rune Elvik, Jenny Blom. (2024, October 17-18).** *Systematic comparison of Safe Systems implementation in three African and three European countries: Analysis of influencing factors and recommendations* [Paper presentation]. **Inclusive and interdisciplinary road safety research, The Hague**

## Abstract

**Introduction** The study compares road safety management in three African countries (Tanzania, Ghana, Zambia) with three EU countries with record of excellence in traffic safety and practicing Safe Systems principles (Norway, Netherlands, Sweden). Norway, Sweden, and the Netherlands are early adopters of what has been termed the Safe System Approach (termed “Sustainable safety” in the Netherlands). Norway and Sweden have the highest road safety level in world. This has to a great extent been attributed to the implementation of the Safe system approach. The study aims to: 1) Examine the alignment with Safe System principles in the road safety management systems in each country, 2) Examine factors influencing the level of alignment and 3) Develop recommendations as to how the African countries can learn from the Safe System countries in their road safety management.

**Research methodology** Analysing the studied countries’ alignment with Safe system principles for road safety management, we use a 12-point checklist developed by Varhelyi (2016) through a systematic literature review. We use two methods to fulfil the study aims. The first is an analysis of key road safety documents, e.g. road safety plans, national transport plans. The second is semi-structured interviews, mainly focus-group interviews, with 62 people working with road safety in the six countries.

**Results** The European countries’ road safety management systems align with the Safe Systems principles for road safety management. The African countries do not have visions and road safety policies like Vision Zero or Sustainable safety, e.g. with the principles of Safe System when it comes to system owner responsibility, forgiving and anticipating road system etc. However, safe System implementation is not just about vision, it also concerns the continuous improvement process: “Plan-Do-Check-Adjust”. What the European Safe System countries have in common is the existence of a continuous improvement process. They have: 1) Relatively good statistics and data on accidents, exposure and risk for different groups, 2) Comprehensive safety performance indicators (SPIs), 3) Quantified targets related

to SPIs, 4) Strategies and action plans to improve the SPIs to reach the targets, 5) Relatively clearly defined responsibilities for implementation of the measures in the action plans and 6) Performance related to this process (SPIs, targets) is monitored relatively regularly (e.g. annually). The African countries do not have this continuous improvement process to the same extent. The last road safety policies from Tanzania are e.g. from 2009.

**Discussion and conclusions** The African data indicates challenges related to the implementation of formal strategies and plans, while these seem to be far more “alive” (i.e. implemented) in the European countries. Thus, there seems to be a larger discrepancy between formal and informal aspects of road safety management in the African countries than the European; between plans and implementation. We especially point to low institutional road safety influence and lacking funding in the African countries to explain this. The point of departure for the recommendations to the African countries is resource scarcity, which requires prioritizations. The first recommendation is to choose one main road safety challenge and have a primary effort on this (e.g. pedestrian fatalities). This means to have a living continuous improvement process related to one main challenge, instead of several. The second recommendation is to establish or strengthening the lead agencies for road safety and the third is that action plans should have unique/dedicated budget for the activities. Fourth, given that road safety commitment among decision makers is fundamental, estimating the economic costs related to road traffic accidents also seems important, as this might create a “sense of urgency”.

**Nævestad, T.-O., Enoch, F. S., Masaki, J., Mwamba, D., Francis, F., Miyoba, T. O., Forward, S., Fiangor, A., Blom, J., Hesjevoll, I., Milch, V., Farah, H., Bisht, L. S., & Adanu, K. (2024, October 17–18). *Comparing national road safety culture in three African and three European countries* [Paper presentation]. **Inclusive and interdisciplinary road safety research, The Hague.****

## Abstract

**Introduction** The present study compares road safety culture (RSC) in three African countries (Tanzania, Ghana, Zambia) with three EU countries with record of excellence in traffic safety (Norway, Netherlands, Sweden). We define road safety culture as shared norms prescribing certain road safety behaviours, and thus shared expectations regarding the behaviours of others (Nævestad & Bjørnskau 2012; Nævestad et al., 2019), and shared values and attitudes signifying what is important (e.g. safety, mobility, respect, politeness) (cf. Elvebakk, 2015). Several factors that could influence RSC are national (e.g. traffic rules, the police enforcing the rules, driver licensing, and driver education). For these reasons, we could expect the existence of different national RSCs (cf. Nævestad et al., 2019). In accordance with this, previous studies have found differences in national RSC, corresponding to differences in national road safety records (cf. Nævestad et al., 2019). The present study aims to: 1) Compare road safety behaviours and RSC among car drivers in the studied countries, 2) Examine the factors influencing road safety behaviours, focusing especially on national RSC, 3) Examine the influence of road safety behaviours and other factors (e.g., demographic and work related variables) on accident involvement, and 4) Discuss factors influencing RSC in the studied countries.

**Research methodology** The study is based on two methods. The first is qualitative interviews and focus groups with drivers and national road safety experts in each studied country. The purpose is to get in-depth information about typical road safety behaviours, national RSC and factors influencing RSC. The second method is quantitative surveys distributed to representative samples of car drivers within each study country. We have conducted two

multivariate regression analyses. We employ binary logistic regression analyses to examine factors (e.g. road safety behaviours) influencing whether respondents have been involved in a traffic accident while driving a bus in the last two years. In the second analysis, we use a linear regression analysis, analysing how RSC and other factors influence road safety behaviours. The three African and European countries were selected for comparison since the road safety record of these countries differ substantially. While the road fatality rates of Norway, Sweden and the Netherlands were 15, 20 and 33 per million population in 2021, corresponding numbers in Ghana, Zambia and Tanzania were 88, 111 and 284. Thus, the average number of road fatalities in the European countries is 26 per million population, while it is 200 in the African countries. In accordance with these differences, we hypothesize differences in national RSC in the studied countries (Hypothesis 1). Based on previous research, we expect a relationship between RSC and road safety behaviours (Hypothesis 2). The background is that descriptive norms create a “mild social pressure” to do as the others do (Cialdini et al 1990). National RSC concerns what we think of as “normal” road safety behaviour in our own country, what we generally expect from other road users (Nævestad et al 2019). Identifying differences in the types of road safety behaviour that are considered “normal” in the studied countries is important, as this might shed light on the different road safety records. Finally, we also expect a relationship between road safety behaviours and accident involvement (Hypothesis 3).

Discussion and conclusions Discussing factors influencing RSC in the studied countries, we focus on five factors: road user interaction, road infrastructure, education, enforcement, national economy and composition of road users. We also relate the differences in RSC to different levels of Safe system implementation in the studied countries. Based on the observed relationships and a discussion of factors influencing road safety culture in the studied countries, we suggest measures to improve national road safety culture

**Sam, E. F. (2023, October 16-19).** *Walking as a mode of transport in ‘unwalkable’ contexts: Cross-city experiences from Ghana and Nigeria* [Paper presentation]. 23rd Walk21 Conference (Pre-conference event), Kigali.

**Sam, E. F. (2023, March 21-23).** *Removing barriers to disability-inclusive urban transport systems in Accra and Nairobi (SITUATE 2)* [Paper presentation]. Volvo Research and Educational Foundations (VREF) Research Workshop Urban Access and Mobility, Paris

**Adu-Boahen, K. (2023, Dec 12-15).** \*\* [Paper presentation]. From funding to communicating science: The ultimate research writing workshop, Virtual

**Adu-Boahen, K. (2023, November 7-16).** \*\* [Paper presentation]. Ensuring data integrity & compliance in the digital lab: Insights and prevention strategies, Virtual. WAS Virtual Conference - Fall 2023.

**Adu-Boahen, K., & Kyeremeh, S. (2023, June 7).** *Investigation of abundance and spatial distribution of marine debris on Ghanaian urban coastal beaches* [Paper presentation]. Faculty of Social Sciences Education Seminar, Winneba, Central Region.

**Adu-Boahen, K., Owusu, E. S., & Esi, T. A. (2023, January 26–28).** *Fidelity of Implementation (FOI) dissemination meeting* [Paper presentation]. Fidelity of Implementation (FOI), Accra, Greater Accra.

**Adu-Boahen, K., Frimpong, K., Mensah, D. K. D., & Okyere, Y. E. (2023, November 17).** *Implications of traditional beliefs and practices on natural resource conservation and management: Evidence from some selected urban rivers in Ghana* [Paper presentation]. Annual American Association of Geographers Conference, East Lakes Branch, University of Toledo.

**Dadson, I. Y., Semabia, P. P., & Adu-Boahen, K. (2023, August 30 – September 2).** *Shoreline movements and instability of the Fosu Lagoon barrier beach at Bakaano in Cape Coast, Ghana* [Paper presentation]. Ghana Geographers Association, Annual Conference, Cape Coast, Central Region.

## **Books**

**Dadson, I. Y, Adu-Boahen, K., Owusu, B. A. (2024).** *Essential of physical geography.* (4<sup>th</sup> edition). UCC Press.

**Danso-Wiredu E. Y., & Weiler, J. (Eds.) (2023).** *Winneba: The Geography, Peoples and Systems.* DigiBooks Ghana Ltd. <https://www.researchgate.net/publication/369658557>

### **Abstract**

The book draws on primary and secondary data from various sources to unearth the dynamics and processes of the growth of Winneba as a small city and the functions the town performs in national development. It uses a multidisciplinary approach to look at various research themes which holistically describes the Winneba town: history, culture, geography, population; economic activities; mapping tourist areas and settlement types in relation to the socio-economic trends and land use in the town

**Danso-Wiredu, E. Y. (2023).** *Our environment and us. Ghana in the global context.* (2<sup>nd</sup> edition). DigiBooks Ghana Ltd. <https://searchworks.stanford.edu/view/13747878>

### **Abstract**

The book highlights both spatial and temporal constraints on human beings to conceptualize and act swiftly on threats posed by the environment. Globally there is a wide difference between the lived experiences of the environment, between the western and developing countries. As most developing countries struggle to find their daily sustenance and therefore give no regard to how they are obtained, some developed countries have reached a stage that they are mindful of sustenance without compromising environmental sustainability. In the face of an absolutely unprecedented emergency, society has no choice but to take dramatic action to avert a collapse of civilization. Either we will change our ways and build an entirely new kind of global society, or they will be changed for us.

**Asamoah, Y. (2023).** *Mining-induced displacement's impact on children's education: children of school-going age in Newmont's 'Fenceline communities' in the Asutifi North District, Ghana.*

## Department of Economics Education

### Articles In Journal

**Ababio, A. G. (2024).** "It will be difficult but doable": an exploratory study on Mobilizing churches in Ghana for poverty reduction. *International Journal of Social Economics*, na, na. <https://doi.org/10.1108/IJSE-08-2023-0670>

#### Abstract

**Purpose** – Religion could drive development. Although Ghana is touted as the most religious country in the world, notably, some Charismatic/Pentecostal churches operate at the expense of community development and members' welfare. This study sought to achieve three objectives: to determine whether there is an opportunity for organizing the various churches for interfaith cooperative collective action; to assess the association between people's religiosity and the propensity to join interfaith cooperative collective action and to assess people's perceptions of the institutional framework that could facilitate the organization of the religious community in Ghana for interfaith collective action.

**Design/methodology/approach** – Descriptive statistics and an ordered probit model (OPM) were used to analyze cross-sectional data from a representative sample of households in the Greater Accra Region. Thematic analysis was also used to analyze the qualitative data.

**Findings** –The study found that generally, there is a positive response to a proposal to mobilize churches in an interfaith cooperative collective action, but distrust poses a great threat to interfaith cooperative collective action. The study also found that affiliation with the Seventh-Day Adventist Church and Pentecostal/ Charismatic is negatively (positively) associated with the propensity to join a collective action, respectively. Finally, the results of the study found that accountability, proper management and fair distribution of the proceeds from a collective action will help in mobilizing churches in Ghana in an interfaith collective action.

**Originality/value** –This is the first major study to explore the possibility of interfaith collective action among religious denominations aimed at accelerating poverty reduction and wealth creation in any developing country

**Ababio, A. G., Osei-Fosu, A. K., & Dramani, J. B. (2023).** Religion, social capital and poverty in Ghana: Correlations and explanations. *International Social Science Journal*, 73(248), 559-581. <https://doi.org/10.1111/issj.12408>

#### Abstract

Religion is a key source of social capital for poverty reduction. This study used nationally representative data from households (N = 16,772) in Ghana to determine the association between religious affiliation and the incidence of poverty. Descriptive statistics, multilevel mixed-effect logistic model and nearest neighbour matching estimator were used to analyse the data. We found that relative to the unaffiliated, except affiliation with Other Christian



and Other religions, affiliation with Catholic, Protestant, Pentecostal/Charismatic, Islam and Ahmadiyya is negatively associated with the incidence of absolute poverty. In urban areas, relative to those who belong to no religion, except affiliation with Other religions, affiliation with all the major religious denomination is negatively associated with the incidence of absolute poverty. The study also found that, compared to all other denominations, affiliation with Ahmadiyya and Catholic is positively associated with the incidence of poverty in Ghana. We concluded that in Ghana, religious affiliation reduces the odds of falling into poverty for those who live in urban areas, although some religious norms and values could expose households to poverty. The study recommends that the introduction of faith tax on religious denominations and conditional transfer programmes could help maximize the effect of religious affiliation on poverty reduction in Ghana.

**Eduboah, E. J. (2024). ‘Role of financial openness in Ghana’s financial sector development episode’.** *Journal of Financial Economic Policy*, Vol. 16(No 3), pp. 348-370. <https://doi.org/10.1108/JFEP-07-2023-0189>

## **Conferences/Workshops/Symposia/Seminars with Presentations**

**Ababio, G. A. (2023, July 3).** *Towards the franchising of Pentecostal/Charismatic churches for development: An exploratory analysis of the involvement of religious denominations in poverty reduction activities in Ghana [Paper presentation]. Faculty of Social Sciences Education Seminar, Winneba, Central Region, Ghana.*

### **Abstract**

Undoubtedly, most Orthodox religious denominations have contributed immensely towards poverty reduction in Ghana. However, in recent years, the modus operandi of some Pentecostal/Neo-Pentecostal churches have exacerbated public disenchantment in respect of the perceived role of the church in national development. This study compared the performance of Pentecostal/Neo-Pentecostal churches to other religious denominations in terms of their level of involvement in poverty reduction activities in Ghana. The study also constructed some performance indices to objectively assess the level of involvement of religious denominations in poverty reduction activities. Data for the study comes from the Ghana Living Standard Survey, round 7 (GLSS-7) and Religion in Poverty Reduction Survey (RPRS) from Greater Accra Region, Ghana. Descriptive statistics, logit model, multinomial logit model and Mantel-Haenszel differential information functioning were used to analyze the data. The study found that the presence of Pentecostal/Charismatic as the major religious denomination in rural communities was significantly negatively associated with the provision of drinking water and improvement in social amenities but the presence of Protestant denominations as the major denomination in rural communities was positively associated with the provision/maintenance of health facilities. The study also found that the presence of Protestant denomination as the major religious denomination in a community was found to be negatively associated with the odds that the welfare of rural communities became worse. Results also show that all religious denominations obtained a low score on both the Religious Denominations in Social Service Delivery Index (RDSSDI) and Religious Denominations in Poverty Reduction Index (RDPRI) but obtained medium score on Religious Denominations in Awareness Raising Index (RDARI). The study concludes that many

Pentecostal/Charismatic churches operate as free-standing entrepreneurial organizations, and therefore contribute little to community development. Among other things, the study recommends that government should enact and enforce institutional framework that requires the franchising of the establishment and operations of Pentecostal/Charismatic churches to maximize their impact on poverty reduction in Ghana.

Keywords: Religious denominations, Pentecostal/Neo-Pentecostal, franchising model, religion in poverty reduction index, religious denominations in social service Delivery index, religious denominations in awareness raising index

## Department of History Education

### Articles In Journal

**Adu-Boahen, A. O. (2024).** Exploring empathic thinking among history student-teachers in Ghana: A case of Dr. JB Danquah's letter to Dr. Kwame Nkrumah in prison. *Social Sciences & Humanities Open*, 5, 100850. <https://doi.org/10.1016/j.ssaho.2024.100850>

**Agbofa, F. J. K., Mensah, D. K. D., Opoku-Amankwaah, K., Kyeremeh, S., & Adu-Boahen, A. O. (2023).** Teachers' concerns on the implementation of the standards-based curriculum in Ghana: A case of New Juaben North Municipal. *Creative Education*, 14(5), 1076–1093.

**Amoako-Gyampah, A. K. (2023).** Managing waste: The provisioning of public latrines and the disposal of night soil in southern Gold Coast (Ghana), c. 1878 - 1950. *he Gold Coast*, c., 1880 – 1950. *Journal of Social History*, 57(2), 244 - 267. <https://doi.org/10.1093/jsh/shad017>

**Amoako-Gyampah, A. K. (2023).** Sanitation and public hygiene in rural and mining communities in colonial Ghana, c. 1878 – c. 1950. *Journal of West African History*, 9(2), 65-86. <https://muse.jhu.edu/article/923487>

### Article(s)/Chapters in an Edited Book

**Adu-Boahen, A. O., & Akansor J. (2024).** Learning difficult histories: The role of monuments and museums. In G. Boadu & C. Adabo-Oppong, *History education in African schools: Perspectives and practices*. Palgrave Macmillan.

**Adu-Boahen, A. O., & Essiaw, P. (2023).** Re-introducing history into the Ghanaian basic school curriculum: A roadmap and concerns from classroom practitioners. In A. K. Amoako-Gyampah, B. Lundt, & E. A. Agyeman, *Education in Ghana: History and politics*. Langaa RPCIG.

**Adu-Boahen, A. O., & Oppong, C. A. (2023).** Testing the understanding of historical significance among pre-service teachers in Ghana. In M. Furrer, P. Gautschi, & N Fink, *Why history education?* Wochenschau Verlag.

## Conferences/Workshops/Symposia/Seminars with Presentations

**Adu-Boahen, A. O., Adjayi, E., & Essiaw, P. (2024, March 26-27).** *Examining the impact of empathy-based teaching on understanding the transatlantic slave trade in a Ghanaian Senior High School* [Paper presentation]. **7th Social Sciences Conference, Bringing the Gown to Town,, Winneba, Central Region. Ghana.**

**Adu-Boahen, A. O. (2023, January 18).** *Embracing the past: Transatlantic slave trade in Ghana and the Holocaust in Germany* [Paper presentation]. **Becoming vulnerable ambivalent solidarities: Controversies over antisemitism and colonial racism in history and memory politics, Berlin, Virtual.**

**Adu-Boahen, A. O., & Opong, C. A. (2023, September 14-17).** *Why history education? Exams as a mirror for teaching and learning history (The Ghanaian perspective)* [Paper presentation]. **Why History Education? Exams as a Mirror for Teaching and Learning History, Luzern**

## Books

**Amoako-Gyampah, A. K.; Lundt, B.; Agyemang, A. E. (2023).** *Education in Ghana: History and Politics.* Langaa RPCIG, . <https://www.amazon.com/Education-Ghana-Akwasi-Kwarteng-Amoako-gyampah/dp/9956553999>

# Centre For African Studies

## Articles In Journal

Skinner, K., Salifu, J., & Adomako Ampofo, A. (2024). 'The most extensive reform ever made in the private law of Ghana': a political history of the 1985 Intestate Succession Law. *Women's History Review*, 34, 1–21. <https://doi.org/10.1080/09612025.2024.2367801>

### Abstract

Ghana's 1985 Intestate Succession Law (PNDC Law 111) is a notable example of attempts by postcolonial African states to introduce new forms of protection for widows and children in cases of death 'intestate' (that is, when the deceased person had not made a valid will). Whilst some legal scholars depicted Law 111 as a radical departure from customary laws pertaining to marriage and property, feminist scholars have been more sceptical, pointing to deficiencies in both the letter and implementation of the law, and advocating for further reform. This article is driven by a historical question: given that several previous governments had considered the issue of intestate succession but had not actually reformed the law, why did the military regime of Flight Lieutenant Jerry Rawlings decide upon Law 111 in 1985? The national archives for this period are fragmentary, but we draw from newspapers, 'grey literature', and oral history interviews to trace the prolonged struggle over intestate succession, suggest what motivated the Rawlings' regime in 1985, and identify the compromises that were made. By locating Law 111 in Ghana's postcolonial political history, we nuance established typologies of women's organisation, activism, and advocacy.

Salifu, J. (2023). **Becoming a social worker: Personal and professional identity formation among social welfare officers in Ghana.** *Journal of Comparative Social Work*, 18(2), 180–206. <https://doi.org/10.31265/jcsw.v18i2.675>

### Abstract

Despite being the subject of numerous research, professional identity in social work remains an important yet contentious concept. The aim of this article is to contribute to the literature on professional identity in social work by reflecting on the mutual development of the personal and professional identities of social workers in Ghana. Interviews were conducted among 20 social workers in two regions of Ghana, the northern and central regions. The evidence shows that the identity of social workers is shaped by two major factors – the statutory legal regime in which they operate, and the professional principles they apply in their work. Understood within the frame of social identity theory, the narratives of the social workers indicate how identifying with the professional group bestows distinctiveness and a change in personal identity. This change is reflected in their attitudes and value judgements of previously taken-for-granted socio-cultural practices. But while they firmly identify with the state and the professional principles, the social workers actively attempt to build local authenticity into their professional practices.

Skinner, K., Salifu, J. & Adomako Ampofo, A. (2023). 'Edited and approved by women for maximum benefit of all readers': Newsprint journalism, the International Women's Year and the remaking of a gendered national public in 1970s Ghana. *Gender & History*, 35, 1–17. <https://doi.org/10.1111/1468-0424.12745>

## Abstract

During the International Women's Year (IWY) of 1975, United Nations bodies made concerted efforts to ensure global awareness and understanding of the IWY aims of equality, peace and development, via the mass media. In this article, we engage with these strategies of global information distribution from the vantage point of Ghana, West Africa. Drawing from interviews with women journalists and examples from the women's pages of the national state-owned Daily Graphic newspaper, we argue that the onset of the IWY presented an important opportunity for women living under the constraints of military rule. A small but determined group of journalists capitalised on a longer history of readers writing into newspapers, and on lower levels of government surveillance of women's pages. Working with and through multi-layered forms of address, they adapted the homey, gossipy women's pages and turned them into spaces of engagement between men and women as co-citizens. During the IWY, connections were forged between international events and agendas and 'domestic issues'. By hosting older debates about widowhood, inheritance and polygyny, and newer debates about family planning, formal education and employment, the women's pages positioned Ghanaian women as a key constituency in national development, but also enabled more assertive critiques of men's privileges.

Otoo, S., Bordoh, A., Gyasi, K., & Dankwa, S. (2023). An appraisal of work-family conflict on the management staff of star-rated hotels. *Universal Journal of Business and Management*, 3(1), 28-45. <https://www.scipublications.com/journal/index.php/ujbm/article/view/804>

Eshun, I., Iddrisu, D., Bordoh, A., & Dankwa, S. (2023). Cultural challenges affecting effective community participation in potable water management in selected rural communities in the Upper West Region of Ghana. *Global Journal of Science Frontier Research (H)*, 23(6), 32-43. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4675130](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4675130)

Anderson Jr, G., & Tweneboah, S. (2023). Neo-prophetism and the commercialisation of religion in Ghana. *Oguaa Journal of Religion and Human Values (OJORHV)*, 7(1), 62-82. <https://doi.org/10.47963/ojorhv.v7i1.1410>

Atiemo, A., & Tweneboah, S. (2023). Religious conversion, proselytization, and the marginalisation of indigenous religions in Ghana. *Journal of Religion in Africa*, 53(3-4), 317-340. <https://doi.org/10.1163/15700666-12340268>

Tweneboah, S. (2023). Religion, human rights, and the parliamentary regulation of "One-Man Churches" in Ghana. *Journal of Church and State*, 65(1), 24-45. <https://doi.org/10.1093/jcs/esac074>

Tweneboah, S. Nangwele, L., & Baami, P. A. (2023). Political vigilante violence in Ghana: Its human rights implications. *Journal of African Elections*, 22(2), 196-218. <https://doi.org/10.20940/JAE/2023/v22i2a9>

Kuranchie, A., & Bampo, J. (2023). Continuous professional development for public school teachers: Benefits and concerns. *Journal of African Education*, 4(1), 137-158.

Yeboah, A., & Kuranchie, A. (2023). Challenges teachers encounter while seeking for promotion. *European Journal of Education Studies*, 10(2), 35-49.

### **Article(s)/Chapters in an Edited Book**

Kuranchie, A. (2023). Older persons' utilisation of mobile phone: Evidence from two municipalities in Ghana. *Contemporary issues in ageing in Ghana: A multidisciplinary approach*. In C. C. Mate-Kole and A. Essuman *Contemporary issues in ageing in Ghana: A multidisciplinary approach* (129-148). Digibooks.

Kuranchie, A., & Obeng, I. J. (2023). Academic, social and cultural experiences of students in a university outside their ethnic societies. In *Education and New Learning Technologies* (15th ed., 1339-1345). EDULEARN.

Tweneboah, S. (2024). Traditional chiefly power and its implications for peacebuilding, reconciliation and human rights in Ghana. In M. C. Green, J. B. Sourou, & C. Gnonzion, *Law, religion and reconciliation in Africa*. African Sun Media. <https://doi.org/10.52779/9781991260277>.

Tweneboah, S. (2023). Moral panic, social exclusion, and the human rights of same-sex partners in Ghana. In N. Rajput, A. Katyal, & R. Katyal, *Global LGBTQ+ Concerns in a Contemporary World: Politics, Prejudice, and Community*. IGI Global, Hershey. <https://doi.org/10.4018/978-1-6684-5568-5.ch008>.

Tweneboah, S. (2023). "Seeking the face of God in trying times": Law, religion and the Covid19 crisis in secular Ghana. In M. C. Green, F. Kabata F., & F. Sibanda, *Law, Religion, Health and Healing in Africa*. African Sun Media. <https://doi.org/10.52779/9781991201911/02>.

### **Conferences/Workshops/Symposia/Seminars with Presentations**

Tweneboah, S. (2024, May 19-21). *Pentecostal moral leadership, Human rights and the legal regulation of LGBTQI+ activities in Ghana* [Paper presentation]. African Consortium for Law and Religion Studies Conference, Victoria Falls, Zimbabwe.

Tweneboah, S. (2023, May 14-17). *Traditional chiefly power and its implications for peacebuilding, reconciliation and human rights in Ghana* [Paper presentation]. African Consortium on Law and Religion Studies conference, Abidjan, Cote d'Ivoire.

### **Published Proceedings of Conferences/Workshops/Symposia/Seminars**

Kuranchie, A. (2023). Social innovation by higher education institutions: The case of two distinct universities in a municipality in Ghana. In *Technology, Education and Development*, 17 INTED, Valencia-Spain.



# SCHOOL OF BUSINESS

## Department of Accounting

### Articles In Journal

**Adegbedzi, D., Bosomtwe, E., & Omane-Adjekum, C. (2024). Short-term financial management practices and SME performance in Ghana: A case study of Effutu Municipality. *Open Access Library Journal*, 11(7), 1-23. <https://doi.org/10.4236/oalib.1111799>**

#### Abstract

The study sought to examine the effect of Cash Management (CASH), Inventory Management (INV), Receivables Management (REC), and Payables Management (PAY) Practices on the Performance (PERF) of SMEs in the Effutu municipality. The inquiry used an explanatory design and quantitative approach. By employing a purposive sampling technique to draw 130 SMEs and a Partial Least Squares-Structural Equation Modelling approach, the results indicated that all the short-term financial management practices had positive and significant effects on the performance of SMEs. The findings imply that ensuring sound short-term financial management practices could improve SMEs' performance. The paper recommends that SME managers negotiate for payables days longer than REC days. The government is implored to institute tax incentives and soft loan schemes to encourage SME growth. The study brings new insight into the discussion on WCM practices and their effect on SMEs' performance using primary data and non-accounting base measures.

**Frimpong, A., & Omane-Adjekum, C. (2024). Investigating morality among accounting students across gender. *Open Journal of Accounting*, 13(3), 100-115. <https://doi.org/10.4236/ojacct.2024.133007>**

#### Abstract

Previous studies have assessed the morality of accounting students in different countries. However, these studies have revealed different results. Besides, these studies have used different moral abilities of Rest's four components of morality to determine the morality of students. This study, therefore, determines the level of morality of accounting students, as well as examines the difference in morality among accounting students based on gender. Moral efficacy, moral meaningfulness and moral courage were used as indicators in determining the morality of students. Through the proportional stratified sampling technique, a sample of 250 accounting students was selected from a public university in Ghana to respond to a questionnaire. Mean, standard deviation, and Mann-Whitney U test were used to analyse the data. It was found that accounting students have a high level of morality. Also, it was revealed that there was no statistically significant difference between male and female accounting students' level of morality.

**Omane-Adjekum, C., Bosomtwe, E., & Adegbedzi, D. (2024). Monetary policy, institutional quality and economic growth: The Ghanaian narrative. *Open Access Library Journal*, 11(7), 1-25. <https://doi.org/10.4236/oalib.1111798>**

### Abstract

The multiplicate role of institutional quality in the monetary policy-economic growth nexus from the Ghanaian perspective has remained unexplored. This investigation explores two objectives. First, to analyse the effect of monetary policy on economic growth and second, to examine the multiplicative role of institutional quality in the monetary policy-economic growth nexus in Ghana. The study used secondary data collected from 1990-2021 and employed the bound testing to cointegration and ARDL technique. The result revealed a positive significant effect of monetary policy rate on economic growth in both the short and long run. However, money supply showed a statistically significant positive effect on economic growth in the long run yet a negative effect in the short run. Additionally, the rule of law and regulatory quality demonstrated a significant positive moderating role in the long run but a significant negative role in the short run in the monetary policy-economic growth nexus.

**Achiyaale, R. A., Adalety, J. E., Mbilla, S. A. E., & Tsorhe, D. K. (2023). Economic growth implications of inflation targeting and inflation volatility: An emerging economy's perspective. *Journal of Economics, Management and Trade*, 29(9), 134-149.**

**Mbilla, S. A. E. (2023). Social drivers and tax revenue: The mediation effect of tax compliance. Evidence from an emerging economy. *Cogent Economics and Finance*, 11(2), 1-11.**

**Ahmed, I. A., Akyen, B., & Anaman, P. D. (2023). Unlocking the growth potential of SMEs in Ghana: An investigation of financial management practices and challenges. *Journal of Research in Business and Management*, 11(10), 55-65. <http://www.questjournals.org>**

### Abstract

The study aimed to investigate the influence of financial management practices on the growth of Small and Medium Enterprises (SMEs) in Ghana. Specifically, the study examined the financial management practices employed by SMEs and their impact on SMEs' growth, and also, evaluated the challenges faced by SMEs in relation to financial management practices. This study adopts a sequential explanatory research design, using a sample of 100 SMEs in a single region in Ghana. Quantitative data analysis was conducted using SPSS, while qualitative data were analysed using a thematic analysis approach. Triangulation was employed to strengthen the robustness of the study. The study found that financial management practices, such as working capital management, financial record keeping, financial analysis practice, financial reporting analysis, capital budgeting, and inventory management, had a significant impact on the growth of SMEs in Ghana. The study also revealed that SMEs face several challenges in relation to financial management practices, including a lack of financial management skills and access to finance. The findings of the study provide valuable insights for policymakers, entrepreneurs, and SME managers on the importance of prioritizing financial management practices in enhancing the growth of SMEs. The study's use of triangulation in analysing data provides additional robustness to the study's findings. The findings of this study highlight the importance of effective financial management practices in enhancing SME growth in Ghana. Policymakers, entrepreneurs, and SME managers should prioritize the development of financial management skills to support the growth of SMEs.

**Anaman, P. D., Ahmed, I. A., Appiah-Oware, F., & Somiah-Quaw, F. (2023). External auditors' impact on corporate governance of unlisted firms: A developing country perspective. *SEISENSE Business Review*, 3(1), 22-36. <https://doi.org/10.33215/sbr.v3i1.904>**

### **Abstract**

**Purpose:** The purpose of this study is to examine the impact of external auditors on the corporate governance of unlisted firms in Ghana. **Design/Methodology:** The study adopts a quantitative research survey design approach. Closed-ended questionnaires were distributed to 485 respondents using the purposive and convenience sampling method. Inferential statistics were conducted on the data collected using IBM SPSS Statistic v23. **Findings:** The study found that the presence of boards, familiarity with corporate governance codes, and adherence to the code of conduct are prevalent in unlisted firms in Ghana. Also, the study found that the role external auditors play in unlisted firms in Ghana has a positive and significant impact on corporate governance. **Practical Implications to Business or key stakeholders:** The findings of the study highlight the importance of establishing effective boards, adhering to corporate governance codes, and actively engaging external auditors to strengthen governance practices. Stakeholder engagement, training, risk management, and policy enhancements are also crucial in fostering transparency, accountability, and sustainable business growth. Implementing these implications can enhance corporate governance, build stakeholder trust, and promote long-term organizational success

**Anaman, P. D., Ahmed, I. A., Suleman, A. R., & Dzakah, G. A. (2023). Environmentally sustainable business practices in micro, small, and medium enterprises: A Sub-Saharan African country perspective. *Business Perspectives and Research*, 1-16. <https://doi.org/10.1177/22785337231162740>**

### **Abstract**

In line with the natural resource-based view, this paper explores the sustainable business practices (SBPs) of Ghanaian micro, small, and medium enterprises (MSMEs). Qualitatively, the study interviewed eight MSME operators and middle-level managers purposively to assess their use of SBPs and how it affects their businesses. Data collected were edited, coded, and grouped under themes based on the Braun and Clarke thematic framework. The study identified holistic environmental management, eco-preneurship, and regenerative practices as the environmental stewardship drivers among Ghanaian MSMEs. Also, integrated vision and strategy, process efficiency and resource optimization, and risk profiling drive process excellence. Finally, sustainability-focused leadership, internal advocates and change agents, and ongoing education and awareness as drivers for sustainability-oriented culture. The business practices of organizations have continually impacted the immediate environment within which they operate. Consequently, there is a clarion call for businesses to engage in SBPs to mitigate the effect of their operations on the environment. The study brings to bear the SBPs Ghanaian MSMEs are engaged in and how they affect their operations and survival, especially in this era of sustainability

**Anaman, P. D., Dzakah, G. A., Anyass, I., Ahmed, O. N., & Somiah-Quaw, F. (2023). Understanding Ghanaian banks' views on the influence of ESG reporting on their financial performance. *Journal of Business and Management*, 25(8), 10-21. <http://www.iosrjournals.org>**

### Abstract

The present study aims to examine the influence of Environmental, Social, and Governance (ESG) performance on the financial performance of banks operating in Ghana. Drawing from the theoretical frameworks of stakeholder and resource-based view theories, this research study adopts a quantitative methodology to examine data collected from a sample of eight banks in Ghana and includes a total of 180 respondents. This study employs the partial least squares structural equation modelling (PLS-SEM) technique to assess the correlation between environmental, social, and governance (ESG) performance and financial performance. Based on the analysis, the findings suggest that while Social and Governance performances significantly influence the financial performance of banks, Environmental performance does not present a significant relationship. This highlights the crucial role of social responsibility and robust governance in promoting financial success within Ghana's banking sector, while the non-significant impact of environmental performance warrants further investigation. These insights offer valuable direction for policy-making and strategic decisions in the banking sector, underscoring the importance of effective ESG practices for financial performance.

**Amaning, N., Osei, R. A., Amoah, R., Andzei, T. A., Amoako, K. O., & Quansah, E. (2023). Do audit report disclosures significantly predict firm failure? The Ghanaian context. *International Journal of Critical Accounting*, 13(3), 227-248. <https://doi.org/10.1504/IJCA.2023.136830>**

### Abstract

This study aims to examine the capability of audit report disclosures in predicting firm failure in Ghana. An online survey was adopted in soliciting 337 responses from financial analysts and external audit practitioners, using purposive and convenience sampling techniques. The Smart PLS 3.0 analytical tool was used in analysing the responses. The outcomes of the study show that audit report disclosures significantly [p value < 0.001, effect size ( $f^2 = 1.232$ ),  $R^2 = 0.552$ ] predict firm failure in Ghana; both exogenous and endogenous variables contribute to bankruptcy. The results of the study have implications for researchers and regulators as the audit report is considered a useful tool in detecting and avoiding business failure in Ghana.

**Asiedu, M. A., & Mensah, E. (2023). Re-examining the corporate governance–Firm performance nexus: Fresh evidence from a causal mediation analysis. *Cogent Economics & Finance*, 11(1), 2223414. <https://doi.org/10.1080/23322039.2023.223414>**

### Abstract

The role that corporate governance (CG) plays in contributing to firm performance enhancements has been widely acknowledged. However, the conduit through which CG is able to affect firm performance is an emergent theme. This paper re-examines the relationship between corporate governance (CG) and firm performance via means of causal mediation analysis using financial reporting quality (FRQ) as a mediator. The study samples 104 companies listed on the respective stock markets of nine sub-Saharan African countries,

and collects annual reports data spanning over a period of 2007 to 2019 for analysis using causal mediation. The study finds that a causal relationship exists between CG and firm performance, albeit through the transmission mechanism of FRQ. Again, the study finds that CG positively affects firm performance both directly and indirectly through the mediation of FRQ. The study is useful in highlighting for managers and CG practitioners attention, an important channel through which CG would favourably affect firm performance, being FRQ. The current study is unique, in that it is the first panel multi-cross-country investigation within Africa to introduce FRQ in the study of the relationship between CG and firm performance. It therefore extends the agency theory by employing FRQ as a mediating variable in the CG—firm performance nexus within the African context.

**Asiedu, M. A., & Opoku, M. O. (2023). Determinants of Strategic Management Accounting Information Disclosure under a Multi-Theoretical Framework: Evidence of Listed Firms on Ghana Stock Exchange. *The International Journal Of Business & Management*, 11(6), 22-54. <https://doi.org/10.24940/theijbm/2023/v11/i6/BM2306-010>**

## **Abstract**

Sharing information is vital for decision-making as it helps mitigate risks by providing a wealth of relevant information. When the perceived risk is low, it ultimately reduces the costs associated with making a decision. Strategic Management Accounting Information is an important resource for decision-making. This study sought to identify the determinants of strategic management accounting information disclosure (SMAID) from multiple perspectives. The study used a non-experimental, quantitative correlational design to analyze 35 out of 36 firms listed on the Ghana Stock Exchange for a period between 2010 and 2019. The study employed a linear dynamic panel data model with a one-step system GMM. The model included lagged values of the dependent variable and accounted for unobserved panel-level effects. It was discovered that Board subcommittees have non-linear relationships with SMAID. The previous year's subcommittee negatively impacts SMAID, while the current year's has a positive influence. Past disclosures of strategic management and competitor accounting information have a positive impact on current SMAID. Past customer accounting information disclosures also positively influenced the current SMAID. The study reveals that past disclosures of strategic costing information positively and statistically affect current aggregate SMAID. It is recommended that firms establish effective board subcommittees that can provide oversight and guidance to the management team. Policymakers should consider enforcing the presence of such sub-committees to ensure high-quality and sufficient disclosure of SMAID. Maintaining a high level of SMAID from the previous year can positively impact the current year's SMAID, enabling firms to make better-informed decisions and enhance overall performance.

## Article(s)/Chapters in an Edited Book

Essel, I. K., Omame-Adjekum, C., Mbilla, S. A., & Abdulai, E. (2024). Disaggregated environmental taxes on energy intensity: A global perspective. In A. Rafay (Ed.) *Modern concepts and practices of climate finance*. IGI Global, Hershey, PA. <https://doi.org/10.4018/979-8-3693-2117-1.ch015>.

### Abstract

This study examines the impact of various environmental taxes on energy intensity using panel data from 20 European countries and 17 Sub-Saharan African countries for the period 2000-2019. The autoregressive distributed lag model (ARDL) was used to analyze both the long-term and short-term effects, employing a Pool Mean Group estimator. Results indicate that the influence of disaggregated environmental taxes, specifically air pollution taxes and climate change taxes, on energy intensity is not always consistent across different regions. The findings highlight that the effects vary based on income groups and time periods. These results suggest that policymakers need to tailor environmental tax policies to the unique economic and temporal contexts of each region, balancing the goals of economic growth and environmental sustainability.

## Department of Applied Finance and Policy Management

### Articles In Journal

Akromah, B., Daniels, E., & Kusi, B. A. (2024). Does financial sector transparencies tame government debts in Africa: Exploring for complementarities and nonlinear threshold effects. *Cogent Economics & Finance*, 12(1), 1-22. <https://doi.org/10.1080/23322039.2024.2345303>

### Abstract

Despite evidence that improving financial sector transparency (FST) can help tame clientele (households, businesses and corporate) debts, the empirical literature fails to explore how improving FST can lower/tame the unsustainable soaring government or (regulator) debts, particularly in Africa where alternative government debt management is inevitable. Hence, this study examines the complementarity and nonlinear threshold effects of private and public sector-led financial transparencies on government debts in Africa for the first time. Using a dynamic GMM panel data strategy covering periods between 2004 and 2020, the results show that the joint term of public and private sector-led financial sector transparency has complementary-synergetic effects on long-term debts and interest on debts while having substitutive effects on gross and short-term government debts, implying that private and public sector-led financial transparencies are substitutes to each other or can be used to complement gross and short-term government debts but complementary on long-term debt and interest on debts. Similarly, it is reported that there is a nonlinear inverted U-shaped threshold effect of financial sector transparencies on government debts, implying that financial sector transparencies must reach a minimum threshold/level to induce the desirable reducing effect of financial sector transparencies on government debts in Africa. These results create awareness of how financial regulators can employ FST as a debt-reducing tool and require policymakers to expand and deepen FST information to hasten it and reinforce the reducing effect of financial sector transparencies on government debts.



**Forson, J. A., Braimah, A. I., Asiamah, S. K., Kuranchie-Pong, R., Daniels, E., & Adjavon, S. E. (2023). Banking supervision and nonperforming loans in Africa: does institutional quality matter in the Ghanaian banking space?. *Journal of African Business*, 24(3), 384-403. <https://doi.org/10.1080/15228916.2022.2087443>**

### **Abstract**

In this paper, we reexamine the determinants of nonperforming loans through the impact of supervisory devices in credit risk management in Africa. The paper employs bank-specific, macroeconomic and institutional data for a panel of 14 universal banks over the period 2009 to 2020. We develop models that capture the role of regulatory supervision on credit risk. Findings from the Panels Corrected Standard Errors (PCSE) and the system GMM shows that previous year's NPL and inflation significantly affect NPLs in the banking space of Ghana. Bank size and financial development are inversely associated with NPLs. The interactive term of regulatory quality and government effectiveness on NPLs has net negative effect. This suggests that regulatory quality enhances the reductive effects of government effectiveness on NPLs. Our findings in general lend credence to the financial instability theory as NPLs in the Ghanaian context has been the outcome of activities of speculative borrowers.

**Atitianti, P. A., Asiamah, S. K., Arthur, B., & Duku, J. A. (2024). Does Aid Improve Local Wealth? Micro-Level Evidence from Africa. *Journal of International Development*, 1, 1-21. <http://doi.org/10.1002/jid.3907>**

### **Abstract**

This paper adopts a micro-level analysis to assess the effect of aid from China and the World Bank on the wealth of locals residing near aid project sites. We match geospatial data on aid projects financed by China and the World Bank in 35 African countries between 2008 and 2014 to respondents from rounds 5 and 6 of the Afrobarometer survey. The results indicate that aid from these two donors increases the wealth of the local population. Our transmission mechanism test suggests that aid impacts wealth by promoting employment opportunities.

**Asiamah, S. K. (2023). Assessment of financial system and economic growth: An empirical evidence from Ghana's stock market. *Journal of Economics and International Finance*, 15(1), 12-21. <https://doi.org/10.5897/JEIF2022.1184>**

### **Abstract**

The importance of a country's financial system to its economic well-being cannot be underestimated. This paper seeks to investigate whether causation exists between Ghana's financial system and economic growth. Ghana's financial system was measured using the efficiency, depth, and stability of the stock market, while economic growth was measured as the Gross Domestic Growth (GDP) per capita growth. The measurement variables were purposively sampled from 2008 to 2020, spanning thirteen years of time series data. The Granger causality approach was employed to test the financial system's and economic growth's causation. In the analysis of the data, the study employed the Augmented Fuller Dickey (ADF) and Phillip Perron (PP) to test the stationarity of the series, the Jarque Bera Variable to test the normality of the data and the VAR and Johansen cointegration to test the order of integration among the variables. The statistical test revealed that the variables were

not cointegrated at level; there was a unit root in the series. There was no long or short-run relationship among the variables. Furthermore, the regressors' depth, efficiency, and stability of the stock market as proxies for the financial system of Ghana do not cause economic growth. It is recommended that regulatory bodies should pursue policies that would improve the effectiveness, efficiency, depth, and stability of other aspects of the country's financial system and focus less on the stock market due to the discovered relationship between the stock market and economic growth.

**Atitianti, P. A., & Asiamah, S. K. (2023). Aid and governance: Impact of chinese aid on the evaluation of government performance in Sub-Saharan Africa. *Africa Spectrum*, 58(1), 64-68. <https://doi.org/10.1177/00020397231160192>**

### Abstract

One of a government's primary responsibilities is to provide public goods and services for the benefit of citizens. A government that excels in such provision may therefore win favorable evaluations from its citizens. However, if external state and non-state actors through foreign aid issuance become providers of what citizens expect from their government, citizens may doubt their government's competence. In recent decades, China has become an important donor to Africa, providing the continent with several aid projects. Consequently, this study examines whether aid from China undermines citizens' evaluations of government performance. Geocoded data on Chinese aid projects are matched to 4 waves of Afrobarometer survey respondents from 31 sub-Saharan African countries. Using an instrumental variable estimation, the findings indicate that Chinese aid undermines the evaluation of government performance. Testing for the mechanism through which this effect manifests, the results suggest Chinese aid engenders corruption perceptions and erodes trust.

**Atitianti, P. A., & Asiamah, S. K. (2023). Chinese foreign direct investment and business start-ups in Africa. *African Journal of Science, Technology, Innovation and Development*, 15(6), 661-6670. <https://doi.org/10.1080/20421338.2023.2176612>**

### Abstract

In recent decades, Chinese FDI has become an integral investment source for African countries and has, therefore, engendered studies seeking to understand the determinants of these flows. In a quest to identify the factors that stimulate these flows, this paper assesses whether the ease of starting a business induces Chinese FDI flow to Africa. The analysis is based on panel data for 46 African countries between 2004 and 2018. The results from fixed-effect estimations suggest that Chinese FDI is attracted by the ease of starting a business in African economies. This finding also holds for sub-Saharan Africa (SSA) and is robust across all estimations. The results also provide corroborating evidence that identifies Chinese FDI as market and resource-seeking, attracted to large markets and economies with abundant natural resources. The findings suggest that improving business regulations could be a stimulant for Chinese FDI flow to Africa. In evaluating the nexus between Chinese FDI and business start-ups, this paper provides new evidence to complement the dated studies on this theme

**Yamoah, E. E., Ofei-Gyekyi, F., & Forson, J. A. (2024). Enhancing Workplace Productivity: The Nexus of Organizational Culture and Policies in Public Institutions. *Journal of Human Resource Management*, 27(1), 84-97. <https://doi.org/10.46287/NFH9342>**

### **Abstract**

**Aim** – This study aims to explore the intricate interplay between organizational culture, policies, and productivity within a major public institution in Ghana. The primary purpose is to investigate the relationships between organizational policies, characteristics of organizational culture, and non-financial indicators of organizational productivity.

**Design/methodology/approach** – This study utilizes a descriptive survey design, using a sample of 119 respondents randomly selected from a population of 1489 employees. Advanced statistical techniques, including Pearson Correlation and Multiple Linear Regression, are employed to identify relationships and test hypotheses.

**Findings** – The results indicate positive and statistically significant relationships between organizational policies, cultural characteristics, and productivity. Multiple linear regression analysis supported the hypothesis, demonstrating a substantial influence of these factors on productivity. Notably, a moderate to strong positive correlation was found, highlighting the critical role of organizational culture in fostering improved performance.

**Limitations** – Reliance on self-reported data raises concerns about social desirability bias. Additionally, the descriptive survey design allows for the identification of correlations, but causal relationships between variables cannot be established.

**Practical implications** – This research highlights the importance of strategic policies and a supportive culture for public sector productivity. Clear policy implementation, leadership fostering a positive work environment, and engagement in policymaking likely enhance performance, particularly within diverse workforces. However, future research should explore causal relationships between these factors and productivity for deeper understanding and continuous optimization.

**Originality/value** – This study investigates the combined effects of organizational culture, policy clarity, and employee participation on productivity in a Ghanaian public institution. It contributes to the literature by confirming the positive influence of a supportive culture and well-defined policies, while emphasizing the importance of employee involvement in policy development. These findings offer practical insights for leaders seeking to enhance productivity in similar contexts.

**Forson, J.A. (2024). Does corruption affect development outcomes differently? Fresh evidence from Ghana. *Discover Sustainability*, 5(123), 1-18. <https://doi.org/10.1007/s43621-024-00314-2>**

### **Abstract**

This study demonstrates that the effect of corruption on development might be dissimilar depending on how development is perceived. This study uses the linear and nonlinear ARDL bounds test estimation technique to cointegration with annual time series data (1980–2023 for WDI and 1995–2023 for Transparency International). Thus, the symmetric analysis reveals that corruption stimulates economic development in the long run; but in the short run, the

effect is negative. However, the effect of corruption on sustainability is consistently negative in the short and long runs. The asymmetric analysis establishes a strong effect of corruption and corruption controls on economic development in the long run but with a weak effect in the short run. Yet, on sustainability, corruption has a weak consequence on genuine wealth per capita in the short run, but the long-run asymmetric effect is inconclusive. Governments in Africa, particularly Ghana must pay serious attention to the SDGs with recourse to the expedition of trial on environmental-related corruption cases. Strict adherence to environmental policies by MNEs must also be encouraged to stem the tide of the greenhouse effect (GHG).

**Forson, J. A. (2024). Public sector corruption, FDI and sustainable development in Africa: Does the pollution halo or haven hypothesis hold in Ghana? *Scientific African*, 26, 1-25. <https://doi.org/10.1016/j.sciaf.2024.e02442>**

### Abstract

This paper examines the effects of corruption and FDI on sustainable development in Africa, particularly Ghana. The study observes the behaviour of firms using foreign direct investment to track MNEs' role in carbon emission. The study employs a quantitative approach with an ex-post facto research design type to inquiry using data from the World Bank, the Global Footprint Network and Transparency International from 1980 to 2023. The symmetric result discloses that corruption and FDI depress sustainability significantly in the long run. In the short run, it turns out that corruption and FDI stimulate sustainability. However, the short-run asymmetric effect shows that the positive and negative shocks of corruption and FDI exude negative effects on sustainability. This provides strong and consistent evidence of the pollution haven hypothesis of FDI in Ghana. Therefore, firms under the one-district, one-factory (1D1F) flagship policy and beyond must be encouraged to adhere to the strict carbon policy of the host country. The decision of the government to introduce an emission tax in the 2024 budget is tenable but the tax must be properly targeted to achieve the desired outcome.

**Zhang, A., Nankpan, M.N., Zhou, B., Forson, J.A., Nkrumah, E.N.K., & Adjavon, S. E. (2024). A COP28 perspective: Does Chinese investment and fintech help to achieve the SDGs of African economies? *Sustainability*, 16, 1-16. <https://doi.org/10.3390/su16073084>**

### Abstract

Scientific consensus affirms human activity, particularly carbon emissions from market participants, drives global warming. Foreign investment, crucial for sustainability in developing nations, now faces scrutiny regarding its impact on environmental quality in emerging economies. This study examines the influence of Chinese Outward Foreign Direct Investment (OFDI) and fintech on environmental conditions in the top five Chinese-invested African economies, alongside factors such as energy consumption, economic performance, and unemployment affecting CO<sub>2</sub> pollution. Quarterly data from 2006–2021 confirm cointegration among variables via panel unit root and cointegration tests. Panel ARDL method estimates coefficients for short and long-run effects. Our findings reveal: (1) A 1% increase in Chinese investment leads to a 0.56% decrease in CO<sub>2</sub> emissions, supporting its positive environmental impact. (2) Fintech adoption also demonstrates a beneficial effect, with a 1% increase associated with a 0.18% reduction in CO<sub>2</sub> levels. (3) Total energy consumption, as expected, has a detrimental impact, causing a 0.92% increase in CO<sub>2</sub> emissions with

a 1% rise. (4) Interestingly, economic growth fosters environmental sustainability, while unemployment correlates negatively with it. These findings suggest that targeted Chinese investments and fintech adoption can aid in mitigating CO2 pollution in African economies while balancing economic considerations.

**Baah, A. K., Forson, J. A., Adu-Darko, E., & Agbloyor, E. (2023). Global financial crisis, international capital requirement and bank financial stability: International evidence. *Journal of Financial Regulation and Compliance*, 31(2), 237-258. <https://doi.org/10.1108/JFRC-04-2022-0057>**

### **Abstract**

**Purpose** Financial crises (FC) remain a global threat to the financial stability of financial institutions and international bank regulatory capital requirement (IBRCR) by the Committee on Banking Supervision provides mechanism for curbing the adverse effect of FC on financial stability. Hence, the purpose of this study is to provide, evidence on how IBRCR tones down the adverse FC effects on bank financial stability (BFS).

**Design/methodology/approach** The study uses 102 economies between 2006 and 2016 in a two-step dynamic generalized method of moments model.

**Findings** The results show that while FC and IBRCR negatively and positively impact BFS, respectively, it is observed that under the increasing presence of IBRCR, the negative effect of FC on BFS declines. Additionally, the results show that economies that maintain minimum IBRCR above 10.5% recommended by BASEL III are able to reinforce a significant reduction in the negative effect of FC on BFS.

**Practical implications** These findings imply that in as much as financial crisis is injurious to BFS, regulators and policymakers can rely on IBRCR to avert the injurious effects of FC on BFS. Clearly, while IBRCR is necessary for reinforcing BFS through FC, bank managers who maintain IBRCR above the recommended 10.5% stands a better chance to taming the avert effect of FC on BFS. Additionally, economies that have not full adopted the BASEL minimum capital requirement may have to do so given its potential of dampening the adverse effect of FC on BFS.

**Originality/value** The study presents an international perspective of how BASEL capital requirements can help tame global financial crisis using a global sample of 102 economies.

**Braimah, A. I., & Forson, J. A. (2023). Neoliberalism, education financing, and development in Africa: The politics, synergism and contradictions in the Ghanaian perspective. *Equity in education and society*, 3(3), 1-16. <https://doi.org/10.1177/27526461231219>**

### **Abstract**

The paper examines the sustainability of the new education policy in the light of the drifted neoliberal policies around the world. The researchers adopted a mixed method (MM) approach with the parallel mixed designs type to inquiry. The sampling approach is purposive sampling technique. The sample targeted 10 heads of senior high school, 50 teachers and 100 students in 10 deprived senior high schools across northern Ghana. More specifically, the study covered four thematic areas. It emerged that the free pre-tertiary education policy was implemented contra mundum by government; even though, the policy in principle has

support from all spectrum of life. There has been a spillover effect and other contraindications of the policy in terms of funding, materials, manpower and infrastructure. Government and stakeholders in education need to find indigenous or domestic sources of funding the policy, since its benefits in the long run will outweigh its pitfalls.

**Braimah, A. I., & Forson, J. A. (2023). Reflections on democracy and development in Africa: A new trail of political reforms. *Insight on Africa*, 15(2), 1-10. <https://doi.org/10.1177/0975087822114055>**

### Abstract

Liberal democracy is the most affectionate and all-embracing de facto and de jure form of constitutional governance worldwide. Unrepentant authoritarian regimes and other pseudo-democracies across Latin America, Eastern Europe, Asia, Middle East and Africa also purports to practice democracy and its imperatives. This is to achieve regime legitimacy and catch the eye of the proponents of democracy around the world. In the unique case of Africa, metropolitan states customarily evaluate the democratic credentials of peripheral states as a sine qua non to accessing international financial assistance. It is envisaged by proponents of democracy that its practice is the sidekick to national development, prosperity and human development. This paper is a reflection that thematically interrogates the efficacy of democracy as a coherent dissilient to Africa's development. It concludes that, the argument of liberal democracy being pivotal to Africa's development is dispiritingly distant and a hyperbole.

**Duho, K. C. T., Duho, D. M., & Forson, J. A. (2023). Impact of income diversification strategy on credit risk and market risk among microfinance institutions. *Journal of Economic and Administrative Sciences*, 39(2), 523-546. <https://doi.org/10.1108/JEAS-09-2020-0166>**

### Abstract

**Purpose** This study explores the effect of income diversification strategy on credit risk and market risk of microfinance institutions (MFIs) in Ghana as an emerging market.

**Design/methodology/approach** The study is based on quarterly data of averagely 271 MFIs that have operated from 2016 to 2018. The dataset is unbalanced and pooled cross-sectional with 3,259 data points. The study measures the diversification strategy using income diversification indices, and accounting ratios to measure the other variables. We utilised the weighted least squares (WLS) approach to explore the nexus.

**Findings** The findings show that income diversification is associated with better loan quality and credit risk management. Market risk increases with the level of income diversification of microfinance firms. It is evident that large MFIs can manage their credit risks well and can have a low default rate, depicting an overall U-shaped nexus. On the other hand, the effect of size on market risk is an inverted U-shaped. The effect of asset tangibility on credit risk is positively significant while the effect on market risk is negatively significant. High profitability enhances credit risk management leading to lower loan losses while in the case of diversified and profitable MFIs, they tend to invest more in government securities. The results suggest that MFIs that hold more cash and cash equivalents tend to have high loan loss provision and more government securities suggesting much attention should be paid to optimal cash management.



**Practical implications** The results throw light on the credit risk and market risk profile of the firms and the effect of diversification strategies on them. The findings are relevant for effective macroprudential regulation, market regulation and prudential regulation of the microfinance sector.

**Social implications** The findings reveal the nature of income diversification strategy of MFIs in emerging markets such as Ghana, pointing out how they affect the risk exposure of MFIs that lend to the pro-poor population.

**Originality/value** This is a premier formal assessment of the nexus between income diversification strategies and risk management among MFIs that serve the pro-poor population in the emerging market context.

**Forson, J. A. (2023). Budget credibility and global surprises in Ghana: A Critical Reflection through PEFA Framework. *International Journal of Management, Knowledge and Learning*, 12(1), 87-97. <https://doi.org/10.53615/2232-5697.12.89-97>**

### **Abstract**

**Purpose** - Public financial management practices in emerging economies have evolved overtime with the aim of improving national budget systems and promoting sustainable development. Therefore, the integration of the Ghanaian economy into the global one does not in any way immune it from shocks brought about by the Covid-19 pandemic and the Russian-Ukraine war. The approach in this paper is to document my thoughts and opinion on Ghana's public financial management practices in the context of global surprises.

**Design/methodology/approach** - The PEFA framework is used to assess the budget credibility of Ghana.

**Findings** – The findings shows that although a lot has been done to sanitise the public space in budgetary management, there is glowing evidence that suggest the public purse is riddled with systemic culture of corruption and mismanagement.

**Originality/Value** – Most developing economies have very good blue-prints on how to manage resources, but when it comes to actualising the imports of these blue-prints, there is a challenge. Ghana's experience is commendable and worth being brought to the fore for all economies in the African region and beyond to emulate.

**Forson, J. A., Braimah, A. I., Asiamah, S. K., Kuranchie-pong, R., Daniels, E., & Adjavon, S. E. (2023). Banking supervision and nonperforming loans in Africa: Does institutional quality matter in the banking space of Ghana? *Journal of African Business*, 45(2), 108-130. <https://doi.org/10.1080/15228916.2022.2087443>**

### **Abstract**

In this paper, we reexamine the determinants of nonperforming loans through the impact of supervisory devices in credit risk management in Africa. The paper employs bank-specific, macroeconomic and institutional data for a panel of 14 universal banks over the period 2009 to 2020. We develop models that capture the role of regulatory supervision on credit risk.

Findings from the Panels Corrected Standard Errors (PCSE) and the system GMM show that previous year's NPL and inflation significantly affect NPLs in the banking space of Ghana. Bank size and financial development are inversely associated with NPLs. The interactive term of regulatory quality and government effectiveness on NPLs has net negative effect. This suggests that regulatory quality enhances the reductive effects of government effectiveness on NPLs. Our findings in general lend credence to the financial instability theory as NPLs in the Ghanaian context has been the outcome of activities of speculative borrowers.

**Oduro, R. (2024). Impact of recapitalisation and dividend pay-out policies on financial sustainability of rural and community banks in Ghana. *Future Business Journal*, 10(11), 1 - 18. <https://doi.org/10.1186/s43093-023-00292-3>**

### Abstract

The study examines the effect of bank recapitalization and dividend policies on the financial sustainability of rural and community banks (RCBs) in Ghana. Data from 135 RCBs from 2011 to 2020 revealed an average financial sustainability index of 0.525 over the past decade, suggesting that RCBs can finance their operations and liabilities without diminishing shareholder value. Recapitalization and dividend payouts positively impact financial sustainability, with well-capitalized, highly pay-out RCBs showing faster improvements in sustainability compared to those with retention policy. This highlights the importance of RCBs bolstering their capital base, even when not mandated by regulators, to enhance financial sustainability. Furthermore, adopting a relaxed pay-out policy can signal operational efficiency and sustainability to shareholders.

**Oduro, R., Frimpong, J., & Mensah, E. (2024). Tax audit and tax compliance, the role of tax education and Fear Appealing Messages. *European Journal of Business and Management Research*, 9(1), 24 - 42.**

### Abstract

The study explores the role of tax education and fear-appealing messages in the linkage between tax audit and tax compliance among corporate entities. Data was collected from 205 corporate entities using questionnaire as an instrument. The data was analysed using the PLS-SEM. It was observed that tax audit enhances tax compliance among corporate entities. Again, while tax education partially mediates the linkage between tax audit and tax compliance, fear-appealing messages negatively moderate the relationship between the two. The study concluded that regular tax education during tax audits enhances tax compliance but does not release threatening messages to taxpayers. It was recommended that tax revenue authorities should increase tax audit frequency and educate tax payers during the audit exercise. This has the tendency to improve the level of tax compliance among corporate entities.

**Dza, M. Oduro, R., & Yunusah, H. (2023). Technology adoption and healthcare supply chain performance in Ghana: The role of user attitude. *Public Administration Research*, 12(1), 25 - 37. <https://doi.org/10.5539/par.v12n1p25>**

### Abstract

The study investigates how integrating technology into the healthcare Supply Chain affects operational performance. Using a sample of 212 healthcare facilities in the Accra Metropolitan Area, the study observed that user perceived usefulness and ease-of-use of healthcare supply chain management systems have positive impact on performance. It was also noticed that

attitudes of the users of the healthcare supply chain management system do not mediate the linkage between perceived usefulness and healthcare supply chain performance but rather mediate the relationship between perceived ease-of-use and healthcare supply chain performance. As indicated in the United Nations Development Goals 3, the study recommends that structures should be put in place to ensure the use of technology and other related infrastructures, and commitment from both the public and private sectors to ensure the attainment of health and wellbeing for all Ghanaians by the year 2030.

**Doku, J. N., Iddrisu, K., Bortey, D. N., & Ladime, J. (2023). Impact of Digital Financial Technology on Financial Inclusion in Sub-Saharan Africa: The Moderation Role of Institutional Quality. *African Finance Journal*, 25(2), 31-45.**

### **Abstract**

This study looks at how the quality of institutions affects the relationship between digital financial technology and the level of financial inclusion over a 17-year period (2004-2021) in 34 Sub-Saharan African nations. The results of the two-stage system GMM show that digital finance technology has a favourable and considerable impact on financial inclusion. Furthermore, the presence of high-quality institutions strengthens the beneficial association between digital finance technology and financial inclusion, emphasising the significance of institutional quality in promoting digital finance and fostering financial inclusion. The study concludes with policy proposals targeted at increasing regional financial inclusion.

**Forson, J. A., Braimah, A. I., Asiamah, S. K., Kuranchie-Pong, R., Daniels, E., & Adjavon, S. E. (2023). Banking supervision and nonperforming loans in Africa: Does institutional quality matter in the Ghanaian banking space?. *Journal of African Business*, 24(3), 384-403. <https://doi.org/10.1080/15228916.2022.2087443>**

### **Abstract**

In this paper, we reexamine the determinants of nonperforming loans through the impact of supervisory devices in credit risk management in Africa. The paper employs bank-specific, macroeconomic and institutional data for a panel of 14 universal banks over the period 2009 to 2020. We develop models that capture the role of regulatory supervision on credit risk. Findings from the Panels Corrected Standard Errors (PCSE) and the system GMM shows that previous year's NPL and inflation significantly affect NPLs in the banking space of Ghana. Bank size and financial development are inversely associated with NPLs. The interactive term of regulatory quality and government effectiveness on NPLs has net negative effect. This suggests that regulatory quality enhances the reductive effects of government effectiveness on NPLs. Our findings in general lends credence to the financial instability theory as NPLs in the Ghanaian context has been the outcome of activities of speculative borrowers.

**Mahamuni, P. N., Parkhi, S., Sunder, R. G., Karande, K., Gadzo, S. G., & Singh, P. K. (2023). Does the merger improve the operating performance of the company? Evidence from the beverage industry in India. *F1000Research*, 12, 11-30. <https://doi.org/10.12688/f1000research.139508.2>**

## Abstract

**Background:** There is fierce market competition both locally and globally. Every organisation seeks to maintain itself and, more crucially, to develop quickly through inorganic means. The expansion of a company through mergers and acquisitions is an inorganic process. Organic growth takes a very long period and is time-bound, but inorganic growth through mergers may be achieved quickly. This research aimed to determine whether the operating results of Indian beverage firms have improved after the merger or not.

**Methods:** In order to assess merger-related advantages to the acquiring firms, this study used the operating performance technique, which contrasts the pre-merger and post-merger performance of corporations using accounting data. Secondary data were used to carry out this study. The operating performance was assessed on six operating parameters (ratios) i.e. Operating Profit Margin, Gross and Net Profit Margin, Debt-Equity, Return on Net Worth and Capital Employed. The comparison was done for three years pre and post-merger period of these operating ratios.

**Results:** The findings demonstrate that mergers do not seek to increase owner wealth. This finding shows that rather than just becoming larger and achieving covert goals, managers should pay more attention to postmerger integration challenges in order to produce merger-induced synergies.

**Conclusion:** This study shows that the M&As have not had a good effect on a company's operating performance, especially for the chosen beverage companies in India. Since financial measures cannot fully account for the influence of mergers on business performance, future research may create other metrics for merger-related gains. Research that provides profound insights into the causes and trends of post-merger business performance through the different types of mergers and industries would also be beneficial.

## Conferences/Workshops/Symposia/Seminars with Presentations

**Bosomtwe, E., Asiamah, S. K., Gadzo, S., Forson, J. A., Adegbedzi, K. D., & Obuadey, M. T. (2024, May 15-17). Financial inclusion and poverty rate: Does financial innovation play a moderating role among West African countries? [Paper presentation]. *The 6th International Research Conference, College of Humanities, University of Ghana, Legon, Accra, Greater Accra.***

**Forson, J. A., & Eshun, R. (2023, November 13-17). Terms of trade, institutional quality, and exchange rate volatility in the Economic Community of West African States [Paper presentation]. *The 2023 Joint Conference of the African Light Source and African Physical Society, Law and Political Economy for African Big Science, Johannesburg.***

**Forson, J. A., Aduko, C., Kusi, B. A., & Kuranchie-Pong, R. (2023, May 16-17). The effect of internal control systems on Ghanaian selected banks' performance: The moderating role of internal audit effectiveness [Paper presentation]. *African Growth Institute Hybrid African Finance Association Conference, Cape Town***

# Department of Marketing and Entrepreneurship

## Articles In Journal

**Brew, Y. (2024). The persuasion effect of cause-related marketing on brand preference and repurchase intention: The mediating role of brand distinctiveness and credibility. *African Journal of Business and Economic Research*, 19(1), 243-265. <https://doi.org/10.31920/1750-4562/2024/v19n1a11>**

### Abstract

Cause-related marketing (CRM) has become a popular corporate social responsibility strategy (CSR) for businesses to increase their value through profit-motivated giving. This study examines the persuasion effect of CRM on brand preference and repurchase intention, as mediated by brand credibility and brand distinctiveness. The study used the survey design and questionnaire to collect data from 357 consumers of branded bottled water in Ghana. The covariance-based Structural Equation Model (SEM-AMOS) was used to analyse the data. The study found that CRM has a significant effect on brand distinctiveness, brand credibility, and brand preference. Furthermore, the significant relationship between CRM and repurchase intention is fully mediated by brand distinctiveness, credibility, and preference. The study provides fresh insight into the vital role of brand preference, distinctiveness, and credibility in the relationship between CRM and repurchase intention. Also, an insight into the significant effect of CRM on brand distinctiveness, credibility, and consumer brand preference is provided

**Mensah, I., & Brew, Y. (2023). What happens after product rebranding: Understanding the interrelational effect of brand attachment, brand distinctiveness, and consumer attitudes on brand loyalty. *African Journal of Economic and Management Studies*, 15(5), 366-379. <https://doi.org/10.1108/AJEMS-06-2023-0216>**

### Abstract

**Purpose:** Product rebranding is increasingly popular, but brand managers are sceptical about its implications on brand loyalty (BL). Given the limited empirical literature on the subject, this study examines the interrelational effect of brand attachment (BA), brand distinctiveness (BD) and consumer attitudes (CA) towards product rebranding on brand loyalty (BL).

**Design/methodology/approach:** The study adopted the quantitative survey design and used questionnaire to gather data from 349 consumers of rebranded water, alcoholic and non-alcoholic beverages. Structural equation modelling was used to analyse the data. This study integrates psychology theories into brand management research to propose and test a holistic model.

**Findings:** The study found a significant effect of BA on CA toward product rebranding, and CA toward product rebranding fully mediates the relationship between BA and BL. Furthermore, BD has a significant effect on BL, and further moderates the relationship between BA and BL.

Originality/value: This study offers a fresh theoretical foundation, conceptual clarity and understanding of how rebranding specific brand elements affect the attitudes and BL of consumers who are emotionally connected to a brand. This paper offers practical insights into the implication of product rebranding on CA, BD and BL. It reveals a holistic guidance to brand managers on how to use their unique knowledge about their consumers to create distinctive brands and emotional affection, passion and connections to their brands.

**Dza, M. (2024). Agribusiness supply chain collaboration: Role of innovation capacity and business process agility as antecedents of supply chain performance.** *Journal of Operations and Strategic Planning*, 7(1), 27-47. <https://doi.org/10.1177/2516600X241249235>

**Dza, M., & Atsu, Williams. (2024). Supply chain intelligence and operational performance of small and medium enterprises in Ghana: The mediating role of collaboration.** *International Journal of Business Management*, 7(1), 12 - 31. <https://doi.org/10.5281/zenodo.10684094>

**Dza, M., Acquah, I. N., & Atsu, W. (2024). Supplier relationship management and operational performance: The mediating role of supply chain resilience.** *Journal of Operations and Strategic Planning*, 10, 1-24. <https://doi.org/10.1177/2516600X241277294>

## Abstract

This article examines the mediating role of supply chain resilience on the relationship between supplier relationship management and operational performance. The research utilized positivist philosophical assumptions and a quantitative research approach. The study used a sample of 179 food and beverages companies in Ghana to address the research objectives. Data was analyzed using descriptive statistics and structural equation modelling. The findings of the study revealed that supplier relationship management positively impacts the operational performance of the food and beverages industry in Ghana. Additionally, the study found that supply chain resilience plays a significant role in enhancing the operational performance of firms within the food and beverages industry in Ghana. Finally, the analysis of the study concludes that supply chain resilience further plays a significant mediating role in increasing the impact of supplier relationship management and operational performance of the food and beverages industry. The study is significant because the findings would help expand existing literature on supplier relationship management, resilience, and operational performance, thereby offering valuable insights for theory, practice, and policy development.

**Dza, M., & Yunusah, H. (2023). Logistics preparedness during health emergencies in Ghana.** *GPH-International Journal of Social Science and Humanities Research*, 6(6),105- 126. <https://doi.org/10.5281/zenodo.8120158>

**Dza, M., Oduro, R., & Yunusah, H. (2023). Technology adoption and healthcare supply chain performance in Ghana: The role of user attitude.** *Public Administration Research*, 12(1), 1-25. <http://dx.doi.org/10.5539/par.v12n1p25>

**Kankam, G., & Dza, M. (2023). Supply chain agility and competitive advantage: A moderated mediation analysis of lean marketing.** *Journal of Operations and Strategic Planning*, 6(2), 111-130. <https://doi.org/10.1177/2516600X231203120>



- Kankam, G. (2024). Visual branding: The way forward for product development and customer loyalty in Ghana. *Asia-Pacific Journal of Management Research and Innovation*, 19(2-3) 108-118. <https://doi/10.1177/2319510X241240531>**
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- Kankam, G., & Tetteh, C. (2023). Emotional intelligence and consumer decision-making styles: The mediating role of brand trust and brand loyalty. *Future Business Journal*, 9(1), 57. <https://doi.org/10.1186/s43093-023-00239-8>**
- Kankam, G. Kyeremeh, E. Narki Kumi Somb, N. & Tetteh Charno, I. (2023). Information quality and supply chain performance: The mediating role of information sharing. *Supply Chain Analytics*, 1(1), 6. <https://doi/10.1007/s44257-023-00006-7>**
- Addo, M. A., & Mensah, I. (2023). Envy and jealousy in entrepreneurial activities: Existence and nature, causes, effects, and management. *Journal of Global Entrepreneurship Research*, 13(1), 1-20. <https://doi.org/10.1007/s40497-023-00367-z>**
- Mensah, I., & Brew, Y. (2023). What happens after product rebranding: Understanding the interrelational effect of brand attachment, brand distinctiveness, and consumer attitudes on brand loyalty. *African Journal of Economic and Management Studies*, 15(3), 366-379. <https://doi.org/10.1108/AJEMS-06-2023-0216>**

## **Published Proceedings of Conferences/Workshops/ Symposia/Seminars**

- Dza, M. (2024). Supply chain resilience and organisational performance: The role of business analytics capability and data-driven culture. In *1st International Conference on Decentralisation, Local Governance and Sustainable Development*, 1(1). <https://www.ilgs.edu.gh>**

### **Abstract**

The purpose of this paper is to examine the effect of business analytics capability on firm performance using the mediated-moderated roles of supply chain resilience and data-driven culture in multiple industries in Ghana. The study adopted a blend of descriptive and explanatory designs. A sample size of 250 practitioners in various industries was purposively selected. Data was analysed using descriptive and inferential statistics. The study revealed that business analytics capability, supply chain resilience, and data-driven culture significantly influence firm performance. The finding further showed that business analytics

capability and data-driven culture significantly influence supply chain resilience. Supply chain resilience significantly mediates the link between business analytics capability and firm performance. Further, the result indicated that data-driven culture insignificantly moderates the link between business analytics capability and supply chain resilience but significantly influences the link between business analytics capability and firm performance. The findings of the paper highlight the essential relationship between analytical capability, supply chain resilience, and organisational culture in influencing firm performance. To improve firm performance, organisations should prioritise investments in analytics and build a data-driven culture, with the awareness that supply chain resilience serves as a critical mediator in this connection, contributing to overall resilience and success.

## Department of Management Sciences

### Articles In Journal

**Adam, A. K. (2024). Theoretical gap and significance of job satisfaction and supportive work culture in the state-owned bus transportation services in Ghana: Evaluation of the structural equation model in algorithm. *Global Scientific Journals*, 12(4), 1481-1497.**

**Adam, A. K. (2024). The impact of reward systems: Remuneration on job satisfaction within the hospitality industries in Ghana. *Journal of Organizational Behavior Research*, 9(1), 32-47. <https://doi.org/10.51847/Zr4PHuhck0>**

### Abstract

This research used a qualitative study method which is to draw analysis from inductive angles. Our objectives were, first, to determine the impact of remuneration on the job satisfaction of employees, second, to further understand whether there is equity in remuneration policies that are applied to employees in general, and third, to establish other remuneration systems that exist in most hospitality pay policies. This research aimed to assess the impact of remuneration and job satisfaction among hotel workers, there is a need to gather data on remuneration and job satisfaction of hospitality services in Ghana. This is an inductive study based on a non-probability sampling technique. A quota sampling of 50 AH Hotel workers responded to the questionnaire. Quota sampling is a non-probability sampling method that relies on the non-random selection or convenience of a predetermined number or proportion of units. The research designed closed-ended and open questions in the interview questionnaire (as a data collection instrument of a qualitative nature) which the respondents gave their feedback. The research findings show that remuneration payment has a greater impact on job satisfaction because many of the employees were happy with their salaries/wages. This is the reason why they are retained as loyal staff with good morale, punctuality at work, and, good team players.

Keywords: Remuneration, Reward system, Job satisfaction, Salary, Fringe benefits.

**Adam, A. K. (2024). Management of government-owned bus companies services in Ghana: Application of scientific methods analysis in perspective. *Journal of Management & Business*, 5(2), 1-15.** <https://doi.org/10.32457/jmabs.v5i2.2435>

### **Abstract**

Government owned transport companies in Ghana ought to up their management decisions on the factors surrounding the Supportive Work Culture of their staffs especially, the drivers. Without drivers there will be no movement of buses to various destinations. Besides, it is the drivers that come into contact with customers or passengers every day and faces a lot of safety issues and other road challenges such as traffic and bad roads and bad road networks. Hence, since drivers have been agitating and demonstrating for better conditions of service, calls for further investigation into the sector, it means job satisfaction has been a problem for them. Since the outer loadings and outer weights affects many of the constructs. This research model tested showed that employees work behaviour and commitment have influence on their Job Satisfaction at work. This also reveals that the Good Governance aspect needs much improvement to reflect the desire of the drivers in order to achieve the company objectives. The Outer loadings of the constructs for the various variables showed both weak and higher Outer Loadings but a combination of all these was significant in almost all the measurements results.

Keywords: Government Buses, Public Transportation, Private Bus, Path Coefficients, Indirect Effects, Total Effects, Reverse Scores

**Adam, A. K. (2023). The impact of work culture and job satisfaction with drivers: Total effect regression test using JASP. *Journal of Organizational Behavior Research*, 8(2), 184-199.** <https://doi.org/10.51847/uLuZQg6qAu>

### **Abstract**

The research used JASP software to run the primary data collected and reported on SEM, PLS, and Bootstrap Significance. The results indicated that there is a total positive significance relationship as a total effect between work culture (independent variable) and job satisfaction (dependent variable). JASP is been named after a Bayesian pioneer called Sir Harold Jeffreys, which stands for Jeffrey's Amazing Statistical Program. The results of the study were calculated on the following that is model fit, AIC, BIC, fit indices, other fit measures, R<sup>2</sup>, factor loadings, weights, regression coefficients, factor variance, and residual variance. This research was a quantitative study via survey in Metro Mass Transit, a population of 138 permanent drivers was the target population with a sample size of 102 using Krasjcie and Morgan's (1970) formula. This is a deductive study based on a probability sampling technique. The hypothesis was satisfied. The researcher want this research findigs to be more educative in JASP by presenting all these analysis in comparison for clear understanding and distinctions.

Keywords: Work culture, Job satisfaction, JASP, SEM, PLS, Bootstrap.

**Adam, A. K. (2023). Perspective of variable factors relationships and mediation of job satisfaction and good governance with supportive work culture using SmartPLS bootstrap results and analysis. *International Journal of Business and Development Studies*, 15(2), 35-60. <https://doi.org/10.22111/IJBDS.2024.47881.2094>**

### Abstract

The research has contributed extensively in the area of good governance and supportive work culture since there was very limited study on their relationship from theories studied. But this research results achieved that because it's been significant in the path model. There were several researches on good governance and job satisfaction and, supportive work culture and job satisfaction but not much is proving on good governance and supportive work Culture as the main research gap identified in the theoretical model. This research has confirmed that there is strong relationship between good governance and supportive work culture. This result has showed that good governance effects job satisfaction through supportive work culture partially mediated because good governance can have some direct effects to job satisfaction without supportive work culture mediating since it is not a complete mediation.

Keywords: Mediation Calculation, Factors Relationships, Bootstrap, Hypothesis Testing, Construct Deletion, Public Drivers

**Adu, I. N., Boakye, K. O., & Kyei-Frimpong, M. (2024). Finding solace in work-family culture as a predictor of work-family enrichment; Does gender matter? *International Hospitality Review*, 38, 55-73. <https://doi.org/10.1108/IHR-11-2023-0053>**

### Abstract

Purpose: This current study examines the moderating role of gender in the nexus between the dimensions of work-family culture and work-family enrichment in the hospitality industry.

Design/methodology/approach: This study employed a cross-sectional survey approach to conveniently gather data from a sample of 296 respondents in the Ghanaian hospitality industry. Both descriptive and inferential statistics were used to examine the data received from the respondents with the aid of IBM SPSS Statistics (V26.0) software and the PROCESS macro for SPSS (V3.5).

Findings: As hypothesised in the study, the dimensions of work-family culture significantly predicted work-family enrichment. Further, the results revealed that gender moderated the nexus between the dimensions of work-family culture and work-family enrichment.

Practical implications: The findings of this study imply that hotels in the hospitality industry should foster a working environment that embraces a positive work and family culture that ultimately influences the quality of work and family life of an employee, taking into consideration their gender.

Originality/value: To the best of the authors' knowledge, this current study is amongst the first to examine the moderating role of gender in the nexus between the dimensions of work-family culture and work-family enrichment in the hospitality industry.

**Boakye, K. O., Adu, I. N., Kyei-Frimpong, M., & Twumasi, E. (2024). Gaining competitive advantage through integrated talent development and engagement practices in the telecommunication sector; The mediating role of corporate image.** *Future Business Journal*, 10(65), 1-15. <https://doi.org/10.1186/s43093-024-00344-2>

### **Abstract**

The aim of the study is to investigate the influence of training in multiple functions, communication of strategy, and feedback on performance on competitive advantage while assessing the mediating role of corporate image. A cross-sectional survey design was used in this study. Three hundred and one permanent employees working in different organizations in the Ghanaian telecommunication service sector were sampled for this study. The respondents' responses were analyzed using descriptive and inferential statistics (structural equation modeling partial least squares) with the aid of IBM SPSS Statistics (Version 26.0) and Smart PLS (Version 4.0). The results revealed that training in multiple functions, communication of strategies, and feedback on performance does not significantly relate to competitive advantage. Further, the results established that corporate image mediated the relationship between both communication of strategy and training in multiple functions and competitive advantage. However, corporate image did not mediate the link between feedback on performance and competitive advantage. These results imply that human resource managers should devise strategies to rapidly respond to situations in this current, competitive and ever changing business environment. To the best of our knowledge, studies that have explored the mediating role of corporate image in the relationship between training in multiple functions, communication of strategy, and feedback on performance and competitive advantage in the telecommunication service sector are rare.

**Kyei-Frimpong, M., Ametorwo, A. M., Adu, I. N., & Boakye, K O. (2024). Authentic leadership, empowering leadership and work-family enrichment: The role of supportive work-family culture within the hospitality industry.** *Journal of Quality Assurance in Hospitality & Tourism*, 1-28. <https://doi.org/10.1080/1528008X.2024.2338757>

### **Abstract**

This study examines authentic and empowering leadership as antecedents of work-family enrichment while assessing the moderating role of supportive work-family culture. Data was retrieved from 328 employees from small-sized hotels in Ghana and analyzed using descriptive and inferential statistics. The findings revealed that authentic and empowering leadership positively and significantly influence work-family enrichment, further demonstrating that supportive work-family culture moderates the influence of authentic and empowering leadership on work-family enrichment. Theoretical and practical implications of the findings are discussed.

**Kyei-Frimpong, M., Amoako, E. K., Akwetey-Siaw, B., Boakye, K. O., Adu, I. N., Suleman, A. R., & Bawa, A. A. (2024). Employee empowerment and organizational commitment among employees of star-rated hotels in Ghana: Does perceived supervisor support matter?** *Journal of Work-Applied Management*, *16*(1), 65-83. <https://doi.org/10.1108/JWAM-05-2023-0038>

## Abstract

**Purpose:** The current study aimed to examine the moderating role of perceived supervisor support in the nexus between employee empowerment and organizational commitment in the Ghanaian hospitality industry.

**Design/methodology/approach:** A quantitative research design was adopted, and data were collected from 274 frontline workers from 4-star and 5-star hotels at two different waves within a 7-month interval. The data received were analyzed using descriptive and inferential statistics with the aid of Statistical Package for Social Sciences (SPSS V. 23.0) and SmartPLS (V.4.0), respectively.

**Findings:** As hypothesized in the study, employee empowerment was significantly related to organizational commitment. Furthermore, the results revealed that perceived supervisor support moderated the nexus between employee empowerment and affective and continuance commitment but did not moderate the nexus between employee empowerment and normative commitment.

**Originality/value:** Arguably, support from supervisors has been theoretically identified as a key construct in enhancing subordinates' commitment to an organization. However, less is known in the literature about the moderating role of perceived supervisory support in the nexus between employee empowerment and organizational commitment, especially in the Ghanaian hospitality industry.

**Adu, I. N., Nyarko-Tetteh, A. D., & Kyei-Frimpong, M. (2023). Uncovering the untold story: Exploring gender disparities in sexual harassment experiences and coping strategies among Ghanaian higher education students.** *Journal of Applied Research in Higher Education*, *16*(3), 862-874. <https://doi.org/10.1108/JARHE-02-2023-0081>

## Abstract

**Purpose** This study aims to examine students' experiences of sexual harassment (SH) in higher education institutions (HEIs) in Ghana as well as their coping strategies.

**Design/methodology/approach:** The study adopted the cross-sectional descriptive survey research design and used the convenience sampling technique to sample 926 students from four public Universities in Ghana. The data collected were analyzed using an independent-sample t-test with the aid of IBM SPSS Statistics version 23.0.

**Findings:** The study found no significant difference in male and female students' experience of gender harassment and unwanted SH. Additionally, female students were sexually coerced considerably more than males. In the case of coping strategies, the study found no significant differences among male and female students use of passive coping strategies. Finally, the study found significant differences among male and female students use of active, self-blame and benign coping strategies.



Practical implications: This implies that specific attention is required when students experience SH since they may be exposed to more aggressive sexual behavior.

Originality/value: The originality of this present study rest on its unique contribution by exploring the prevalent SH and coping strategies among tertiary students in HEIs in Ghana.

**Adu, I. N., Twumasi, E., Boakye, K. O., & Kyei-Frimpong, M. (2023). Does organizational support moderate the influence of family–work conflict on career progression? *FIIB Business Review*, 12(2), 208-220. <https://doi.org/10.1177/23197145221125294>**

### **Abstract**

One of the major challenges faced by female employees is the difficulty in juggling between family and work roles. This affects their career progression in the organization. Therefore, this study aims at examining the buffering role of perceived organizational support in the relationship between family–work conflict and career progression. The study utilizes the quantitative research paradigm and employed the survey research design. Responses from two hundred and twenty (220) female officers of the Ghana Revenue Authority–Customs Division were analysed using Smart PLS – 3.0 and Hays’s (2017) Process macro. The result of the study revealed that family–work conflict is negatively related with career progression (career goal progression, professional ability development, and promotion speed). Perceived organizational support moderated the association between family–work conflict and both professional ability development and promotion speed. However, it did not moderate the relationship between family–work conflict and career goal progression. These findings imply that for female officers to progress in the midst of family–work conflict, organizations must institute support systems and policies to reduce its impact on career progression.

**Asante, E. A., Gyensare, M. A., El Bouzidi, L., & Twumasi, E. (2024). An employee–employer relationship gone bad? Examining the double-edged effect of psychological contract violation on employees’ helping behaviors. *Industrial Relations: A Journal of Economy and Society*, 00, 1-22. <https://doi.org/10.1111/irel.12358>**

### **Abstract**

An important concept that depicts the nature of employee–employer relationship is the psychological contract. Prior research has argued that all forms of extra-role behaviors suffer once employees’ psychological contracts are violated. Helping behaviors are a specific form of extra-role behaviors that may suffer due to psychological contract violation. We argue that this predominantly negative relationship between psychological contract violation and helping behaviors is because the literature has not adequately examined the different types of helping behaviors. Using the latent moderated structural equation approach with multiwave and multisource data from a survey of 269 full-time employees and their coworkers from the hospitality industry in Ghana, we show that psychological contract violation is positively related to reactive helping behaviors and negatively associated with anticipatory helping behaviors through anticipatory anxiety.

**Kissi, P. S. (2024). Examine the influence of collaborative business culture and data-driven analytic capability on business innovation: Moderation role of managerial capability.** *Business Information Review*, 41(3), 110-123. <https://doi.org/10.1177/02663821241264775>

### Abstract

The literature has predominantly overlooked the significant combined influence of data-driven analytic capability (DDAC) alongside managerial capability and a collaborative business culture (CBC) on business innovation, despite advancements in DDAC within certain organisations. Therefore, this study examines the relationship between DDAC, CBC, and business innovation while exploring the moderating effect of managerial capability. Data from 577 managers were collected via a survey questionnaire. Research hypotheses were tested using a consistent Partial Least Squares Structural Equation Modeling (PLS-SEM) algorithm alongside bootstrapping methodology. Findings indicate that DDAC positively influences CBC, business innovation, and collaborative business culture. Additionally, a collaborative business culture has a positive impact on business innovation and partially mediates the relationship between DDAC and business innovation. Most importantly, the study reveals that combining managerial capability and DDAC has a less notable impact on CBC than on DDAC alone. However, the joint effect of managerial capability and CBC is stronger than CBC alone on business innovation. Theoretical and managerial implications are extensively discussed.

**Kissi, P. S. (2024). Big data analytic capability and collaborative business culture on business innovation: the role of mediation and moderation effects.** *Discover Analytics*, 2(1), 2. <https://doi.org/10.1007/s44257-024-00010-5>

### Abstract

Although Big Data Analytic Capability (BDAC) has advanced in some organisations, the impact on collaboration and business innovation is unnoticed in the literature. Therefore, this study examines the influence of BDAC on Collaboration Business Culture (CBC) and business innovation. The study further investigates how the relationships between CBC and business innovation and BDAC and CBC are mediated and moderated, respectively. Data was collected from 577 managers in selected organisations using a survey questionnaire. The research hypotheses were examined using a PLS-SEM. The study reveals that BDAC positively impacts CBC and business innovation, while CBC influences business innovation. The result also indicates that BDAC partially mediates the CBC and innovation relationship. The findings also revealed that BDAC moderates the CBC and business innovation relationship. Detailed knowledge contributions and managerial implications are discussed.

**Kissi, P. S. (2023). Job seekers satisfy or dissatisfy with the existing electronic recruitment: A theoretical and empirical investigation.** *Cogent Business & Management*, 10(3), 1- 18. <https://doi.org/10.1080/23311975.2023.2278233>

### Abstract

This study aims to fill the gap by identifying factors and their effects on job seekers' satisfaction with existing e-recruitment systems. A longitudinal cohort research design was employed for the study. Semi-structured interviews and a survey questionnaire were used as research instruments. Two hundred sixty-five job seekers (265) and seven human resource staff were purposively sampled for the study. The human resource staff answered the interview questions while the job seekers responded to the survey questionnaire. The

finding indicates that factors affecting job seekers' satisfaction with the e-recruitment systems are expectation, performance, perceived e-recruitment fraud, and e-recruitment brand quality. More so, the finding reveals that expectation, perceived performance, and confirmation are positively associated with the satisfaction of e-recruitment systems. On the contrary, perceived e-recruitment fraud is negatively associated with confirmation and consequently affects job seekers' e-recruitment satisfaction. Surprisingly, another finding shows that jobseekers are dissatisfied with the existing e-recruitment because their expectations and perceived e-recruitment fraud are higher than the perceived performance of the existing e-recruitment systems. These findings have several implications for policy and recommendations for various levels of stakeholders focusing on e-recruitment systems. Detailed results of theoretical contribution and policy implications are discussed.

**Tamakloe, A., Ashie, A. A., & Yamoah, E. E. (2024). Emotional exhaustion and the baby-profit gap: The moderating role of workplace support in Ghana's private sector. *Management Research and Practise*, 16(3), 34-51. <https://mrp.ase.ro/v16i3/3.pdf>**

### Abstract

This study examines the baby-profit gap and its association with emotional exhaustion and workplace support among female employees with caregiving responsibilities in Accra. Emotional exhaustion, a burnout indicator, affects productivity and organizational commitment, disproportionately impacting women. The baby-profit gap, the disparity in productivity and income between men and women due to caregiving, exacerbates this issue. Using a quantitative cross-sectional survey, data from 152 female employees in three private sector organizations were analyzed. Emotional exhaustion was measured with the Maslach Burnout Inventory, workplace support with a modified Workplace Support Questionnaire, and the baby-profit gap with a tailored questionnaire. Partial Least Squares Structural Equation Modelling (PLS-SEM) was employed for analysis. Findings reveal a significant positive relationship between emotional exhaustion and the baby-profit gap, indicating higher emotional fatigue correlates with greater economic disparities. Workplace support significantly influences and moderates this relationship, suggesting supportive policies can mitigate emotional exhaustion's adverse effects and reduce the baby-profit gap. These results highlight the need for holistic organizational policies and societal changes to address the baby-profit gap. Interventions such as paid parental leave, gender pay equity, and flexible work arrangements are crucial in creating equitable work environments that support professional advancement and caregiving responsibilities. Future research should focus on the long-term effectiveness of these interventions.

Keywords: Emotional exhaustion, Baby-profit gap, Workplace support, Gender disparity, Work-family balance

**Yamoah, E. E. (2024). A cultural context approach to leadership effectiveness in healthcare: Evidence from Ghana. *SEISENSE Business Review*, 4(1), 233-251. <https://doi.org/10.33215/z6r9dd85>**

### Abstract

This study investigates the relationship between leadership styles and employee performance within hospitals in the Effutu Municipality, Ghana. Targeting nurses, healthcare administrators, allied health professionals, and domestic staff from four purposefully selected hospitals, a sample size of 384 participants was determined using the Cochran formula. A stratified random

sampling technique ensured a proportional representation of the distinct subgroups. A final usable sample of 300 participants was achieved after thorough data checking and screening. Data were collected using a questionnaire developed from established leadership constructs, exhibiting high reliability with a Cronbach's Alpha of 0.87. Descriptive and inferential statistical analyses were conducted using SPSS version 25.0, including multiple linear regression to assess the impact of various leadership styles on employee performance. The findings indicate that all examined leadership styles—transactional, bureaucratic, autocratic, transformational, democratic, participative, and laissez-faire—had significant positive effects on employee performance. These results challenge the notion of a single “best” leadership style, suggesting that the effectiveness of leadership approaches is context-dependent. The study's limitations include its geographical scope, with recommendations for future research to explore contextual factors, long-term effects, and cross-cultural comparisons to enhance the understanding of leadership impacts in diverse health care settings.

**Yamoah, E. E. & Nsowah, I. (2024). Safety, commitment, and performance: A study of manufacturing firms. *Prosperitas*, 11(3), 1-15.** [https://doi.org/10.31570/prosp\\_2024\\_0116](https://doi.org/10.31570/prosp_2024_0116)

### Abstract

This study investigates the interplay between Occupational Health and Safety (OHS) practices, employee commitment, and employee performance at manufacturing companies. A quantitative approach using correlation and regression analyses assessed relationships between variables. Data were collected from 115 employees across three manufacturing companies in Ghana's Awutu Senya District. OHS practices positively influence both employee commitment and performance, with commitment partially mediating this relationship. This suggests that a safety-focused environment leads to a more committed and high-performing workforce. These findings hold significant practical implications for manufacturing companies. By prioritizing comprehensive OHS initiatives, organizations can cultivate a safer and more supportive work environment, which leads to a more engaged and productive workforce. This study examines the under-explored mediating role of employee commitment in the OHS-performance relationship within the manufacturing industry in Ghana. By doing so, it extends knowledge and offers insights for optimizing workplace safety, employee well-being, and organizational success.

**Yamoah, E. E., Osei-Gyekyi, F. & Forson, J. A. (2024). Enhancing workplace productivity: The nexus of organizational culture and policies in public institutions. *Journal of Human Resource Management*, 27(1), 84-97.** <https://doi.org/10.46287/NFHX9342>

### Abstract

**Aim** – This study aims to explore the intricate interplay between organizational culture, policies, and productivity within a major public institution in Ghana. The primary purpose is to investigate the relationships between organizational policies, characteristics of organizational culture, and non-financial indicators of organizational productivity.

**Design/methodology/approach** – This study utilizes a descriptive survey design, using a sample of 119 respondents randomly selected from a population of 1489 employees. Advanced statistical techniques, including Pearson Correlation and Multiple Linear Regression, are employed to identify relationships and test hypotheses.

**Findings** – The results indicate positive and statistically significant relationships between organizational policies, cultural characteristics, and productivity. Multiple linear regression analysis supported the hypothesis, demonstrating a substantial influence of these factors on productivity. Notably, a moderate to strong positive correlation was found, highlighting the critical role of organizational culture in fostering improved performance.

**Limitations** – Reliance on self-reported data raises concerns about social desirability bias. Additionally, the descriptive survey design allows for the identification of correlations, but causal relationships between variables cannot be established.

**Practical implications** – This research highlights the importance of strategic policies and a supportive culture for public sector productivity. Clear policy implementation, leadership fostering a positive work environment, and engagement in policymaking likely enhance performance, particularly within diverse workforces. However, future research should explore causal relationships between these factors and productivity for deeper understanding and continuous optimization.

**Originality/value** – This study investigates the combined effects of organizational culture, policy clarity, and employee participation on productivity in a Ghanaian public institution. It contributes to the literature by confirming the positive influence of a supportive culture and well-defined policies, while emphasizing the importance of employee involvement in policy development. These findings offer practical insights for leaders seeking to enhance productivity in similar contexts.

**Yamoah, E. E., Yeboah, I. A., & Nyala, D. N. (2024). Human resource practices and employee retention: The moderating effect of job engagement. *SEISENSE Business Review*, 4(1), 200-216.: <https://doi.org/10.33215/agg17288>**

## Abstract

This study investigates the relationship between human resource management (HRM) practices and employee retention in Ghana's Information and Communication Technology (ICT) sector, emphasizing the moderating role of job engagement. High turnover rates in this sector pose significant challenges, prompting the need for effective HRM strategies. The study identifies key HR practices, including compensation and training and development, as critical drivers of employee retention. It employs a quantitative approach, utilizing structural equation modeling (SEM) to analyze data from employees at the National Information Technology Agency (NITA). The findings reveal that both compensation and training significantly influence retention rates, with job engagement enhancing these effects. Specifically, engaged employees are more likely to remain with their organizations when they perceive fair compensation and effective training programs. However, the study uncovers a complex interaction where high job engagement may negatively moderate the relationship between training and retention, suggesting potential role overload or misalignment with employee needs. The research contributes to existing literature by integrating theories such as Equity Theory, Human Capital Theory, and Job Demands-Resources Theory to explain how HRM practices can be optimized for better retention outcomes. The implications extend to HR managers who are encouraged to develop equitable compensation structures and comprehensive training initiatives while fostering an engaging work environment. Limitations include the study's cross-sectional design and focus on a single organization, which may affect generalizability. Future research is recommended to explore longitudinal effects and additional variables influencing employee retention across diverse sectors.

**Twum, F.O. & Ayitey, V.A. (2024). Exploring employee turnover intentions in private tertiary institutions, Ghana: Implementing Frederick Herzberg's two-factor theory in practical context. *ADRRJ Journal (Multidisciplinary)*, 34(1), 18-30. <https://journals.adri.org/en/>**

### Abstract

Employee turnover intentions in Private Tertiary Institutions in Ghana can be influenced by several factors. The turnover rate of hardworking employees remains one of the most frustrating and persistent issues facing most organizations. While there is a global demand for competent workers, organizations have little insight into how best to retain their workforce. Employees' decision to quit their current job is referred to as turnover intention. Whereas, the number of employees joining or leaving the organization at a particular period is regarded as employee turnover. This study aims to investigate the factors influencing workers intentions to quit their current jobs for other employment opportunities in Ghana. Also, this paper aims to apply Herzberg's motivation and hygiene factors to provide a conceptual foundation for strategic planning to tackle the ongoing turnover intentions in education. This is a qualitative study where 18 participants were interviewed using the snowball approach. The representation of participants were management, faculty and administrative staff in selected Private Tertiary Institutions in Ghana. The findings reports that turnover intentions sprout as a result of job insecurity, inadequate resources, poor work conditions, low motivation, and poor salary. Further, it was ascertained that despite the cost of turnover in terms of hiring and training; the worst outcome is the human capital flight of accumulated expertise and core competence transferred to the new job. Hence, it is critical that employers implement attractive systems and strategies to reduce employee turnover and retain the best talent.

**Welbeck, D.N.O., Amponsah-Bediako, K., Dorhetso, S.N., Aazagreyir, P., Yeboah, J.N.O. (2024). The Impact of stress management on job performance: The mediating role of transformational leadership. *European Journal of Business and Management*, 16(2), 28-39. <https://doi.org/10.7176/EJBM/16-2-04>**

### Abstract

This quantitative study examined the connection between stress management (SM), transformational leadership styles (LS), and job performance (JP) of managers of small and medium-sized enterprises (SMEs). The research intends to examine the impact of stress management (SM) on job performance (JP) and the mediating role of transformational leadership style (LS) in this relationship. A survey instrument was designed and administered to a representative sample of SME managers. The data is analysed using appropriate partial least squares (smart pls). The findings of the research demonstrate that stress management has a positive and significant impact on job performance of SME managers. The results indicate that effective stress management practices are associated with improved job performance outcomes. Furthermore, the study reveals that transformational leadership styles mediate the relationship between stress management and job performance of SME managers. This suggests that transformational leaders, who exhibit behaviours such as inspiring and motivating their subordinates, play a crucial role in translating the benefits of stress management into enhanced performance. The study contributes to both theoretical and practical knowledge. The findings highlight the importance of implementing stress management practices in SMEs to support the job performance of managers. Additionally, the study emphasises the significance of transformational leadership in leveraging the positive effects of stress management on job performance. Understanding the mediating role of transformational leadership style provides insights into the mechanisms through which stress management practices influence job performance outcomes. These findings have practical implications for SME owners, managers and practitioners. The results



suggest that organisations should invest in stress management programmes and initiatives to support their managers' job performance. Moreover, organisations should cultivate and promote transformational leadership behaviours among managers to maximise the benefits of stress management practices. By implementing effective stress management strategies and fostering transformational leadership, SMEs can enhance the performance and well-being of their managers, ultimately enhancing the overall success of the organisation.

**Yeboah, J.N.O, Opoku, D., & Sam, J.K. (2024). The cultural significance of Frederick Herzberg's two-factor theory on the Ghanaian society: Evidence from public senior high schools in Ghana. *IRJEMS International Research Journal of Economics and Management Studies*, 3(7), 195-202. <https://10.56472/25835238/IRJEMS-V3I7P121>**

## **Abstract**

This study sought to situate Herzberg's motivation theories in the Ghanaian cultural perspective medium as a test of its global relevance with evidence from the Ghanaian educational sector. This study explored how cultural factors impacted employee motivation in Ghana through the two-factor theory of motivation and the relevance of intrinsic forms of motivation towards employees' effectiveness and efficiency in the organization. This was to further determine the extent to which the two-factor theory was managed in Ghanaian organizations to drive performance. The study was a descriptive research design and was quantitative. The population for this study was staff of seven Senior High Schools across three regions in Ghana. These schools have 994 workers of both teaching and non-teaching staff across all seven schools, which were selected purposively in the Greater Accra, Western and Ashanti regions. The simple random method was used to sample 550 staff of all seven Senior High Schools as the sample size for the study. A questionnaire was the survey tool utilized to collect data for this investigation, which was self-designed with guidelines from cultural issues and motivation which were the main variables for this study. The research instrument was categorized into three sections, all in thirty-nine research items, which were outlined in a structured survey questionnaire which had closed ended questions. The three hypotheses for the study were tested using Pearson's Product Moment Correlation (r). The findings showed that employees who have worked with their respective Senior High Schools for ten years and above were quite enormous, but this, however did not match with employee performance. Thus employees' performance is independent from their length of stay in the organization. This implied that employee motivation must be tied to the cultural factors that pertain in Ghanaian Public Senior High Schools. Also, Ghanaian Senior High Schools must make available and accessible opportunities for growth, advancement and life-long work environments to promote long service and further draw a comprehensive educational policy to facilitate educational opportunities for employees to update their educational qualifications.

**Poku, A. A., Sarkodie, K., Mensah, J., Sam-Mensah, R., Quayson, J. J., & Poku, K. (2024). Livelihood resilience among street hawkers during Covid-19 lockdown in the Awutu Senya East Municipality, Ghana. *Journal of Humanities and Applied Social Sciences*, 00, 1-16. <https://doi.org/10.1108/JHASS-09-2023-0125>**

## **Journal(s) Edited by staff**

**Blind Review. (2024). *South Asian Journal of Social Studies and Economics*.**

**IJESM-01-2024-0011.R1. (2024). *International Journal of Energy Sector Management*.**

# Department of Procurement and Supply Chain Management

## Articles in Journal

**Acquah, I. N. (2024). Antecedents and consequences of green supply chain management in Ghana's manufacturing sector.** *Journal of Manufacturing Technology Management*, 35( 3), 524-543. <https://doi.org/10.1108/JMTM-07-2023-0282>

### Abstract

**Purpose:** The study explores manufacturers' supply chain social capital (SCSC) (structural social capital and relational social capital) and supply chain performance, respectively, as drivers and outcome of green supply chain management practices (GSCMPs). Additionally, the study explores the direct relationship between SCSC and supply chain performance of manufacturers.

**Design/methodology/approach:** The author develops and tests a research model grounded in the resource-based view and the natural resource-based view theory using survey data from 100 manufacturing firms operating in Ghana. The measurement model and hypothesized paths were examined using partial least squares structural equation modelling.

**Findings:** The findings revealed that relational social capital of manufacturers has a positive and significant relationship with supply chain performance, but structural social capital does not. Additionally, manufacturers' structural social capital and relational social capital were found to have a positive and significant relationship with GSCMPs. Lastly, GSCMPs were found to have a positive and significant relationship with supply chain performance.

**Originality/value:** The study contributes to the limited literature demonstrating the contribution of intangible relational assets, specifically SCSC, toward GSCMPs implementation.

**Acquah, I. N., Asamoah, D., Kumi, C. A., Akyeh, J., & Agyemang, P. (2023). Untangling the nexus between supplier relationship management and competitive advantage: Insights on the role of procurement performance and supply chain responsiveness.** *International Journal of Emerging Markets, ahead-of-print(ahead-of-print)*. <https://doi.org/10.1108/IJOEM-03-2022-0459>

### Abstract

**Purpose:** The study examines the intricate interplay between supplier relationship management (SRM), procurement performance, supply chain responsiveness (SCR) and competitive advantage. Additionally, the study examines the mediating role of procurement performance and SCR in the link between SRM and competitive advantage.

**Design/methodology/approach:** A research model grounded in the resource-based view and dynamic capabilities theory (DCT) was developed and tested using partial least squares structural equation modeling (PLS-SEM). Data were obtained from 122 firms in Ghana.

**Findings:** The study revealed that SRM has a positive and significant effect on procurement performance, SCR and competitive advantage. Additionally, SCR has a positive and

significant effect on competitive advantage; however, procurement performance has a negative and insignificant effect on competitive advantage. It was also revealed that SCR partially mediates the relationship between SRM and competitive advantage but fully mediates the relationship between procurement performance and competitive advantage. Also, it was also revealed that procurement performance does not mediate the relationship between SRM and competitive advantage.

Research limitations/implications: The study contributes to literature by highlighting the mediating role of SCR in influencing the effect of SRM and procurement performance on competitive advantage.

Practical implications: Practically, the study findings highlight the need for firms to seek, build and manage meaningful relationships with their suppliers in order to enhance their competency and capability to influence their competitive position in the marketplace.

Originality/value: To the best of the researchers' knowledge, no prior study has examined the effect of SRM on procurement performance and SCR. Additionally, no previous study has examined the mediating role of procurement performance and SCR on the link between SRM and competitive advantage.

**Acquah, I. N., Kumi, C. A., Asamoah, D., Agyei-Owusu, B., Agbodza, M., & Agyabeng-Mensah, Y. (2023). Unearthing the relationship between supply chain social capital and firm performance: The role of supply chain responsiveness. *Benchmarking: An International Journal*, 31(4), 1225-1248. <https://doi.org/10.1108/BIJ-01-2022-0002>**

## Abstract

Purpose: This paper examines the nexus between supply chain social capital (relational social capital and structural social capital), supply chain responsiveness (operations system responsiveness and supplier network responsiveness) and firm performance. Additionally, the study examines the mediating role of supply chain responsiveness on the relationship between supply chain social capital and firm performance.

Design/methodology/approach: The authors test their hypotheses on a sample of 120 firms operating in Ghana. The measurement model and hypothesized paths were assessed using partial least squares structural equation modelling.

Findings: The findings revealed that structural social capital had a significant direct effect on firm performance, but relational social capital did not. It was also revealed that both relational and structural social capital have significant effects on operations system responsiveness and supplier network responsiveness. Additionally, operations system responsiveness fully mediated the effect of relational social capital on firm performance and partially mediated the effect of structural social capital on firm performance. Supplier network responsiveness, on the other hand, partially mediated the effect of both relational and structural social capital on firm performance.

Originality/value: This study contributes to the limited literature on supply chain social capital by unearthing the mechanisms through which supply chain social capital enhances firm performance. Specifically, the study demonstrates the intervening role of operations system responsiveness and supplier network responsiveness in the supply chain social capital–firm performance link.

**Asamoah, D., Acquah, I. N., Nuertey, D., Agyei-Owusu, B., & Kumi, C. A. (2023). Unpacking the role of green absorptive capacity in the relationship between green supply chain management practices and firm performance. *Benchmarking: An International Journal*, 31(8), 2793-2818. <https://doi.org/10.1108/BIJ-09-2022-0564>**

## Abstract

**Purpose:** This study examines green absorptive capacity as an important intervening variable that elucidates the relationship between green supply chain management (GSCM) practices (specifically, green purchasing, customer cooperation and investment recovery) and firm performance.

**Design/methodology/approach:** Drawing from the theoretical underpinnings of the natural-resource-based view theory and information processing theory, a research model is developed and tested using data obtained from 368 manufacturing firms in Ghana. Data analysis was conducted using structural equation modeling.

**Findings:** The results indicate that green purchasing, customer cooperation and investment recovery have a direct positive and significant effect on firm performance. Additionally, green purchasing and customer cooperation have a positive and significant effect on green absorptive capacity but investment recovery does not. Further, the results show that the paths from green purchasing and customer cooperation to firm performance are positively mediated by green absorptive capacity.

**Practical implications:** The study reveals to supply chain managers that green absorptive capacity is an important conduit through which firms can achieve enhanced firm performance from GSCM initiatives.

**Originality/value:** This study makes a contribution by integrating the absorptive capacity literature and green management literature and establishes green absorptive capacity as a mechanism through which GSCM practices enhance firm performance.

**Awuni, F. Y., Essuman, D., Ataburo, H., Anin, E. K., & Acquah, I. N. (2023). (2023). The proliferation of motor tricycle usage in precarious transportation contexts and the performance of micro and small manufacturers. *Research in Transportation Business & Management*, 51 (101068), <https://doi.org/10.1016/j.rtbm.2023.101068>**

## Abstract

Micro and small businesses (MSBs) in developing countries increasingly use motor tricycles to navigate transportation-induced supply chain disruptions. However, there is a lack of empirical understanding of whether and when these resources benefit such firms. This study draws on the contingent resource-based theory to examine how motor tricycle deployment relates to the performance of MSBs under varying conditions of supply chain dynamism in a developing country. The study tests its hypotheses on primary data from 267 micro and small manufacturers in Ghana using moderated regression analysis. The results indicate that motor tricycle deployment positively relates to MSB performance in Ghana ( $\beta = 0.024$ ,  $SE = 0.007$ ,  $p = 0.001$ ). The results further show that supply chain dynamism positively moderates the relationship between motor tricycle deployment and MSB performance ( $\beta = 0.008$ ,  $SE = 0.004$ ,  $p = 0.035$ ). In contributing to the limited literature on the firm-level

performance implications of the increasing use of motor tricycles among micro and small businesses in developing countries, this study's results underscore the importance of adopting a contingency-based approach to understand the complexities inherent in the relationship between motor tricycle deployment and firm performance in these settings.

**Evans Kyeremeh, Alfred Yamoah, and Baffour Antoa Mensah. (2024). Road transport efficiency and organizational performance: Does traffic infrastructure management matter?. *Transportation Research Record*, 00(0), 1-12. <https://doi.org/10.1177/03611981241246786>**

### Abstract

The objective of this study is to assess the relationships between road transport efficiency and organizational performance. In addition, the investigation explored the intermediary function of traffic infrastructure management in the relationship between road transport efficiency and organizational performance. A study model was built, drawing on a resource-based approach and stakeholder theories, to investigate the interactions between the constructs. The data was collected from a sample of 30 logistics enterprises located in Ghana. The research model underwent analysis utilizing the partial least squares structural equation modeling technique. The results of the study indicate that there is a strong and statistically significant relationship between road transport efficiency and organizational performance. Once more, the analysis has demonstrated a favorable impact of traffic infrastructure management on the performance of organizations. Furthermore, the management of transportation infrastructure has shown a noteworthy and substantial role in mediating the impact on organizational performance.

**Kankam, G., Kyeremeh, E., Som, G. N. K., & Chanor, I. T. (2023). Information quality and supply chain performance: The mediating role of information sharing. *Supply Chain Analytics*, 2 (100005), 1-8. <https://doi.org/10.1016/j.sca.2023.100005>**

**Acquah, N., Kumi, C., Asamoah, D., Agyei-Owusu, B., Agbodza, M., & Agyabeng, Y. (2024). Unearthing the relationship between supply chain social capital and firm performance: The role of supply chain responsiveness. *Benchmarking: an International Journal*, 31(4), 1225-1248. <https://doi.org/10.1108/BIJ-01-2022-0002>**

### Abstract

This paper examines the nexus between supply chain social capital (relational social capital and structural social capital), supply chain responsiveness (operations system responsiveness and supplier network responsiveness) and firm performance. Additionally, the study examines the mediating role of supply chain responsiveness on the relationship between supply chain social capital and firm performance. The authors test their hypotheses on a sample of 120 firms operating in Ghana. The measurement model and hypothesized paths were assessed using partial least squares structural equation modelling. The findings revealed that structural social capital had a significant direct effect on firm performance, but relational social capital did not. It was also revealed that both relational and structural social capital have significant effects on operations system responsiveness and supplier network responsiveness. Additionally, operations system responsiveness fully mediated the effect of relational social capital on firm performance and partially mediated the effect of structural social capital on firm performance. Supplier network responsiveness, on the other

hand, partially mediated the effect of both relational and structural social capital on firm performance. The study contributes to the limited literature on supply chain social capital by unearthing the mechanisms through which supply chain capital enhances firm performance. Specifically, the study demonstrates the intervening role of operations system responsiveness and supplier network responsiveness in the supply chain social capital–firm performance link

**Azila-Gbettor, E. M., Mensah, C., & Agbodza, M. (2023). Fear of Covid-19 and perceived academic safety: The buffering role of personal resources. *International Journal of Educational Management, 37*(3), 541-557. <https://doi.org/10.1108/IJEM-04-2022-0159>**

### **Abstract**

The study investigates the moderating effect of personal resources, including optimism and resilience, on the link between fear of Covid-19 and perceptions of academic safety among university students in Ghana. A total of 618 students took part in the research by completing an online self-reported questionnaire. The respondents were chosen using a simple random sample method. The data was processed and analysed using IBM SPSS version 24 and SEM-PLS, respectively. Results reveal fear of Covid-19 positively influence students' perception of academic safety. Furthermore, both resilience and optimism mitigate the impact of fear of Covid-19 on students' perceptions of academic safety. This is the first study to examine personal resources as a moderator between fear of Covid-19 and students' perceptions of academic safety. Practical and theoretical implications are added to the text.

**Azila-Gbettor, E. M., Mensah, C., Abiemo, M. K., & Agbodza, M. (2023). Optimism and intellectual engagement: A mediating moderating role of academic self-efficacy and academic burnout. *Journal of Applied Research in Higher Education, 15*(5), 1370-1391. <https://doi.org/10.1108/JARHE-01-2022-0003>**

### **Abstract**

The study examines a mediated, moderated process of students' intellectual engagement from optimism, academic self-efficacy and academic burnout. Five hundred and twenty-seven participants who completed a self-reported questionnaire were selected using a convenient sampling technique. PLS-SEM was used to test the proposed hypotheses. Results showed that optimism positively affects students' intellectual engagement and academic self-efficacy. Additionally, academic self-efficacy correlates positively with students' intellectual engagement and further mediates the relationship between optimism and intellectual engagement. Finally, the moderation effect of academic burnout was positive and non-significant. This paper is among the first to have tested a model including optimism, academic self-efficacy, intellectual engagement and academic burnout in a university setup from a developing country perspective.



# SCHOOL OF COMMUNICATION AND MEDIA STUDIES

## Articles in Journal

Otoo, S. F., Asemanyi, A. A., Osei-Mensah, B., Cudjoe, E. C., Akyiaw, S. O., & Adelakun, S. O. (2024). Online marketing of falsified drugs in Ghana: Content analysis of selected drugs on social media. *Journal of Marketing and Consumer Research*, 93,34-49. <https://doi.org/10.7176/JMCR/92-03>

### Abstract

This study investigates the marketing of falsified drugs on Facebook and Instagram. The study also examines steps that drug regulators are implementing to address this phenomenon. To holistically understand the issue, the study adopts the technique of online observation to understand how these falsified drugs are marketed online. Interviews were used to capture the regulators' point of view. Through the lens of social judgement theory, the study found that online peddlers of falsified drugs employ over-elaboration of the efficacy of the drugs to capture the interest of the target market. Lower price mechanisms are also used to stimulate the desire of their target audience. Additionally, these perpetrators also advertise door-to-door delivery services to assure clients of obtaining these drugs at their convenience. Another interesting finding from the study is that celebrities are also used as instruments of persuasive advertising. Data obtained from selected officials from the Foods and Drugs Authority (FDA) suggest that the agency has been organizing public sensitization programs to dissuade members of society from patronizing these online products. It was also found that the FDA is adopting viable strategies to track down culprits and mete out deserving punitive measures. The study concludes that despite efforts to foil the menace of fake drug marketing on social media, these peddlers are also employing deceptive and persuasive marketing techniques. The study recommends that the FDA must optimize the use of the Internet for both sensitization and tracking purposes.

Osei-Mensah, B., Asiamah, E. O, & Sackey, R. (2023). Strategic communication and artificial intelligence: Reviewing emerging innovations and future directions. *Archives of Business Research*, 11(1), 85-102. <https://doi.org/10.14738/abr.111.13616>

### Abstract

This review examines the adoption of artificial intelligence (AI) as a novel technology for strategic communication. This study includes a survey of pertinent literature that highlights innovative communication linked to AI applications in public relations, marketing and branding, political communication, and customer relations with the goal of enlightening both research and practice. Emerald Insight and Google Scholar, two essential online databases, were used to retrieve and analyse information from peer-reviewed journal articles and chapters (n = 17) published between 2017 and 2022. Based on the main inquiries raised by there search, significant themes were discovered and critically explored. Political communication with AI, AI-focused public relations and marketing approach, and conversational AI assistants were the major themes in the research on strategic communication and AI integration. These

studies were primarily the outcome of quantitative and mixed-method techniques used in a western environment. This review satisfies the need for research on AI and strategic communication that makes inferences applicable to the context in Ghana. The study's conclusion outlines a research agenda for the future, emphasising the need for research on particular topics like integration of AI voice assistants in relationship marketing domains, adoption of wearable technology and its relevance to customers' health consciousness as well as privacy concerns of emerging innovation. Future studies should also focus on developing more evidence-based AI suggestions for strategic communication practitioners, as well as a thorough methodological and theoretical discussion of how to further close the gap between research and practice in the African setting.

**Sem-Ackah, K., Asemanyi, A. A., Osei-Mensah, B., & Anane, A. A. (2023). Staged beefing in the music industry in Ghana: Perspectives of selected entertainment bloggers and music artists. *Research Journal of Mass Communication and Information Technology*, 9, 2695-2475. <https://doi.org/10.56201/rjmcit.v9.no2.2023.pg62.79>**

### Abstract

This study explores staged beefing in the music industry for entertainment bloggers and music artists in Ghana. This qualitative case study focuses on capturing detailed information from participants using structured interviews. Through a purposive selection technique, ten participants were chosen and interviewed to learn about their personal experiences with the phenomena of staged beefing in the music industry and its ramifications for both bloggers and musicians. The participants' responses were analysed using the thematic analysis approach, which was based on Agenda Setting and Framing Theory. Participants identified implications of staged beefing to both bloggers and musicians as fake feuds, collaboration, and controversy, monetary gains, and clout. The data capture that some musicians and entertainment bloggers collaborate to create 'fake' feuding scenarios and that the phenomenon of 'fake feuds' is real event that happen. The result also shows that entertainment bloggers and musicians present information in such a way as to market the artiste and connect with the audiences during the process of opinion formation, which subsequently influences attitudes and behaviours. Based on the outcome of the interview, supported by the literature it became obvious that both bloggers and musicians who consent to create fake feuds do so to promote their brand visibility and relevance to attract large corporations for endorsement deals and or boost sales of their music

**Osei-Mensah, B., Asiamah, E. O., & Sackey, R. (2023). Strategic communication and artificial intelligence: Reviewing emerging innovations and future directions. *Archives of Business Research*, 11(1), 85–102. <https://doi.org.10.14738/assrj.912.13612>**

### Abstract

This review examines the adoption of artificial intelligence (AI) as a novel technology for strategic communication. This study includes a survey of pertinent literature that highlights innovative communication linked to AI applications in public relations, marketing and branding, political communication, and customer relations with the goal of enlightening both research and practice. Emerald Insight and Google Scholar, two essential online databases, were used to retrieve and analyse information from peer-reviewed journal articles and chapters (n = 17) published between 2017 and 2022. Based on the main inquiries raised by the research, significant themes were discovered and critically explored. Political communication with

AI, AI-focused public relations and marketing approach, and conversational AI assistants were the major themes in the research on strategic communication and AI integration. These studies were primarily the outcome of quantitative and mixed-method techniques used in a western environment. This review satisfies the need for research on AI and strategic communication that makes inferences applicable to the context in Ghana. The study's conclusion outlines a research agenda for the future, emphasising the need for research on particular topics like integration of AI voice assistants in relationship marketing domains, adoption of wearable technology and its relevance to customers' health consciousness as well as privacy concerns of emerging innovation. Future studies should also focus on developing more evidence-based AI suggestions for strategic communication practitioners, as well as a thorough methodological and theoretical discussion of how to further close the gap between research and practice in the African setting.

**Sem-Ackah, K., Asemanyi, A. A., Osei-Mensah, B., & Anane, A. A. (2023).** Staged beefing in the music industry in Ghana: Perspectives of selected entertainment bloggers and music artistes. *Research Journal of Mass Communication and Information Technology*, 9(2), 62-79.

## Department of Strategic Communication

### Article(s)/Chapters in an Edited Book

**Boateng, A. B. (2024).** Social media marketing of public universities in Ghana: The use of Facebook. In A., W., Njathi & B. Watkins (Eds.). *Digital public relations and marketing communication trends in Africa* (pp. 127-148). Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781032689654-8/social-media-marketing-public-universities-ghana-akwasi-bosompem-boateng>

### Abstract

Whether higher education institutions including public universities seek to engage with their students, attract new students, relate with their alumni, or increase donations, social media have become necessary in marketing their brands and activities. This chapter argues that the use of robust social media marketing could contribute to the brand promotion of public universities. However, little has been done to investigate how public universities in Ghana are using social media to market and attract stakeholder audiences in the competitive higher education environment. Using Technology Acceptance Model and Kapferer's Brand Identity Prism, this chapter analyzes data from qualitative interviews and documents on the Facebook page of the University of Cape Coast to investigate the use of social media in higher education marketing in Ghana. The study found that the University of Cape Coast perceives social media as useful platforms in their marketing activities. The ease of use of social media motivates the University of Cape Coast to appropriate them in its digital marketing activities. The University of Cape Coast employs various strategies using different social media platforms for its brand marketing communication activities. Facebook provides cost-effectiveness, interactivity and ease of use. However, the University of Cape Coast has not given critical attention to the use of social media in extending engagements, conversations and relationships to ensure brand loyalty. This requires enlightened policies

and investment in social media to improve their functionality and develop multi-platform approaches to social media marketing for interactions in promoting the brand identities and loyalty to public universities.

## Articles In Journal

**Boateng, A., B. & Gumedé, N. (2023). Communication strategies in relation to covid-19 in south Africa and Ghana: A systematic review. *Journal of Creative Communications*, 18(2), 214-229.** <https://journals.sagepub.com/doi/full/10.1177/09732586231168945>

### Abstract

COVID-19 is a novel severe acute respiratory syndrome coronavirus 2 (SAR-CoV-2) spread from person to person through infected air droplets of saliva and discharged from sneezes and coughs. This study seeks to contribute to knowledge and understanding of how coronavirus outbreaks could be addressed by examining communication and media strategies used by governments and public health institutions in South Africa and Ghana during the coronavirus pandemic. The study systematically analysed published data on COVID-19 in South Africa and Ghana from 2019 to 2020 to identify recurring themes to discuss issues regarding communication strategies in response to the outbreak. This study found various inadequacies and challenges to communication and media strategies to address the spread of COVID-19. The governments and public health institutions in South Africa and Ghana used multiple mass media channels to communicate different messages and create awareness about COVID-19. This article recommends the improvement of communication and media engagements between governments and health stakeholders in South Africa and Ghana to increase public awareness of the risks, threats and outcomes of COVID-19. The media in South Africa and Ghana must conduct fact finding of information about coronavirus from official sources in government and health institutions before dissemination to the public to minimise fake news, misinformation and disinformation. The governments and health institutions must not rely solely on traditional mass media strategies but also integrate indigenous communication strategies for engagements to address the challenges of mass media to increase public awareness about COVID-19 in South Africa and Ghana.

## Books

**Wornyo, A. A., Appiah-Adjei, G., Asemanyi, A. A., Okae-Anti, A., Anane, A. A., Baffoe, G. A., Watson-Nortey, N. K. L., Dedzo, Y., & Acqua, I. K.-N. (2024). *A manual on communication skills for tertiary students* (4th ed.). Peaddo Ventures.**

### Abstract

The book has been prepared to help students develop effective language and study skills for their academic work, improve vocabulary become familiar with the conventions of standard English Language usage and develop strategies for preparing and taking examinations. The book provides skills aimed at equipping students with the mechanical skills for academic writing and reading.

**Wornyo, A. A., Appiah-Adjei, G., Asemanyi, A. A., Okae-Anti, A., Anane, A. A., Baffoe, G. A., Watson-Nortey, N. K. L., & Dedzo, Y. (2023).** *A manual on communication skills for tertiary students* (3rd ed.). Peaddo Ventures.

### **Abstract**

The book is designed to help students develop effective language and study skills for their academic work, improve vocabulary, become familiar with the conventions of standard English Language usage and develop strategies for preparing and taking examinations. This issue has a special section devoted to punctuation marks, a key element in academic writing.

## **Department of Journalism and Media Studies**

### **Articles In Journal**

**Appiah-Adjei, G. (2024).** **Journalism education and sustainable journalism in Ghana.** *Journalism Practice*, 1–20. <https://doi.org/10.1080/17512786.2024.2340514>

### **Abstract**

Despite a decentralised planning system for a multi-stakeholder approach in implementing the SDGs and numerous efforts towards attaining Agenda 2030, Ghana's progress is not at the rate required to achieve the SDGs targets by 2030. One of the reasons for slow progress is because less consideration is given to the role of professional journalism in sustainable development. This study is on the premise that education in sustainable journalism is central to attaining Agenda 2030. As a result, it seeks to investigate how journalism education in Ghana equips students with education for sustainable journalism. Using a qualitative approach and case study design, multiple methods (document analysis, FGD and interviews) are used to gather data to establish how sustainable journalism is integrated into the Ghanaian journalism curriculum. Thematic analysis of data through the lens of the curriculum framework for SDGs established that, to an extent, sustainable journalism is part of the curriculum even though it is not expressly taught as a stand-alone course. Therefore, there was unanimous support for the modification and inclusion of sustainable journalism into the existing curriculum..

**Jamil, S., & Appiah-Adjei, G. (2024).** **The dire need of ecological sustainability in Pakistan: The agenda-setting role of news media to address environmental problems.** *Media Asia*, 1–22. <https://doi.org/10.1080/01296612.2024.2396214>

### **Abstract**

Pakistan is struggling from a major challenge stemming from the twin problems of declining economy and environmental degradation. There is sufficient evidence to suggest that the country is failing in its battle to protect its environment. Considering its wider reach and influence, the need for news media's strategies to set a public agenda for fostering ecological sustainability is felt than ever before in Pakistan. Therefore, drawing on the agenda setting theory, this study explored the Pakistani journalists' views about possible strategies that the country's news media can use to set the public agenda of ecological sustainability. In doing so, this study used the qualitative method of in-depth interviews and analyzed the

data using inductive thematic analysis. The interviewed Pakistani journalists suggested four key strategies to set a public agenda on ecological sustainability: (i) news verification to combat dis/misinformation, (ii) fostering knowledge-based journalism, (iii) improving public trust and engagement, (iv) and solution-oriented news reports. They emphasized using specialized knowledge and using right sources to consult for information on ecological sustainability solutions relevant to the particularities of the provinces in Pakistan. They also urged for combating disinformation so as to improve the public trust deficit about ecological sustainability news among Pakistanis.

**Jamil, S. & Appiah-Adjei, G. (2023). Let's draw a line between dos and don'ts: Pakistani journalists' perspectives about the ethics of conflict-sensitive reporting. *Journalism and Media*, 4(1), 177-196. <https://doi.org/10.3390/journalmedia4010013>**

### **Abstract**

In conflict-ridden countries, the news media has a pivotal role to perform as an active advocate of human rights and societal peace, as well as a facilitator of conflict mitigation and resolution through the gathering and dissemination of non-partisan information. While today the world witness armed conflicts in more forms than ever before, some countries are more sensitive to conflict and violence—such as Pakistan. The country is recognized as one of the riskiest places for working journalists by virtue of recurrent political, ethnic, and religious conflicts. The Pakistani journalists work in a climate of fear and risks and with opposing groups seeking to influence the news media, which creates more difficulties for them to report unbiased and accurate news to the public. The practice of ethics has become more challenging for the Pakistani journalists because the country lacks an effective and standardized code of conduct to report on conflict. Therefore, drawing on the theory of the conflict triangle by Galtung, this study seeks the Pakistani journalists' perspectives about the ethics of conflict sensitive reporting. In doing so, this study uses the quantitative method of survey and the qualitative method of in-depth interviews. The study uses descriptive analysis to present the survey findings in the form of percentage and thematic analysis to present the findings of interview data.

**Osei-Mensah, B., Asiamah, E.O. & Sackey, R. (2023). Strategic communication and artificial intelligence: Reviewing emerging innovations and future directions. *Archives of Business Research*, 11(1), 85-102. <https://doi.org/10.14738/abr.111.13616>**

### **Books**

**Roberts, T., Gitahi, J., Allam, P., Oboh, L., Oladapo, O. A., Appiah-Adjei, G., Galal, A., Kainja, J., Phiri, S., Abraham, K., Skelton, S. K., & Sheombar, A. (2023). *Mapping the supply of surveillance technologies to Africa: Case studies from Nigeria, Ghana, Morocco, Malawi, and Zambia (1st ed.)*. Institute of Development Studies. <https://doi.org/10.19088/IDS.2023.027>**



## Department of Communication Instruction

### Articles In Journal

- Hammond, C., Watson-Nortey, N. K. L., & Osei-Mensah, B. (2023). Why are you not married? The same reason you are not dead, it's not my time': Social media use of hate speech on female celebrities in Ghana. *Research Journal of Mass Communication and Information Technology*, 8(1), 109 – 131. <https://org/10.56201/rjmcit.v8.no1.22.pg103.131>
- Obeng, B., Wornyo, A. A., & Hammond, C. (2023). Variations in rhetorical moves meta discourse elements in conference abstracts: A genre analysis. *European Journal of Applied Linguistics Studies*, 6(1), 127-148. <http://dx.doi.org/10.46827/ejals.v6i1.421>
- Peprah, A. K., & Wornyo, A. A. (2023). Propaganda as a means of persuasion by student leaders: A study of graduate students' elections in two universities in Ghana. *European Journal of Political Science Studies*, 6(2), 1-18. <http://dx.doi.org/10.46827/ejps.v6i2.1455>
- Wornyo, A. A. (2023). The use of persuasion in editorials: Logos, ethos and pathos appeals in the Daily Graphic. *Journal of Linguistics and Literature*, 6(1), 1-9.

## Department of Development Communication

### Article(s)/Chapters in an Edited Book

- Aggrey, K. (2024). New Wine Versus Old Wine: Internet Praxis Begets New Social Reality of Power Relations between the Young and the Old in the Swedru Municipality. In K. Aiseng, I. A. Fadipe, & P. Mpofu (Eds.) *Political Economy of Contemporary African Popular Culture: The Political Interplay*. Lexington Books.

### Abstract

The fear of challenging the status quo compels the elderly in the Swedru Municipality to condemn youth involved in the Internet fraud phenomenon. This argument is best understood considering the discourse of Ghanaian society which uses culture and tradition to mute otherwise brilliant ideas and ingenuity of young people. In spite of the endemic nature of Internet scams, young people engaged in the Internet fraud praxis seem to have couched a new sub-cultural life imbued with a new sociality of power. Author thus submits that people believe that the adult population's phobia could be as a result of some underlying reasons known only to them.

**Aggrey, K. (2024). New Wine Versus Old Wine: Internet Praxis Begets New Social Reality of Power Relations between the Young and the Old in the Swedru Municipality. In K. Aiseng, I. A. Fadipe, & P. Mpofu (Eds.). *Political Economy of Contemporary African Popular Culture: The Political Interplay*. Lexington Books.**

### **Abstract**

The fear of challenging the status quo compels the elderly in the Swedru Municipality to condemn the youth involved in the Internet fraud phenomenon. This argument is best understood considering the discourse of Ghanaian society which uses culture and tradition to mute otherwise brilliant ideas and ingenuity of young people. In spite of the endemic nature of Internet scams, young people engaged in the Internet fraud praxis seem to have couched a new sub-cultural life imbued with a new sociality of power. Author thus submits that people believe that the adult population's phobia could be as a result of some underlying reasons known only to them.

**Aggrey, K., Sackey, B. O. & Boateng, P. A. (2024). Communicating Sexuality and Reporting Reproductive Health Issues Among the Akan: Questions of Morality, Profanity, and Culture. In K. Aiseng & I. A. Fadipe (Eds) *Public Health Communication Challenges to Minority and Indigenous Communities*. IGI Global, New York. <https://10.4018/979-8-3693-0624-6>.**

### **Abstract**

Societies structure their communication relationships in a variety of ways. The Akan in Ghana have a peculiar way of communicating issues relating to their sexuality. They find it difficult mentioning the real names of the human sex organs; they prefer employing various metaphors to signify these. It is not clear what the reasons are and how feasible this becomes when they (Akan) are confronted with reporting reproductive health since it is usually considered important for patients to indicate specific parts of the body that ail for appropriate diagnosis and healthcare. The study investigated how the Akan communicate sexuality generally, and how this affects their reporting of reproductive health issues. It was grounded on the rhetorical sensitivity theory. A multiple case study was employed for the study. In all, eight respondents were sampled and were categorised into two as cultural respondents and medical respondents. Cultural respondents comprised the Fante ethnic group of the larger Akan group. One respondent each was selected from three Fante traditional communities.

# SCHOOL OF CREATIVE ARTS

## Department of Graphic Design

### Articles In Journal

**Boamah, A. (2024). Graphic design students and social media usage: A check on new media literacy. *Arts and Design Studies*, 109(2225-059X), 6-13. <https://www.iste.org/Journals/index.php/ADS/article/view/61939>**

#### Abstract

Digital media's growing impact on education is a defining feature of the twenty-first century. Research indicates a notable void in knowledge on the degree of active engagement with new media literacy that students in diverse fields, such as graphic design, exhibit. Using the New Media Literacy Framework, this study attempts to address this gap by objectively evaluating the graphic design students' new media literacy abilities. The study adopted a quantitative descriptive survey to identify, analyse, and describe the new media literacy skills of Graphic design students towards social media use. A purposive sampling technique was used to select 150 active students based on the four-continua skills as indicators from the New Media Literacy Framework. The findings of the study indicate that Graphic design students have high levels of functional consuming, critical consuming, critical consuming, and functional media literacy skills. Additionally, regression analysis conducted to establish what influences design students' new media literacy skills revealed the predictors as; the type of social media used by design students, students' level, gender, and the area of specialization of the design student.

**Essuman, J., Aklasu, E., & Osei Akyiaw, S. (2024). Visual Noise: Publicity in Winneba and Its Impact. *Research Journal of Mass Communication and Information Technology (RJMCIT)*, 10(2), 97-116. <http://www.iiardjournals.org>**

#### Abstract

Abstract Visuals are meant to enhance recall of experience, support in-depth research, dispel myths, create new experiences, and provide context for vital information, and help in forming value judgments. Many discourses try to find out whether visual noise is detrimental or a helpful technique for spreading information to the community, spectator, or reader. Billboards and posters for outdoor advertising remain the best mediums for the disseminating information to the general public. In spite of the exceptional role of visual artefacts, the concerned authorities have not given the matter enough attention regarding positioning these visuals in order to lessen the detrimental effects on the environment, especially for road users who patronize this service. The study examines some visual artefacts used in Winneba, the impact they have on the community, and the responses from road users. The study deployed "Perception Theory of Visual Communication" and "Uses and Gratification Theory" to form the foundation of the study. The study uses a cross-sectional study design with a minimum sample size of 10 participants. The findings revealed that outdoor visuals, when not properly sited, distract attention from important information, defy and lower ethical and moral standards, as well as pose risks to road users. The study concluded that cluttered visuals pose a challenge that requires consideration and that the placement of outdoor visuals must be regulated and implemented to guarantee that a restricted quantity of commercials are permitted in order to minimize visual disarray.

**Aklasu, E., & Essuman, J. (2023). Graphics mirror: Re emphasizing visual aids. *International Journal of Education and Evaluation*, 9(9), 122-136. <http://doi.org/10.5620/ijee.v9.no9.2023.122136>**

### **Abstract**

Abstract The influence of visual aids on the academic performance of students is a topic of significant interest within the field of education. Visual aids such as images, diagrams, videos and other visual representations play a crucial role in enhancing students' comprehension and retention of information. The primary objective of this study was to examine the contributions of visual aids towards academic performance of Visual Arts students at St. John's, Archbishop Porter's Girls and Fijai Senior High schools in the Sekondi-Takoradi Metropolis. The intent was to identify visual aids as essential instructive instruments and how they impact learning. An exploratory case study approach was used to assess the availability and use of instructional resources that explanatory research has attempted to explain. A sample size of 15 participants was used. Data was collected through interviews, focus group discussion, observation and documentary review. A thematic approach was used for data analysis. The study found that visual aids maintained students' interest, improved comprehension, recall and retention of information. Students' perceptions of visual aids revealed that their absence promotes abstract presentations, making it difficult to grasp concepts, as teachers mostly resort to the use of the whiteboard. Financial constraints were identified as a major teaching challenge. This difficulty has a negative impact on students' academic performance. The research inferred a direct correlation between the use of visual aids and effective student academic performance.

**Essuman, J. (2023). Technological intrusions in image creation and interpretation within Ghanaian visual culture: Kweku Ananse in focus. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 28(3), 41-52. <http://www.iosrjournals.org>**

### **Abstract**

Abstract This article provides an insightful look at the impact of technology on image creation and interpretation within the Ghanaian visual culture, focusing specifically on the images of Kweku Ananse. It focuses on the images (illustrations) of the Ghanaian mythical figure and a trickster, Ananse, who is well known for his smartness. The study analyses the impact of technological advancements on the interpretation of Ananse images within the Ghanaian visual culture. It also highlights the activities of artists using technology in their works and how their works influenced their audience's perception, especially in their recreations of digitised Ananse images. The qualitative approach and purposive sampling technique were used in this study. The findings were that, artists create the mythical figure of Ananse based on the stories in the books. This represents and that technology has allowed for the visual story of Kwaku Ananse to be shared and accessed more easily, leading to a wider audience and appreciation of that component of the Ghanaians' visual culture. The article concludes by discussing the role of technology in shaping the future of the Ghanaian visual culture and how artists are leading the way in using technology to create innovative Ananse images that challenge traditional norms and push the boundaries of the art world. Key words: Technology, Image Creation, Image interpretations, Visual Culture and Kweku Ananse

**Essuman, J., Amissah, E. K., & Gyimah, J. K. (2023). Graphical symbolism of Adaekeese Festival: Independent visual communication tool of verbal language. *International Journal of Education Humanities and Social Science*, 6(01), 264-280. <https://doi.org/10.54922/IJESS.2023.0490>**

### **Abstract**

**ABSTRACT** The primary focus of this study was to present selected graphical symbolism of Adaekeese festival of the Asante Kingdom in Ghana and brings out the communicative values embedded in them. The study seeks to buoy up the comprehension of usage of how graphical symbolism of Adaekeese festival are used in a more communicative way by the current generation of the Asante on what they communicate independently of verbal language and their implications for the festival. The research method employed to unearth information were qualitative research approach and descriptive. The research tools employed were extensive observation at the Adaekeese festival celebration ground including regalia and paraphernalia, document reviews and verbal data from persons who are knowledgeable about the displayed graphical symbolism, and photographs of the graphical symbolism for data description. Expert purposive sampling method was adopted in this study. The major findings of this study revealed that although the graphical symbolism of Adaekeese festival have hidden symbolic and philosophical meanings that can be used to educate and inform the society of the rich cultural heritage of the Asante Kingdom, they were specifically used to communicate independently of verbal language during the festival. The study concluded that the graphical symbolism of Adaekeese festival communicates independently of verbal language among traditionally and culturally endowed or trained royals and subjects during the festival. **Key Words:** Graphical Symbolism, Adaekeese Festival, Asante Kingdom, Visual Communication, Verbal Language.

**Opoku, N. (2024). Readiness to enter the workforce: Perceptions of graphic design students against market demands. *Arts and Design Studies*, 109, 14-26. <https://doi.org/10.7176/ADS/109-03>**

### **Abstract**

Studies have revealed that employers of newly hired graphic design graduates are not well prepared. Interestingly, this triggers further research to discover insight to the workforce readiness gap among graphic design students. This present study then sought to explore the perceptions of graphic design students in their quest to enter the workforce in their demand of the market. To that end, an online survey questionnaire was designed and administered to 102 graphic design students enrolled in the final year of their undergraduate degree programme. The study revealed that there are deficits of professional competencies in the area of coding, responsive design and prototyping tools. Meanwhile, graphic design students assessed their creativity, handling deadline and project management competencies as the high. The findings of this study are useful for improving the education and employability of graphic designers as they provide a consistent language to pertinent stakeholders about the requirements for new entrants to the graphic design industry.

**Esseku, J. F. (2023). Utilizing white space for impactful design. *International Journal of Novel Research and Development*, Vol. 8(8), 265-275. <https://www.ijnrd.org/papers/IJNRD2308031.pdf>**

### **Abstract**

White space, often referred to as negative space, is a fundamental yet frequently overlooked element of design. In this paper, the researcher explores the significance of white space in various design disciplines and its profound impact on visual communication. The purpose of this abstract is to provide a concise overview of the main themes and insights discussed in the full paper. The research looks at white space and its essential characteristics, emphasizing its ability to create balance, enhance readability, and evoke emotions. Next, a delve into the principles and techniques of incorporating white space effectively in graphic design and typography. Through illustrative examples and case studies, it is demonstrated how skilled utilization of white space can elevate the overall aesthetic appeal and usability of design compositions. Furthermore, this paper examines the psychological and cognitive aspects of white space, exploring how it influences perception, attention, and comprehension. By understanding the interplay between white space and content, designers can optimize their creations to engage and guide users effectively. Moreover, the paper addresses the common misconceptions surrounding white space, dispelling the notion that it is mere emptiness or wasted area. Instead, the researcher argue that white space should be embraced as an active and purposeful design element, capable of directing focus, emphasizing key elements, and fostering a sense of elegance and sophistication. Lastly, the practical considerations for incorporating white space into design workflows, including the challenges faced and best practices to overcome them is discussed. Also, the paper highlights the role of responsive design and mobile devices in shaping the utilization of white space in contemporary design. In conclusion, this paper advocates for a renewed appreciation of white space as a crucial component of design. By recognizing its inherent value and leveraging its potential, designers can create visually captivating and highly functional compositions that resonate with their intended audience. The insights presented in this paper aim to inspire designers to harness the power of white space and integrate it seamlessly into their creative process.

**Esseku, J. F., Teye, V. Q. N., Musa, M., & Agyemfra, K. A. (2023). The role of animation in preserving Ghanaian cultural heritage. *International Journal of Research and Innovation in Social Science (IJRISS)*, 7(6), 795-805. <https://dx.doi.org/10.47772/IJRISS.2023.7663>**

### **Abstract**

The importance of animation to the preservation of Ghana's cultural legacy is the focus of this study. The potential of animation as a medium for preserving and promoting Ghana's cultural history is being investigated at a time when globalization and modernity provide obstacles to cultural preservation. The research examines the state of cultural preservation efforts in Ghana at the present time and studies the ways in which animation might be used to both portray and preserve aspects of Ghanaian culture such as folklore, traditional dances, and historical events. An investigation into how well animation can engage and inform a wide variety of audiences about the cultural traditions of Ghana is being carried out. In addition, we investigated cutting-edge animation methods that, when applied appropriately, can improve the conservation and transfer of cultural property. The study also looked at the effects that animation has had on Ghanaians' cultural understanding, appreciation, and identity, as well as its potential to inspire future generations. By embracing animation, Ghana is able to secure the continuation of its cultural traditions and build a greater awareness for Ghanaian cultural heritage.



**Kumangtum, R. T., & deGraft-Yankson, P. (2023).** Kasem proverbs as digital paintings. *Arts and Design Studies*, 108(8), 8-19.

**Owusu, E., & Gyapong, N. Y. (2023).** Computer health risks among graphic design students in Ghanaian tertiary institutions: The case of University of Education, Winneba. *Journal of Arts and Design Studies*, 107(2023), 26-37. <https://core.ac.uk/download/pdf/590228534.pdf>

## Abstract

The study was set out to explore the computer health risks awareness among Graphic Design students in tertiary institutions of Ghana, using University of Education, Winneba as a case study. A descriptive survey design was adopted for the study. To accomplish the aim, two research questions were formulated to guide it. Review of related literature centred on computer health risks, particularly eye, vision and posture, while empirical studies on computer ergonomics were also reviewed. Stratified, purposive and simple random sampling techniques were adopted to select one hundred and fifteen (115) respondents for the study. The instruments used for data collection were questionnaire and observation, while the data collected was analysed and presented in simple percentages and frequencies. The analysis of data indicated that a majority of Graphic Design students were using the computer extensively and for prolonged hours. However, they were not aware of the associated health implications. Hence, they adopted a bad attitude by using the machine for prolonged hours without intermittent breaks, and assumed bad postures such as slouching. It was recommended that the Department of Graphic Design, University of Education, Winneba should make efforts to educate students about the dangers involved in using the computer as well as ensuring students adhere to best practices when it comes to computer usage.

## Conferences/Workshops/Symposia/Seminars with Presentations

**deGraft-Yankson, P. (2024, February 18–23).** *Framework for the development of a Trans-disciplinary Art Education textbook* [Paper presentation]. **First workshop on the Development of a Trans-disciplinary Art Education textbook, Johannesburg.**

**deGraft-Yankson, P. (2023, September 4–8).** *Postcolonialism: Imagining a Joint Textbook from the Global South and the Global North* [Paper presentation]. **InSEA World Congress 2023, Çanakkale.**

**deGraft-Yankson, P. (2023, June 12–18).** *Dialogue on the feasibility of transcultural/transdisciplinary textbook for Art Education* [Paper presentation]. **Research Meeting in the University of Bayreuth, Bayreuth.**

**Essuman, J. (2023, February).** *Religious tolerance and sustainable development: The use of conceptual photography* [Paper presentation]. **The Power of Images, Winneba**

## Books

**Addae-Yeboah, A., Boamah, A. & Akyiaw, S. O. (2023).** *3D Modelling Terminologies*. University Press, Winneba. ISBN: 978-9988-3-6711-4

**Amponsah, A. B., & Essuman, J. (2023).** *A handbook on lithographic printing fault, causes and suggested remedies*. U-Gain Publishing, Sepe- Kumasi.

# Department of Art Education

## Articles In Journal

**Kpodo, C. S., Ankyiah, F., Glover, R. K. A., Dah S. (2024).** Exploring innovative approaches and interventions to address misconceptions and promote effective visual arts education in secondary schools in Ghana. *American Journal of Education and Technology*, 3(2), 7-11. <https://doi.org/10.54536/ajet.v3i2.2524>

### Abstract

Visual arts education is important in developing students' creativity, critical thinking, and cultural awareness. However, in Ghana, visual arts subjects at the secondary school level often need help with challenges such as lack of resources, large class sizes, and misconceptions about the value of art education. This study aimed to explore innovative approaches and interventions that could address misconceptions and promote effective visual arts education in Ghana's secondary schools. A qualitative document analysis and thematic analysis were conducted. Relevant policy documents, national curriculum frameworks, and previous research studies related to visual arts education in Ghana were analyzed to identify existing challenges, opportunities, and recommendations. Key emerging themes included misconceptions about visual arts subjects, lack of resources, training for art teachers and large class sizes that do not augur well for hands-on learning. The analysis also identified recommendations such as integrating visual arts across the curriculum, promoting art exhibitions, and leveraging community resources and partnerships to support visual arts programmes. This study provides insights into existing challenges in visual arts education in Ghana's secondary schools and highlights innovative approaches that could help address misconceptions and strengthen visual arts programmes. Integrating visual arts across subject areas, promoting art exhibitions, improving teacher training, and leveraging community partnerships may help promote effective visual arts education.

**Ankyiah, F., Kpodo, C. S., Amo-Broni, R., & Asare Donkor, M. (2023).** When the artist's studio is alive, art is alive: Empowering art educators and students through live studio practice. *Asian Research Journal of Arts & Social Sciences*, 21(1), 1-11. <https://doi.org/10.9734/arjass/2023/v21i1457>

### Abstract

Art education plays a vital role in developing artistic talent and nurturing creativity. However, the challenges facing art education in many developing countries, including Ghana, are significant. Traditional teaching methods, lack of resources, and cultural and social factors are barriers to the development of high-quality art education programmes and the cultivation of artistic talent. This qualitative study uses textual analysis to explore the potential of live studio practice as a solution to the challenges facing art education in Ghana. With regards to duration, investigation time frame falls between 2012 and 2023. The analysis of selected texts related to art education in Ghana reveals several key themes and patterns related to the challenges facing art education in Ghana and the potential of live studio practice to promote practical skills development, creativity, community engagement, professional skills development, and cultural exchange. The findings of this study disclose that policymakers, educators, and practitioners in the field of art education in Ghana does not prioritize the factor

of the development of policies and practices that promote the development of high-quality art education programmes and the cultivation of artistic talent in Ghana through the use of live studio practice. In terms of suitable spaces for the critical artistic studio practical aspects, it is uneasy to have comfortable dwellings for the consistent practical works. These factors donate the hindrance of potentials in the amateur artists. This study contributes to the ongoing debate about the future of art education in Ghana and provides insights into the potential of live studio practice as a solution to the challenges facing art education in Ghana and other developing countries. Keywords: Art education, live studio practice, empowerment, practical skills development, creativity

**Ankyiah, F., & Appiah, S. D. (2024). *The disconnection of identity and place in drawing: Superficial exploration of culturallandscapes. American Journal of Arts and Human Science (AJAHS), 3(1), 45-51. <https://doi.org/10.54536/ajahs.v3i1.2487>***

### **Abstract**

This art-based research explores the disconnect between personal identity and sense of place when representing cultural landscapes through superficial drawing practices. Existing solely as visual representations focused on formal qualities of form and colour, drawings of cultural landscapes often fail to deeply engage with the lived experiences, histories, and meanings embedded within those places. Through a series of plein-air drawings created in three distinct cultural landscapes—a rural farming community, an urban park, and a historical heritage site—this research examines how superficial approaches to landscape drawing can distance the artist from genuinely understanding and connecting to the places depicted. Drawings were analysed using contemplative art criticism to evaluate how effectively they conveyed embedded cultural meanings and perspectives beyond mere visual documentation. The findings suggest that without contextual research into the landscapes' social and cultural significance and reflective practices connecting the artist's identity and experiences to the place, the drawings became detached representations lacking depth of meaning. This superficial approach resulted in a disconnection between the artist's sense of identity and place in the depicted landscapes. To more authentically connect representation to meaning, the researcher proposes an alternative model for cultural landscape drawing that emphasizes experience-based practices and reflective inquiry into the intersections between artist, place, and community identities. Such an approach holds potential to bridge divisions between external visualization and internal comprehension of what cultural landscapes signify on deeper levels.

**Ankyiah, F. (2023). *Mobile marketing in the art industry: Trends and insights. Journal of Social Media Marketing Journal of Social Media Marketing, 2(2), 20-34. <https://doi.org/10.33422/jsmm.v2i2.1124>***

### **Abstract**

The rising prevalence of mobile devices has transformed consumer behaviors and created new opportunities for audience engagement through mobile marketing in the art world. However, there has been limited research on implementing effective mobile strategies for art professionals. This study aimed to systematically review mobile techniques over the past five years based on academic literature and industry reports. It analyzed key mobile marketing campaigns from prominent art institutions focusing on approaches like apps, augmented reality, and location-based services. The literature revealed several important findings about mobile marketing effectiveness. According to Pew Research Center data from 2019, 81% of Americans now own smartphones frequently used for internet access, demonstrating

widespread mobile access. Studies of apps found those displaying artist portfolios and enabling ticket purchases had high audience engagement. Augmented reality apps providing interactive experiences attracted more first-time museum visitors than non-users. Location services increased nearby gallery foot traffic up to 35% by capitalizing on proximity. Case studies indicate mobile strategies can significantly boost participation when integrated across digital and physical channels through profiles, ticketing, content, and location promotion to spur visits. As a result, mobile technologies may help arts institutions connect with broader demographics in novel ways. However, usability and data privacy must be addressed. The review concluded that mobile techniques are highly impactful for boosting audience involvement, working best as an omni-channel approach across platforms and interactivity. Adopting established mobile marketing best practices is essential for arts professionals and organizations to thrive in today's digital landscape and engage wider audiences.

**Ankyiah, F. (2023). Riding against patriarchy: Gloria Sarfowaa's self portraiture in appropriated historical equestrian in contemporary feminist portrait. *Sexuality and Gender Studies Journal*, 1(2), 11-23. <https://doi.org/10.33422/sgsj.v1i2.478>**

### **Abstract**

Equestrian portraiture has historically upheld gender norms by depicting powerful men and excluding women artists. 17th and 18th-century equestrian portraits of women depicted them as passive objects, often overshadowed by their male counterparts. These portraits reinforced traditional gender roles and upheld the patriarchal hierarchy prevalent during that time. This paper examines how Ghanaian contemporary artist Sarfowaa challenges patriarchal traditions through feminist self-portraiture in appropriated historical equestrian paintings. Through visual analysis of composition, techniques, symbols and contextualize selected artworks, this article explores how Sarfowaa subverts the equestrian genre by inserting herself into these male-dominated paintings. Her self-portraits provide a powerful statement of resistance that reclaims authority and agency for women. By contextualizing Sarfowaa's work within feminist art movements and theory, this paper analyzes how her art dismantles traditional gender roles and norms. The results demonstrate that Sarfowaa's portraits further the aims of feminist portraiture through their bold questioning of patriarchal power structures. This research expands current scholarship on the intersections of art, portraiture, feminism, and political resistance. It appeals to academics, artists, and audiences interested in the capacity of contemporary art to drive social change.

**Ankyiah, F. (2023). Mocking the Canon: Irony, Subversion, and Play in Iconoclastic Portraiture. *European journal of behavioral sciences*, 6(4), 1-10. <https://doi.org/10.33422/ejbs.v6i4.1108>**

### **Abstract**

This qualitative research paper examines how iconoclastic artists use techniques of irony, subversion, and play to undermine the conventions of traditional portraiture. Canonical portraiture aims to convey status and power through dignified representation. Iconoclastic portraiture rebels against this pretense through incongruous, caricatured, and role-reversed depictions designed to mock canonical norms. The paper analyzes selected artworks by Marcel Duchamp, Cindy Sherman, Yue Minjun, and others that exemplify iconoclastic approaches. Visual analysis reveals how incongruity introduces discordant elements to undercut meaning, caricature exaggerates features comically, and role reversal portrays subjects in undignified ways that contravene tradition. The paper interprets these techniques through the

lens of postmodern theories of parody, carnivalesque inversion, and deconstruction. Findings demonstrate that by ironically mocking canonical conventions, iconoclastic portraiture destabilizes traditional hierarchies and reimagines portraiture as a critical, subversive art form. This research advances understanding of how iconoclastic artists deploy irony and play to contest establishment orthodoxies. This study elucidates iconoclastic portraiture's aims and significances as a challenge to the canon's pretensions and demonstrates humor and subversion as profound artistic strategies.

**Ankyiah, F. (2023). Ritual Ecology and Sirigu Mural Paintings: Interrogating the Intersection of Art and Culture. *Journal of Advanced Research in Social Sciences*, 6(4), 1-15. <https://doi.org/10.33422/jarss.v6i4.112>**

### **Abstract**

This theoretical research study utilizes qualitative case study research methods to explore the intersection of art and culture in the context of Sirigu mural paintings, a unique art form found in the Upper East region of Ghana. Drawing on the concept of ritual ecology, the study investigates the cultural significance of these paintings and their role in local ritual practices. Through in-depth interviews with artists, community members, and cultural experts, as well as participant observation and visual analysis, the study examines the ways in which Sirigu mural paintings embody and reflect local cultural traditions. The study also analyzes the artistic techniques and materials used in creating the paintings, highlighting the importance of artistic skill and innovation in the production of cultural artifacts. Drawing on theories of cultural identity and cultural transmission, the study examines the ways in which Sirigu mural paintings are passed down through generations and how they contribute to the maintenance and preservation of local cultural practices. Again, the study explores the challenges and opportunities for sustaining cultural heritage in the face of globalization and modernization. The findings of this study contribute to a deeper understanding of the complex relationship between art and culture, and the ways in which cultural practices and traditions are embodied and expressed through artistic forms. Lastly, the study provides insights into the role of artistic innovation and inter-generational transmission in preserving cultural heritage, and the challenges and opportunities for sustaining cultural traditions in a rapidly changing world.

**Ankyiah, F. (2023). Exploring the role of leadership in art history: A visual and documentary analysis. *Journal of Advanced Research in Leadership*, 2(1), 25-38. <https://doi.org/10.33422/jarl.v2i1.530>**

### **Abstract**

Leadership is an integral yet understudied component of art history. This paper explores the role of influential leaders who shaped the course of art movements and genres throughout history. A visual and documentary analysis is conducted to examine how leadership manifests in artistic works and historical texts. The study analyzes key art historical figures such as Leonardo da Vinci, Michelangelo, Andy Warhol, and others who pioneered new techniques, spearheaded movements, founded institutions, mentored proteges, or galvanized public interest in the arts. Their lasting impacts as champions of artistic innovations and progress are evaluated. Archival letters, journals, articles, and other documents provide insights into leadership styles, relationships with followers, and strategic decision-making. Patterns of patronage linking leaders with wealthy, powerful, or religious institutions are also explored. The visual record reveals how leadership was conveyed symbolically through the content and style of seminal works. The analysis integrates qualitative evidence from both

visual and documentary sources to build a historical understanding of leadership's central, multifaceted role in shaping the direction of art. This study aims to highlight leadership as a driving force in art history and understand how leaders profoundly influenced the production, dissemination, and reception of art across successive eras.

**Ankyiah, F. (2023). The art of memoir: Using drawing to tell your story. *International Journal of Research and Innovation in Social Science (IJRISS)*, 7(6), 1176-1183. <https://doi.org/10.47772/IJRISS.2023.7701>**

### **Abstract**

This theoretical article explores the relationship between memoir and visual art, with a particular focus on the use of drawing to enhance the narrative structure and emotional impact of the text. Drawing on theories of visual storytelling and visual thinking, the article argues that drawing can be used to convey information, emotion, and meaning in a memoir in ways that written language cannot. The article also analyzes the interplay between text and image in memoir, including the use of sequential art and the representation of memory. By the end of the article, readers will have a deeper understanding of the theoretical framework behind the use of drawing in memoir and its potential to enhance the reader's experience.

**Ankyiah, F., Kpodo C., Amo-Broni, R., & Asare Donkor, M. (2023). *When the artist studio is alive, art is alive: Empowering art educators and students through live studio practice. Asian Research Journal of Arts & Social Sciences*, 21(1), 1-11. <https://doi.org/10.9734/ARJASS/2023/v21i1457>**

### **Abstract**

Art education plays a vital role in developing artistic talent and nurturing creativity. However, the challenges facing art education in many developing countries, including Ghana, are significant. Traditional teaching methods, lack of resources, and cultural and social factors are barriers to the development of high-quality art education programmes and the cultivation of artistic talent. This qualitative study uses textual analysis to explore the potential of live studio practice as a solution to the challenges facing art education in Ghana. With regards to duration, investigation time frame falls between 2012 and 2023. The analysis of selected texts related to art education in Ghana reveals several key themes and patterns related to the challenges facing art education in Ghana and the potential of live studio practice to promote practical skills development, creativity, community engagement, professional skills development, and cultural exchange. The findings of this study disclose that policymakers, educators, and practitioners in the field of art education in Ghana does not prioritize the factor of the development of policies and practices that promote the development of high-quality art education programmes and the cultivation of artistic talent in Ghana through the use of live studio practice. In terms of suitable spaces for the critical artistic studio practical aspects, it is uneasy to have comfortable dwellings for the consistent practical works. These factors donate the hindrance of potentials in the amateur artists. This study contributes to the ongoing debate about the future of art education in Ghana and provides insights into the potential of live studio practice as a solution to the challenges facing art education in Ghana and other developing countries.



**Ankyiah, F., & Bamfo F. (2023). Examining studio-based art practices as a means of fostering critical thinking skills in young learners. *International Journal of Childhood Education*, 4(2), 106-116. <https://doi.org/10.33422/ijce.v4i2.520>**

### **Abstract**

This study examines how studio-based art practices, such as drawing, painting and sculpture, can be used to foster critical thinking skills in elementary and middle school students. Studio art engages students in hands-on creative problem solving and experimentation. A review of literature on critical thinking skills, visual arts education, and cognitive development in children was conducted. Case studies of art programs that incorporate discussion and reflection were also examined. The research suggests that open-ended art projects that promote student autonomy and require making decisions can boost skills like analysis, interpretation, evaluation and creative problem solving. When combined with self-reflection and group critique, studio art may enhance perspective taking, reasoning ability and abstract thought in young learners. When implemented intentionally to cultivate questioning, exploration and meaning making, studio-based visual art practices show potential as a tool for nurturing critical thinking during foundational school years. Further research is still needed to systematically measure critical thinking outcomes of arts-integrated approaches versus traditional instruction alone. Educators and administrators should consider how critical thinking concepts can be made explicit within art curriculum and instruction in order to leverage the cognitive benefits of studio practice for overall student development.

**Ankyiah, F., & Bamfo, F. (2023). Race and women in painting: Unveiling the intersectionality of race, gender, and identity in artistic representation. *Journal of Advanced Research in Women's Studies*, 1(2), 61-71. <https://doi.org/10.33422/jarws.v1i2.519>**

### **Abstract**

This article investigates the intricate relationship between race, gender, and identity within the domain of painting. It delves into the historical depiction of women from diverse racial backgrounds, aiming to shed light on the intersectional experiences and challenges encountered by women of colour in the art world. Through an examination of prominent artworks and an analysis of their social and cultural contexts, this research seeks to enhance our comprehension of how race and gender intersect in artistic representation. The study employs a multifaceted research methodology, including a thorough literature review, visual analysis of selected paintings, socio-cultural contextualization, and an intersectional analysis. The results of the study reveal a historical pattern of under representation and misrepresentation of women of colour in painting, characterized by Eurocentric beauty standards, exoticization, and objectification. However, the analysis also uncovers instances where artists have challenged these stereotypes and presented more diverse and empowering representations. By highlighting these findings, the research emphasizes the importance of fostering inclusivity and appreciation for the diverse voices and narratives of women in painting, ultimately contributing to a more equitable and diverse art world.

**Mensah, T. K., & Djan, I. (2024). Exploring the multifaceted narratives embedded in some murals in Accra: A cultural insight, Ghana.** *International journal of innovative research and development*, volume 13(5), 6-20. [https://www.internationaljournalcorner.com/index.php/ijird\\_ojs/issue/view/9838](https://www.internationaljournalcorner.com/index.php/ijird_ojs/issue/view/9838)

### Abstract

This research paper explored the cultural dimensions and significance of some selected murals in Accra, Ghana, with the aim of shedding light on the intricate interplay between art, culture, and identity in the urban landscape. Accra, the capital of Ghana, boasts a vibrant street art scenery characterized by a diverse range of murals that reflect the city's rich cultural tapestry and historical narratives. The study was based on murals at three (3) public spaces in Accra. Eleven (11) people, consisting of five (5) muralists and six (6) members of the public, formed the sample for this research. The study employed the qualitative approach, with a multiple case study as the design, combining visual and thematic methods of data analysis to investigate a curated selection of murals across the three selected neighborhoods in Accra. The primary objectives of this paper were to identify the cultural symbols, themes, and stories embedded within the murals and to examine how they contribute to the cultural identity of Accra's residents. Through interviews with artists, community members, and cultural experts, we gained insights into the motivations behind the creation of these murals and their intended impact on the community. The findings revealed that Accra's murals serve as a dynamic means of cultural expression, preservation, and communication. They depicted a wide array of themes, including historical events, social issues, traditional folklore, and contemporary urban life, all of which were deeply intertwined with the city's cultural fabric. Additionally, these murals foster a sense of place, community pride, and cultural continuity, creating a visual dialogue between the past, present, and future. In conclusion, this paper contributes to a deeper understanding of how murals in Accra play a pivotal role in shaping and reflecting the cultural identity of the city. It underscores the importance of public art as a catalyst for cultural preservation, education, and community engagement, ultimately enriching the urban experience for residents and visitors alike.

**Mensah, T. K., Gyachie, D. A., & Abraham, E. K. (2024). Navigating tradition and innovation: Trans-modernism among five contemporary young Ghanaian painters.** *European Journal of Science, Innovation and Technology*, 4(3), 31-38. <https://ejst-journal.com/index.php/ejst/article/view/465>

### Abstract

This paper explores the fascinating intersection of tradition and innovation in the artistic practices of five contemporary young Ghanaian painters, encapsulated by the concept of "Trans-Modernism." As the art world grapples with the complexities of globalization and rapid cultural change, these artists navigate the complex terrain of identity, heritage, and modernity with a distinctive blend of traditional Ghanaian artistic elements and innovative approaches. Drawing upon extensive interviews, artistic analysis, and critical discourse, this study unveils the evolution of a unique trans-modernist art movement in Ghana to strengthen the egalitarian principle of the global contemporary art framework. The study highlights the power of art to bridge cultural divides, questions established norms, and inspire societal change. By navigating the intricate balance between tradition and innovation, the study showed how these five young Ghanaian painters exemplify a trans-modernist movement that not only reflects the complexities of their heritage but also paves the way for a promising future in global art discourse.

**Mensah, T. K., Gyachie, D. A., & Abraham, E. K. (2024). Navigating tradition and innovation: Trans-modernism among five contemporary young Ghanaian painters. *European Journal of Science, Innovation and Technology*, 4(3), 371-393. <https://ejst-journal.com/index.php/ejsit/article/view/465/431>**

### **Abstract**

This paper explores the fascinating intersection of tradition and innovation in the artistic practices of five contemporary young Ghanaian painters, encapsulated by the concept of “Trans-Modernism.” As the art world grapples with the complexities of globalization and rapid cultural change, these artists navigate the complex terrain of identity, heritage, and modernity with a distinctive blend of traditional Ghanaian artistic elements and innovative approaches. Drawing upon extensive interviews, artistic analysis, and critical discourse, this study unveils the evolution of a unique trans-modernist art movement in Ghana to strengthen the egalitarian principle of the global contemporary art framework. The study highlights the power of art to bridge cultural divides, questions established norms, and inspire societal change. By navigating the intricate balance between tradition and innovation, the study showed how these five young Ghanaian painters exemplify a trans-modernist movement that not only reflects the complexities of their heritage but also paves the way for a promising future in global art discourse

**Mensah, T. K., & Abraham, E. K. (2023). Aesthetical discourse on ‘unity monument’ and its role in peace-building in Simpa, Ghana. *Journal of African Arts & Culture*, 6(1), 1-20. <https://jaac-sca.org/wp-content/uploads/2024/02/Mensah-and-Abraham.pdf>**

### **Abstract**

This study was informed by the art-based approach to peacebuilding and unity to situate the Unity Monument as a didactic symbol of unity and peace in Simpa. The illustrative case study design was used in conjunction with semiotics to discuss the aesthetical connotations of the unity monument in relation to its nexus to unity and peace in Simpa. Simpa has experienced a protracted chieftaincy feud which resolution continue to hang around the neck of Kingmakers like an albatross. Many approaches have been explored to no avail. What is missing, is the use of art-based approaches to peace. Through literature review, interviews, and observations data was collected from a sample of nine (9) respondents chosen through purposive and convenience sampling techniques to advance an aesthetical discourse and solicit public opinions on the monument as a viable peacebuilding edifice. The findings revealed a threesome perspective from aesthetes who only consume the hedonistic nature of the monument; the optimists who relate to the unity and peace message in the monument and the skeptics who despite their inclination to the monument as a symbol of unity, doubted its potency in the unity and peace narrative of Simpa. We concluded that while art-based approaches could only do so much, this monument was nonetheless a valid ally (visual reminder) and a physical instantiation to the quest for unity and peace in Simpa.

**Ankyiah, F., Kpodo, C. S., Amo-Broni, R., & Asare, D. M. (2023). When the artist studio is alive, art is alive: Empowering art educators and students through live studio practice. *Asian Research Journal of Arts & Social Sciences*, 21(1), 1-11. [https://www.researchgate.net/publication/373458542\\_When\\_the\\_Artist\\_Studio\\_is\\_Alive\\_Art\\_is\\_Alive\\_Empowering\\_Art\\_Educators\\_and\\_Students\\_through\\_Live\\_Studio\\_Practice](https://www.researchgate.net/publication/373458542_When_the_Artist_Studio_is_Alive_Art_is_Alive_Empowering_Art_Educators_and_Students_through_Live_Studio_Practice)**

### **Abstract**

Art education plays a vital role in developing artistic talent and nurturing creativity. However, the challenges facing art education in many developing countries, including Ghana, are significant. Traditional teaching methods, lack of resources, and cultural and social factors are barriers to the development of high-quality art education programmes and the cultivation of artistic talent. This qualitative study uses textual analysis to explore the potential of live studio practice as a solution to the challenges facing art education in Ghana. With regard to duration, the investigation time frame falls between 2012 and 2023. The analysis of selected texts related to art education in Ghana reveals several key themes and patterns related to the challenges facing art education in Ghana and the potential of live studio practice to promote practical skills development, creativity, community engagement, professional skills development, and cultural exchange. The findings of this study disclose that policymakers, educators, and practitioners in the field of art education in Ghana do not prioritize the factor of the development of policies and practices that promote the development of high-quality art education programmes and the cultivation of artistic talent in Ghana through the use of live studio practice. In terms of suitable spaces for the critical artistic studio practical aspects, it is uneasy to have comfortable dwellings for consistent practical works. These factors donate the hindrance of potential in amateur artists. This study contributes to the ongoing debate about the future of art education in Ghana and provides insights into the potential of live studio practice as a solution to the challenges facing art education in Ghana and other developing countries.

**Botsio, L., Osuanyi, Q. E., & Amissah, E. R. K. (2023). Historical roots of makai hairstyle of elmina people of Ghana. *International Journal of Arts and Social Science*, 6(10), 216 - 225. <https://www.ijassjournal.com/2023/V6I10/4146663681.pdf>**

### **Abstract**

The study traced the historical roots of the makai hairstyle, including its sociocultural significance in the celebration of the annual Bakatue festival celebrated by the people of Elmina in Ghana. The historical research design under the qualitative research approach constituted the research design. The expert sampling technique was used to select a sample size of nine (9) consisting of indigenous hairstylists in active practice with experience ranging from 20 to 35 years on the job and opinion leaders, historians, and cultural experts in Elmina for the study. Unstructured interviews, focus group discussions, and document reviews were used for the data collection. Data analysis was done using narrative inquiry and historical analysis. The Akan-Fantse (or Fante) hairstyle spanned over six centuries, with a deep historical root in Elmina in the Central Region of Ghana and therefore an established precolonial hair grooming fashion. The history of the hairstyle can be traced to the very foundation of setting up the town in about 1300 CE, the inception of the annual Bakatue festival, and the African traditional religious beliefs of worshipping the supreme being and smaller gods (river god Nana Benya). It recommended the creation of an online virtual gallery on makai hairstyles to share their educational relevance, be it historical, social, cultural, economic, aesthetical, religious, or psychosocial.

**KEYWORDS** - Makai hairstyle, Bakatue, Elmina, precolonial, hair grooming, fashion, Fante

**Sawyer, N. O., & Amissah, E. K. (2023). West African Indigenous Design Patterns as a Source of Inspiration for Contemporary Ghanaian Textile Designs. *Arts and Design Studies*, 105, 28-38. <http://doi.org/10.7176/ADS/105-04>**

### **Abstract**

The purpose of the study was to explore the possibility of generating contemporary Ghanaian textile designs from indigenous West African Design Patterns. Qualitative research design was adopted for the study. The data collection instrument was observation. Purposive sampling was used to select five (5) indigenous West African Design patterns which could be manipulated with CorelDraw to generate contemporary Ghanaian textile designs. The findings revealed that designs from selected indigenous textiles could be used as motifs and textures. Additionally the indigenous design patterns had aesthetically pleasing colour combinations that could be used in textile designing. The study concluded that indigenous design patterns from West Africa can be used to generate contemporary Ghanaian textile designs. It is recommended that textile designers in their quest to design should explore all possible or available themes, since there is a lot that can be derived from the unknown. Also other researchers (textile designers) should be encouraged to further investigate the possibility of generating contemporary textile designs from indigenous ones.

Keywords: Contemporary textile designs, Ghanaian, Indigenous Design Patterns, West Africa.

**Kumangtum, R. T., & DeGrart Y. (2023). Kasem Proverbs as Digital Paintings. *IISTE*, 103, 1-12. <https://iiste.org/Journals/index.php/ADS/article/view/60165/62110>**

### **Abstract**

This study highlights the role of Visual Art in the preservation of oral culture. Apart from oral transmission of culture, existing literature indicates the constant use of text as the ultimate method used to document, preserve, and pass on Kasem proverbs over the years. The goal of the paper was to record and preserve selected Kasem proverbs and taboos by going through digital painting processes. Each painting is titled with their respective proverb theme and has objects peculiar to people from the North of Ghana, where Navrongo is located and this is to indicate the origin of the painted proverbs. Backed by Nelson's semantic theory, which says that pictures are perceptually more distinct from one another than words, thus ensuring their chances of retrieval, the outcomes of this study provide readers and viewers of the artworks, the possibility of retention and recall of the proverbs by perceiving digital artworks of some Kasem proverbs.

**Tayviah, S. K, Quaye, R., Okac-Anti, E., & Bedu-Addo, J. (2023). Teaching strategies for the visually impaired in visual arts. *International Journal of Innovative Research and Development*, 12(3), 60-65.**

### **Abstract**

A 2018 study by the Eye Unit of the Ghana Health Service revealed that about 270,200 Ghanaians are blind, representing 0.74% of the Ghanaian population. Records indicate that the education and training of the blind people in Ghana date back to the early 1940's. The study of Creative Arts involves experimentation and interaction with the natural environment as a problem-solving tool for national development. Creative Arts encompasses art forms like Painting, Sculpture, Graphic Design and Ceramics. However, in the study of Art in Ghana, certain challenges have become barriers for the visually impaired who pursue art. this is

a conceptual study conducted at the University Practice School, South Campus, Ghana. It delves into the challenges that visually impaired learners are exposed to in the study of Arts and establishes if it is the end of the road for a mainstream student who becomes visually impaired along the path in pursuing the dream as an artist. The study identified that visually impaired learners can express themselves artistically once the teaching and learning process is facilitated with tailor-made teaching and learning strategies in Art which directly focuses on potential art learners who are visually impaired. the study gathered that mainstream education in Ghana should be restructured to enable harnessing the potential of visually impaired learners.

Keywords: Art Education, Visual Impairment, Inclusivity in Education

### **Conferences/Workshops/Symposia/Seminars with Presentations**

(May 2023). \*\* [Paper presentation]. OSIS 2 Training Exercise to facilitate entry of results, Winneba, Central.

(2023, November). *Directorate of Research Innovation and Development (DRID)*. [Paper presentation]. Grant Sourcing Workshop and Proposal Writing for School of Creative Arts, SCA Conference Room, UEW, Winneba, Central Region

(2023, December 4–8). \*\* [Paper presentation]. The 10th International Conference on Carnival and Masquerade Arts, SCA Theatre/ Students’ Centre, UEW, Winneba, Central Region

### **Published Proceedings of Conferences/Workshops/Symposia/Seminars**

Ankyiah, F. (2024). From Kente cloth to tapestry art: Exploring the intricacies of cultural hybridity. *The Asian Conference on Education 2023: Official Conference Proceedings* (pp. 225–237). <https://doi.org/10.22492/issn.2186-5892.2024.20>

### **Abstract**

This study explores the concept of cultural hybridity through an examination of the similarities and differences between Kente cloth and medieval tapestries. Drawing on examples from Ghanaian and European cultural heritage, the study investigates the ways in which traditional art forms can adapt and evolve through cross-cultural exchange. The study highlights the intricate designs and patterns found in both Kente cloth and medieval tapestries, and suggests that these similarities reflect a process of cultural exchange and adaptation. Through an analysis of the historical and cultural contexts in which these art forms emerged, the study demonstrates the unique complexities of cultural hybridity and the potential for cross-cultural dialogue. Overall, the study emphasizes the importance of exploring the intricacies of cultural hybridity in understanding the exchange of traditional art forms. It suggests that a deeper understanding of the similarities and differences between cultural artifacts can lead to new forms of artistic expression and cultural understanding, and can promote a more inclusive and diverse cultural heritage for future generations.



## Department of Music Education

### Articles In Journal

**Acquah, E. O., & Maclean, G. A. (2024). Songs of the sea: The socio-cultural fabric of fisherfolk work songs in Winneba. *African Journal of Culture, History, Religion, and Traditions*, 7(2), 13 - 25. <http://dx.doi.org/10.52589/AJCHRT-293YQAHU>**

#### Abstract

This article presents the findings of a study investigating the socio-cultural dimensions of work songs among the fisherfolk of the Winneba Fishing Community in Ghana's central region. It explores the significance of work songs in the daily lives of fisherfolk and their broader socio-cultural impact within the community. Employing a qualitative approach and utilizing a case study design, the authors gathered data through interviews, observations, and focus group discussions involving fifteen purposively sampled fisherfolk. The study was underpinned with the theories of Sense of Community as well as Understanding Music Making of a community. It was found out that work songs are integral to various fishing activities in Winneba fishing community, serving to foster community cohesion, enhance productivity, and preserve cultural heritage. The findings offer practical recommendations for the preservation and promotion of work songs within the Winneba fishing community.

Keywords: Work songs, fisherfolks, Winneba, Central Region, socio-cultural

**Maclean, G. A., & Acquah, E. O. (2024). Beyond the melody: The symbolic meaning of Kɔ̀kɔ̀sakyi by Augustine Adu Safo. *International Journal for Multidisciplinary Research*, 6(3), 1 -12. <http://doi.org/10.36948/ijfmr.2024.v06i03.20216>**

#### Abstract

This research delves into the musical iconicity found within Adu Safo's music composition, "Kɔ̀kɔ̀sakyi" (Vulture), going beyond its mere melody to explore its cultural and symbolic dimensions. Employing a semiotic framework, the composition was sampled purposefully and used as case study to examine how various musical elements evoke and symbolize non-musical concepts, particularly focusing on the representation of the vulture as a symbol of procrastination within Ghanaian society. Using the idea of the theory of semiotics and its inherent analytical frame, the study unravels the understanding of Adu Safo's compositional techniques, shedding light on the creation of iconic music. Key findings indicate that "Kɔ̀kɔ̀sakyi" skillfully utilises melody, rhythm, and lyrics to depict the character of the vulture, offering insightful reflections on the perils of procrastination. By integrating sound and text within the cultural context of Kɔ̀kɔ̀sakyi, the composition underscores the capacity of a musical composition as a potent medium for conveying socio-cultural values. Ultimately, this paper serves as a valuable resource for educators, students, and composers alike, offering insights into the use of iconic representations in art music compositions.

Keywords: Adu Safo, kɔ̀kɔ̀sakyi, iconic music, vulture, music composition, semiotics

**Acquah, E. O. & Maclean, G. A. (2024). Songs of the sea: The socio-cultural fabric of fisherfolk work songs in Winneba. *African Journal of Culture, History, Religion and Traditions*, 7(2), 13-25. <https://doi.org/10.52589/AJCHRT-293YQAHU>**

### Abstract

This article presents the findings of a study investigating the socio-cultural dimensions of work songs among the fisherfolk of the Winneba Fishing Community in Ghana's central region. It explores the significance of work songs in the daily lives of fisherfolk and their broader socio-cultural impact within the community. Employing a qualitative approach and utilizing a case study design, the authors gathered data through interviews, observations, and focus group discussions involving fifteen purposively sampled fisherfolk. The study was underpinned by the theories of Sense of Community as well as Understanding Music Making of a community. It was found that work songs are integral to various fishing activities in the Winneba fishing community, serving to foster community cohesion, enhance productivity, and preserve cultural heritage. The findings offer practical recommendations for the preservation and promotion of work songs within the Winneba fishing community.

**Agyeiwaah, V., Acquah, E. O., & Agbenyo, S. (2024). Fostering cognitive and social development through music instruction in Winneba kindergarten schools. *British Journal of Education, Learning and Development Psychology*, 7(2), 192-201. <https://doi.org/10.52589/BJELDP-OCX6GFGW>**

### Abstract

Numerous scholarly inquiries have underscored the influential role of music in the educational and developmental journey of young children. Musical engagements have demonstrated a capacity to foster intellectual, social, and multifaceted personal growth, including the cultivation of foundational reading skills such as heightened aural discrimination of sounds and letters. This study presents an exploration of the impact of musical activities on the developmental trajectory of kindergarten children in the Winneba community, with a particular focus on their intellectual and social growth. Grounded in the qualitative paradigm, the research employed a case study design, utilising interview, observation and Focus Group Discussion (FGD) for data collection from a purposive sample which comprised four (4) teachers and twenty (20) kindergarten children. The findings revealed that while the primary intention behind organizing musical activities in the kindergarten classroom was to infuse joy and energy, these endeavours unwittingly yielded significant positive impacts on intellectual, social, and personal developmental domains. It is anticipated that educators will adopt a more purposeful approach to music pedagogy, expanding beyond traditional singing and dancing activities to incorporate instrument playing and active listening practices.

**Maclean, G.A. & Acquah, E.O. (2024). Beyond the melody: The symbolic meaning of “Kəkəkəkyi” by Augustine Adu Safo. *International Journal for Multidisciplinary Research (IJFMR)*, 6(3), 1-12. <https://doi.org/10.36948/ijfmr.2024.v06i03.20216>**

### Abstract

This research delves into the musical iconicity found within Adu Safo's music composition, “Kəkəkəkyi” (Vulture), going beyond its mere melody to explore its cultural and symbolic dimensions. Employing a semiotic framework, the composition was sampled purposefully and used as case study to examine how various musical elements evoke and symbolize non-musical concepts, particularly focusing on the representation of the vulture as a symbol of

procrastination within Ghanaian society. Using the idea of the theory of semiotics and its inherent analytical frame, the study unravels the understanding of Adu Safo's compositional techniques, shedding light on the creation of iconic music. Key findings indicate that "Kɔkɔsakyi" skillfully utilises melody, rhythm, and lyrics to depict the character of the culture, offering insightful reflections on the perils of procrastination. By integrating sound and text within the cultural context of Kɔkɔsakyi, the composition underscores the capacity of a musical composition as a potent medium for conveying socio-cultural values. Ultimately, this paper serves as a valuable resource for educators, students, and composers alike, offering insights into the use of iconic representations in art music compositions.

**Acquah, E. O. (2023). Styles of Ghanaian choral music composers: "The Syncopation Man"- James Tsemafo-Arthur. *International Journal of Current Research*, 15(3), 23997-240002. <http://www.journalcra.com>**

**Essel, O. Q., Coffie, M. M., & Acquah, E. O. (2023). Second-hand clothing and colonialist-inspired fashion criticisms through highlife music in post-independence Ghana. *International Journal of Multidisciplinary Research and Development*, 10(6), 85-92.**

## **Abstract**

The study examined the lyrical texts of four Ghanaian highlife music in the 1960s and 1970s to decipher their communicative role in giving exposure to post-independence Ghanaian fashion history. Four classical Ghanaian Highlife music of the 1960s and 1970s were purposively selected since they centre on a common subject matter – second-hand clothing and colonialist-inspired fashion artifice critiques. The selected songs were Obron Woewu, released in 1962, by Ramblers International Band; Ewuraba Artificial, composed by Joe Eyison and recorded by Ramblers International Band in 1963; Wobe tumi No, by Kwadwo Donkoh, and recorded by Uhuru Dance Band in 1966; and Rokpokpo by Joe Mensah in 1977. The selected songs were analysed using textual analysis to unravel their social and historical contents and contexts to fashion practice during the post-independence (republican status change) of Ghana. The four classical Ghanaian Highlife music of the 1960s and 1970s drew attention to the growth of second-hand clothing and colonialist-inspired fashion practice at the time, which the colonialists portrayed as superior to indigenous Ghanaian dress fashion culture. The musicians raised the red flag for the colonialists' undermining of the indigenous Ghanaian dress and fashion culture for policy direction. The musical compositions of the highlife musicians served as Ghanaian dress cultural and beauty standards gatekeepers and ambassadors through their repulsion against colonialists' fashion ideological imposition. It is envisaged that further studies on governmental policy efforts to ban and or minimise second-hand clothing in Ghana from the post-independence period to the present would benefit the study of Ghana's fashion history

**Annan, J. F., Quainoo, M., Ayesu, S. N., Sackey, G., Mensah, D. D., & Agbotah, S. R. (2024). The awareness and proficiency of tutors in using software programmes for music education at Methodist College of Education, Akim Oda. *African Journal of Social Sciences and Humanities Research (AJSSHR)*, 7(2), 424-435. <https://doi.org/10.52589/AJSSHR-P2JI9V7A>**

### **Abstract**

The establishment of an ultra-modern ICT laboratory at the Methodist College of Education, Akim Oda has propelled the need to introduce music students to computer and software programmes in music education. However, to make recommendations for the realization of this vision, this study considered the awareness and proficiency of the tutors in computer and software programmes in music education. This descriptive study described the views of music tutors about their awareness and proficiency in computer and software programmes. The results from this study disclosed that three out of the four music tutors at the Methodist College of Education, Akim Oda are strongly aware of computer software programmes for music education and are proficient in Finale and Perfect Ear software programmes. The study recommended that the college should organise workshops for the music tutors to be trained in software programmes for music creation and education, such as EarMaster, Auralia, Piano Teacher.

Keywords: Ultra-modern, Credible, Awareness, Proficiency.

**Arhin B. O. Jnr., Acquah, E. O., Amponsah, E. K., Addaquay, A. P., Bamongya, A. Y., & Commeyfio, R. (2024). The role of creative artists in promoting traditional cultural tourism in Ghana. *Journal of African Arts & Culture*, 7(3), 27 - 57. <https://jaac-sca.org>**

### **Abstract**

This paper is aimed at exploring the role of creative artists in promoting traditional cultural tourism in Ghana. It is premised on the fact that, the full potential of traditional cultural tourism remains underdeveloped in spite of the rich cultural heritage and the abundance of creative talent in Ghana. This situation hinders the capacity of creative artists to significantly contribute to the growth of cultural tourism, social entrepreneurship, and economic development, although, some creative artists in the industry are contributing without being noticed. Traditional knowledge and cultural expressions have been at the forefront of cultural tourism, which is embedded in the folklore of any society. Folklore has been the intangible asset that has driven many people's tastes for cultural tourism and the role of the creative artist can shape and forge a new dimension to create a creative economy for sustainable development and for social entrepreneurship, and business opportunities for community and national economic impact. The study dwells on a qualitative approach reviewing archival materials with observations and interviews to seek a deeper understanding of the role of creative artistes and artists in promoting cultural tourism using their creative skills as economic agents. Using convenient purposive sampling, thirty participants were interviewed and it came to the known that creative artists are packaging beverages, using waste materials uniquely, traditional festivals, traditional music, and traditional entertainment creatively needing government's support to scale it for socioeconomic impact

**Arko Mensah, A. (2024). Adjudication of music performances in three selected municipality/ district in Ghana. *International Journal of Education Humanities and Social Science*, 7, 10 - 24. <https://doi.org/10.54922/IJEHSS.2024.0657>**

### **Abstract**

This paper presents an inquiry into the adjudication of music performances during cultural festivals within two municipalities and one district in the Central Region of Ghana. It examines the competence levels of adjudicators engaged in the process and elucidates the employed adjudication process, aiming to foster understanding and appreciation among all competition participants. Guided by Dworkin's theory of interpretation, which delineates pre-interpretive, interpretive, and post-interpretive stages in adjudication, the research adopts a qualitative paradigm, utilizing interviews and document analysis as primary data collection instruments. Convenience and purposive sampling were employed to select both the geographical area and study participants respectively. The findings indicate that the selection of adjudicators is the prerogative of cultural coordinators, resulting in a less competitive process that may compromise competence in adjudication. Furthermore, although the cultural festival employs a scoring system across various disciplines to ensure precision and equity through expert adjudication, adjudicators struggle to provide comprehensive feedback that could aid participating groups in improving future performances. The paper suggests the establishment of strategies to introduce competitiveness in the engagement of adjudicators, coupled with plans to ensure their training as part of the preinterpretive stage before proceeding to the interpretive and post-interpretive stages. This approach aims to enhance the overall quality and effectiveness of the adjudication process.

Keywords: Cultural Festival, Adjudication, Central Region, Interpretive Stage, Music Performance.

**Arko Mensah, A. & Agyeiwaah, V. (2024). Ancestral roots for cultural education: Unpopular musical types in the Ashanti Community of Ghana for musical instruction. *International Journal of Latest Research in Humanities and Social Science (IJLRHSS)*, 7(3), 23-32. <http://www.ijlrhss.com>**

### **Abstract**

Music serves as a vital reflection of cultural identity, allowing people to express themselves, celebrate, and narrate stories. In the rich tapestry of African traditions, the Ashanti people of Ghana regard music as an indispensable element. For them, music is not just an accompaniment but a cornerstone enhancing their way of life, deeply woven into various celebrations. Many communities possess their distinct musical customs, some not formally taught in Ghanaian schools, forming an essential part of their local heritage. The study therefore sought to uncover and catalogue the previously unacknowledged origins of existing musical genres within the Ashanti community of Ghana. Using qualitative research paradigm and case study design, data were collected among six purposively selected musical ensembles in Kumasi Township and their leaders interviewed to unearth and illuminate the roots of these musical genres and highlight their substantial impact on the social tapestry of Ashanti community as well as in the teaching of music and dance in schools. It was seen that the Ashanti have some unpopular ensembles such as sanga, Akosua tumtum, dansuom, alateawe as well as bɔsoe which have rich origin and source materials for music learning. It is envisaged that, these diverse musical genres that exist within the Ashanti community are utilised in the education sector. This inclusion aligns with the essence of cultural education, not only in Ghana but throughout Africa, recognizing the significance of every culture's impact.

Keywords: Sanga, Akosuatumtum, dansuom, alateawe, cultural education, ancestral roots.

**Arko Mensah, A., & Agyeiwaah, V. (2024). Ashdance pedagogy: A culturally contextualised strategy for musical instruction. *ISIR Journal of Arts, Humanities and Social Sciences (ISIRJAHSS)*, 1(1), 21 - 29. <https://isirpublisher.com/isirjahss-home/>**

### **Abstract**

The study was an investigation into Ashanti musical types to unearth distinctive pedagogical strategies that could be formalised for teaching music in Ghana and the globe consequently. It highlighted a development and establishment of a pedagogical concept called Ashdance pedagogy, etymologically coined from the terms, Ashanti and Dances. The study became necessary as a result of dearth of existing culturally contextualised strategies for teaching music, and the overreliance of Western pedagogies for music instruction in Ghanaian context, especially, at the basic level of education. The study was underpinned with the Sociocultural Learning Theory while using grounded theory as the design situated within the qualitative paradigm. Participants included six established ensembles, selected purposively to unearth dances attributable to unique instructional strategies and some inherent values. Leveraging on the dances, values of the songs as well as the embedded strategies for teaching such dances, the study established Ashdance pedagogy, a culturally responsive approach for incorporating Ashanti music styles into basic school musical instruction. It is recommended that teachers build culturally sensitive learning environments that celebrate diversity and encourage cultural preservation by integrating Ashdance pedagogical concepts into the music classroom teaching.

Keywords: Ashdance pedagogy, Alateawe, Dansuom, Ashanti, imitation

**Arko Mensah A. & Agyeiwaah, V. (2023). A phenomenographic study of UEW music students' conceptions of musicianship course: A case of sophomore class. *Journal of African Arts & Culture*, 6(1), 23 - 44. <https://jaac-sca.org>**

### **Abstract**

The paper was a result of a phenomenographic study which sought to identify a number of conceptions of a Musicianship course among level 200 students pursuing Bachelor of Arts, Music Education, at the University of Education, Winneba in individual interviews of a sample size of 20. The study was premised on the fact that students have diverse understanding of the musicianship course thereby affecting its significance on their general musical practice. These conceptions were grouped into four categories related to the students' preferred explanations for Musicianship. (a) the ability to play or perform by hearing (b) performing in an ensemble work (c) gaining mastery in reading at sight (d) transcription of musical pitches or sound from audio or video recordings into notation. Using the concept of 'integrated music learning' and improvisation as the framework, the findings from this study raised two critical but general issues regarding Musicianship learning. The first of these is the critical role of African Arts & Culture Vol. 6 No. 1, 2023-24 played by students in their everyday practice to acquire the necessary skills for understanding and interpreting concepts in the Musicianship course. A second issue is the tendency for students to extend their understanding and interpretation of concepts in the Musicianship course to actual performance of their major and minor instruments. This study argues that an understanding of the Musicianship phenomenon by students should form an integral component of the teaching of the course, both as points of origin for lesson planning and for the development of curricular materials. It is envisaged that the results of the study facilitate a better understanding of student's learning of the Musicianship course as part of their training as music educators.



while it gives further direction to teachers of the course to use the integrated approach to help students acquire the necessary skills in the course.

Keywords: musicianship, phenomenography, Integrated music Learning, Sophomore, sight-reading

**Coffie, M. M. (2024). A theoretical review towards a conceptual framework for creating ‘neoclassic big-band highlife music’. *Journal of Advanced Research and Multidisciplinary Studies*, 4(3), 23 - 42. <https://abjournals.org/jarms/papers/volume-4/issue-2/a-theoretical-review-towards-a-conceptual-framework-for-creating-neoclassic-big-band-highlife-music/>**

### **Abstract**

It is a truism that highlife, Ghana’s first acculturated popular music, presents various styles employing various musical ensembles and playing to different audiences. However, the diverse highlife stylistic trends have declined in musical works recently due to generational differences and tastes. As a result, modern-day recorded highlife compositions sound similar and, in some cases, the same. Despite its iconicity in Ghanaian popular music, it is also quite surprising that highlife music still struggles for compositional and theoretical relevance in Ghanaian academic programmes of schools, colleges and universities. This paper, therefore, presents a characterisation of the diverse highlife music trends as an attempt to develop a conceptual framework for creating ‘neoclassic big-band highlife music’ that transcends diverse styles and generational tastes. Drawing on my experience as a highlife practitioner and music educator, I reviewed theories, concepts, and literature relevant to highlife music to conceptualise a framework for creating works that transcend the generational differences and tastes of highlife music. This paper expands the frontiers of highlife music practice and scholarship. Therefore, it is recommended that Music composition professors adopt this conceptual framework as a blueprint to begin a taught course on ‘Highlife Music Composition’ in music institutions to enhance its structural and theoretical trajectory.

**Arhin, B. O., Coffie, M. M., Konu, H. S., Ferguson, E. A. (2023). Spilt sheets in Ghanaian recording studios. *International Journal of Music Business Research*, 12(1), 1-10. <https://sciendo.com/es/article/10.2478/ijmbr-2023-0001>**

### **Abstract**

The split sheet used in a recording studio is one of the essential means for any creative artist who understands its implementation benefits from the royalties that the creative work generates as it obtains commercial merchandise. However, surprisingly, Ghanaian music producers and practitioners are yet to tap into the full potential of this avenue. This paper investigates the awareness and benefits of the split sheet among Ghanaian music producers and practitioners in the recording industry and the extent to which they have explored it. Using a mixed-methods mode of inquiry for data collection, we sampled music producers and practitioners (n= 218) in Ghana to briefly analyse the moneymaking through split sheets of songs available to music practitioners in Ghana’s recording industry. It was noted that 94.9% of respondents were unaware of the split sheet, while 92.7% did not know the benefit of the split sheet. However, only 4.6% of the respondents had used the split sheet. Subsequently, we conclude that the low awareness of the split sheet among Ghanaian music producers and practitioners, the decorum of the business side of creativity in the Ghanaian recording industry is compromised. Therefore, we recommend that more intensive education

be undertaken to sensitize Ghanaian music producers and practitioners to the benefit of the split sheet in their daily work to enhance revenue generation.

**Coffie, M. M. (2023). Health sustainability of popular musicians in Ghana. *Journal of African Arts & Culture*, 6(3), 1-21. <https://jaac-sca.org/health-sustainability-of-popular-musicians-in-ghana/>**

### **Abstract**

In this study, I bring to the fore some prominent popular musicians whose careers were truncated due to ill health and have passed on recently as an attempt to stimulate a discourse towards the health sustainability of popular musicians in Ghana for a sustainable career and industry. Drawing on descriptive research design, document analysis, and interviews for data collection, I observed that only a few prominent Ghanaian popular musicians had sustained their careers for over five decades. At the same time, some are grappling to do so due to ill health. I conclude that the health sustainability of popular musicians is paramount to the sustainability of Ghana's music industry. Therefore, popular musicians should prioritise their health as a matter of urgency in their quest to have a sustainable career. I hope this study serves as a moderate contribution to Ghanaian popular music scholarship, marks the beginning of a new direction, stimulates debates, and gives rise to similar research in other creative arts traditions.

**Essel, O. Q., Coffie, M. M., & Acquah, E. O. (2023). Second-hand clothing and colonialist-inspired fashion criticisms through highlife music in post-independence Ghana. *International Journal of Multidisciplinary Research*, 10(6), 85-92. <https://www.allsubjectjournal.com/archives/2023/vol10/issue6/10105>**

### **Abstract**

The study examined the lyrical texts of four Ghanaian highlife music in the 1960s and 1970s to decipher their communicative role in giving exposure to post-independence Ghanaian fashion history. Four classical Ghanaian Highlife music of the 1960s and 1970s were purposively selected since they centre on a common subject matter – second-hand clothing and colonialist-inspired fashion artifice critiques. The selected songs were Obronni Woewu, released in 1962, by Ramblers International Band; Ewuraba Artificial, composed by Joe Eyison and recorded by Ramblers International Band in 1963; Wobe tumi No, by Kwadwo Donkoh, and recorded by Uhuru Dance Band in 1966; and Rokpokpo by Joe Mensah in 1977. The selected songs were analysed using textual analysis to unravel their social and historical contents and contexts to fashion practice during the post-independence (republican status change) of Ghana. The four classical Ghanaian Highlife music of the 1960s and 1970s drew attention to the growth of second-hand clothing and colonialist-inspired fashion practice at the time, which the colonialists portrayed as superior to indigenous Ghanaian dress fashion culture. The musicians raised the red flag for the colonialists' undermining of the indigenous Ghanaian dress and fashion culture for policy direction. The musical compositions of the highlife musicians served as Ghanaian dress cultural and beauty standards gatekeepers and ambassadors through their repulsion against colonialists' fashion ideological imposition. It is envisaged that further studies on governmental policy efforts to ban and or minimise second-hand clothing in Ghana from the post-independence period to the present would benefit the study of Ghana's fashion history.

Moses, I., & Agbenyo, S. (2024). Factors influencing elementary school band membership. *American Journal of Multidisciplinary Research & Development*, 6(02), 47-54.

Quainoo, M., Ayesu, S. N., Annan, J. F., Sackey, G., Mensah, D. D., & Agbotah, S. R. (2024). The awareness and proficiency of tutors in using software programmes for music education at Methodist College of Education, Akim Oda. *African Journal of Social Sciences and Humanities Research (AJSSHR)*, 7(2), 424-435. <https://doi.org/10.52589/AJSSHR-P2JI9V7A>

### Abstract

The establishment of an ultra-modern ICT laboratory at the Methodist College of Education, Akim Oda, has propelled the need to introduce music students to computer and software programmes in music education. However, to make recommendations for the realization of this vision, this study considered the awareness and proficiency of the tutors in computer and software programmes in music education. This descriptive study described the views of music tutors about their awareness and proficiency in computer and software programmes. The results from this study disclosed that three out of the four music tutors at the Methodist College of Education, Akim Oda, are strongly aware of computer software programmes for music education and are proficient in Finale and Perfect Ear software programmes. The study recommended that the college should organise workshops for the music tutors to be trained in software programmes for music creation and education such as EarMaster, Auralia, Piano Teacher.

Arhin, B. O. Jnr, Coffie, M. M., Konu, H. S., & Ferguson, E. E. A. (2023). Split sheets in Ghanaian recording studios. *International Journal of Music Business Research*, 12(1), 1-10. <https://doi.org/10.2478/ijmbr-2023-0001>

### Abstract

The split sheet used at a recording studio is one of the essential means for any creative artist who understands its implementation benefits from the royalties that the creative work generates as it gets commercial merchandise. However, surprisingly, Ghanaian music producers and practitioners are yet to tap into the full potential of this avenue. This paper investigates the awareness and benefits of the split sheet among Ghanaian music producers and practitioners in the recording industry and the extent to which they have explored it. Using a mixed-methods mode of inquiry for data collection, we sampled music producers and practitioners (n = 218) in Ghana to briefly analyse the moneymaking through split sheets of songs available to music practitioners in Ghana's recording industry. It was noted that 94.9% of respondents were unaware of the split sheet, while 92.7% did not know the benefit of the split sheet. However, only 4.6% of the respondents had used the split sheet. Subsequently, we conclude that the low awareness of the split sheet among Ghanaian music producers and practitioners compromises the decorum of the business side of creativity in the Ghanaian recording industry. Therefore, we recommend that more intensive education be undertaken to sensitise Ghanaian music producers and practitioners to the benefit of the split sheet in their daily work to enhance revenue generation.

**Oduro, B. A. Jnr., Coffie, M. M., Konu, H. S., & Annan, F. E. E. (2023). Split sheets in Ghanaian recording studios. *International Journal of Music Business Research*, 12(1), 1. <https://doi.org/10.2478/ijmbr-2023-0001>**

### **Abstract**

The split sheet used at a recording studio is one of the essential means for any creative artist who understands its implementation benefits from the royalties that the creative work generates as it gets commercial merchandise. However, surprisingly, Ghanaian music producers and practitioners are yet to tap into the full potential of this avenue. This paper investigates the awareness and benefits of the split sheet among Ghanaian music producers and practitioners in the recording industry and the extent to which they have explored it. Using a mixed-methods mode of inquiry for data collection, we sampled music producers and practitioners (n = 218) in Ghana to briefly analyse the moneymaking through split sheets of songs available to music practitioners in Ghana's recording industry. It was noted that 94.9% of respondents were unaware of the split sheet, while 92.7% did not know the benefit of the split sheet. However, only 4.6% of the respondents had used the split sheet. Subsequently, we conclude that the low awareness of the split sheet among Ghanaian music producers and practitioners compromises the decorum of the business side of creativity in the Ghanaian recording industry. Therefore, we recommend that more intensive education be undertaken to sensitise Ghanaian music producers and practitioners to the benefit of the split sheet in their daily work to enhance revenue generation

**Konu, S. H., Arhin, O. B., Coffie, M. M., & Annan, E. E. F. (2023). Split Sheets in Ghanaian Recording Studios. *International Journal of Music Business Research*, 12(1), 3 - 12. <https://doi.org/10.2478/ijmbr-2023-0001>**

### **Abstract**

The split sheet used at a recording studio is one of the essential means for any creative artist who understands its implementation benefits from the royalties that the creative work generates as it gets commercial merchandise. However, surprisingly, Ghanaian music producers and practitioners are yet to tap into the full potential of this avenue. This paper investigates the awareness and benefits of the split sheet among Ghanaian music producers and practitioners in the recording industry and the extent to which they have explored it. Using a mixed-methods mode of inquiry for data collection, we sampled music producers and practitioners (n = 218) in Ghana to briefly analyse the moneymaking through split sheets of songs available to music practitioners in Ghana's recording industry. It was noted that 94.9% of respondents were unaware of the split sheet, while 92.7% did not know the benefit of the split sheet. However, only 4.6% of the respondents had used the split sheet. Subsequently, we conclude that the low awareness of the split sheet among Ghanaian music producers and practitioners compromises the decorum of the business side of creativity in the Ghanaian recording industry. Therefore, we recommend that more intensive education be undertaken to sensitise Ghanaian music producers and practitioners to the benefit of the split sheet in their daily work to enhance revenue generation.

**Keywords:** Creative artistes, music business, music producer, recording studio, royalties, split sheets

## Conferences/Workshops/Symposia/Seminars with Presentations

Acquah, E. O. (2024, February 16). *Equipping music teachers with strategies and approaches to teaching and preparing music students* [Paper presentation]. Workshop for Music Teachers in Ghana @ the University of Ghana, Legon, Accra - UG, Greater Accra.

Acquah, E. O. (2024, January 19). *Quality Assurance in Higher Education: Role of Administrative Management in Colleges of Education* [Paper presentation]. Workshop for Academic and Administrative Staff of St. Louis College of Education, Kumasi, Ashanti.

Acquah, E. O. (2024, January 17-18). *Academic writing, publishing, staff appraisal, institutional communication and functions of the Governing Council* [Paper presentation]. Workshop for Staff of Bia Lamplighter College of Education, Sefwi Debiso, Northern West.

Ayesu. S. N. (2023, April 14-15). *A model to digitally transform elements in Ghanaian Traditional Music* [Paper presentation]. Ohio University, Global Arts Symposium, Athens, Ironton.

### Abstract

The effectiveness of digital transformation in various spheres of contemporary societies cannot be overstated considering how various communities uphold digital technologies due to the credible results they achieve with digital technologies. The enormous space to save digital materials, easy and faster access, limitless space and time, easy creation of multiple copies, and the ability to preserve information and materials for posterity are some of the benefits of digital transformation. Kunst (1959) linked the development of ethnomusicology to the invention of the gramophone which enabled the recording and storing of musical events in ethnographic settings. According to Seeger (1986), these recordings are often improperly stored, wound too tightly on warping reels, attacked by mould, and separated from written documentation by termites, rot, and time. They may not survive to serve any other individual or group. Upon this background, this study sought to develop a model to digitally transform elements in Ghanaian traditional musical instruments for extensive assimilation and preservation. From a pragmatic perspective, the study reviewed literature and theories to propose Digitally Transformed Ethnomusicology as a model to digitally transform elements in Ghanaian traditional music. The Digitally Transformed Ethnomusicology model is a methodological process, method, and technical process that hinges on applied ethnomusicology (Davis and Dyen, 1992), use and gratification theory (Katz, 1974), technological determinism (McLuhan, 1964), technology acceptance model (Davis, 1989) and studio-based design (Marshall, 2010) to digitize and digitalize elements in Ghanaian traditional music.

## Books

- Acquah, E. O. (2023). *Nyansaba: African musical Drama (Anansegorndwom)*.(1). PSJ Publications, Winneba.
- Acquah, E. O., & Adenyoh, C.K. (2023). *Sport, PE and music & dance in local and global cultures (Upper Primary)*. CoDeL, University of Education, Winneba, Winneba.
- Acquah, E. O., & Adenyoh, C.K. (2023). *Sport, PE and music & dance in local and global cultures (Early Grade)*. CoDeL, University of Education, Winneba, Winneba.

## Article(s)/Chapters in an Edited Book

- Acquah, E. O., Arko-Mensah, A., & Ohene-Okantah, M. Jnr. (2023). Music making and ban on drumming among African Communities: Winneba Community in perspective. In E.Y. Dandso-Wiredu, & J. Weiler (Eds.) *Winneba: The Geography, Peoples and Systems*. Digi Books, Tema.

# Department of Theatre Arts

## Articles In Journal

- Amponsah, E. K., & Arko Mensah, S. (2024). Drama versus sanitation issues in Ghana: Henrik Ibsen's *An Enemy of the People* in perspective. *International Journal for Multidisciplinary Research (IJFMR)*, 6(5), 1-11. <https://doi.org/10.36948/ijfmr.2024.v06i05.20822>
- Edu, J. & Osei, L. A. (2024). Masquerading the Totemic Bushbuck of the Effutu state for an academic ceremony at UEW: Insights and audiences' perspective. *International Journal of Carnival Arts*, 8B, 150-159.

## Abstract

The masquerading effect of the totemic bushbuck is visually captivating and also serves as a powerful symbol of identity and cultural heritage for the Effutu people. The study by creative artists at the University of Education, Winneba (UEW) sought to explore and understand the creation and impact of the masquerading effect of the totemic bushbuck found in the Aboakyer festival. The creative process was to enliven the presentation of the academic robe during the investiture of UEW's Chancellor. Ethnographic data was obtained through observation, interviews, focus group discussions, and analysis of videos and photographs. The researchers used a studio-based approach, employing an aesthetic-action research design to analyze and understand the various aesthetic elements contributing to the masquerading effect. The study also aimed to assess the audience's perspectives after witnessing the masquerading effect during an academic ceremony at the University of Education Winneba. The study's findings revealed that the masquerading effect of the Effutu totemic bushbuck captivated and entertained the audience and created a sense of cultural pride and identity



among the Effutu community. The study emphasizes the importance of bridging the gap between community cultural events and academia for a better appreciation and understanding of indigenous heritage.

**Osei, L. A. (2024). “Allow me to dance, does my age or gender count?”: A Study of preschool children in the Effutu Municipality of Ghana. *International Journal for Early Childhood Care and Educational Research*, 1(1), 130-144. <https://journals.uew.edu.gh/index.php/ijecceer>**

### **Abstract**

Undeniably, it is widespread in Ghanaian communities to see children dancing freely at any given opportunity. However, less scholarly attention has been given to the phenomenon of the dance movements of children in Ghanaian preschools. The purpose of the study was to investigate and report the extent to which age and gender affect the dance movements of preschool children in the Effutu Municipality of the Central Region of Ghana. The study employed the quantitative method approach and had a sample size of 120 children between the ages of four and five years from six preschools. Data was collected and analyzed using content analysis and observation. Results indicated that although dancing among children was common at community gatherings, dancing in schools was not a common phenomenon. The results also indicated that although there was no statistically significant difference between the dance movements of boys and girls, there was a statistically significant difference between the dance movements of children aged four and five years. The study concludes that the method of allowing children to engage in self-initiated activities through playing and creative movement allows for a lot of freshness, and tolerance, all preliminary conditions for successful education.

**Osei, L. A. (2024). Harmony of colours and traditions: A reflective journey through the 10th international conference on carnival and masquerade arts in Winneba, Ghana. *International Journal of Carnival Arts*, 8(a), 6-17.**

### **Abstract**

This paper navigates through the thematic highlights of the 10th International Conference on Carnival and Masquerade Arts held at the University of Education, Winneba, Ghana. The narrative unfolds through the lens of the conference coordinator and lead research assistant, offering insights into the pre-conference preparations, the rhythmic execution of academic and workshop sessions, the dynamic exchange of ideas during networking opportunities and the post-conference reflections. It also explores the challenges faced, the successes celebrated, and the enduring impact of the conference on the global discourse surrounding carnival and masquerade arts which created a visual and auditory feast that resonated with participants. This reflection invites readers to embark on a virtual expedition, experiencing the rhythmic heartbeat of carnival and masquerade arts as witnessed and curated during the 10th International Conference in Winneba, Ghana.

**Johnson, K. E., & Koomson, S. (2024). Assessing teaching facilities for Theatre Arts Education at the University of Education, Winneba, Ghana. *Journal of Education and Practice*, 15(11), 11-30. <https://www.iiste.org/Journals/index.php/JEP/article/viewFile/62672/64745>**

### **Abstract**

This paper explores the availability, utility, and maintenance of teaching facilities for Theatre Arts education at the University of Education, Winneba (UEW), Ghana. Over three academic years (2021-2023), a comprehensive assessment of key facilities, such as the School of Creative Arts (SCA) Theatre, mirror rooms, scenic design workshops, and other auxiliary spaces, was conducted. Data was collected through observations, interviews, and document analysis to evaluate the role of these facilities in enhancing student engagement, creativity, and skill development. The findings indicate significant improvements in educational infrastructure, which have positively impacted the quality of practical theatre education. However, the study also highlights critical challenges in the facility maintenance regime, which threaten the longevity and effectiveness of these spaces. The paper concludes that while progress has been made in providing essential facilities, sustainable management practices, including the appointment of a dedicated studio manager; an international best practice for such facilities, are necessary to preserve the educational value of these resources.

**Koomson, S. (2024). Symbolic splendour: Integrating Adinkra Symbols in Ghana's most beautiful set design. *Journal of Art and Design*, 4(1), 27-48. <https://www.scipublications.com/journal/index.php/jad/article/view/1061>**

### **Abstract**

This study explores the integration of Adinkra symbols into the set design of Ghana's Most Beautiful (GMB), a popular beauty pageant and reality TV show that has aired on TV3; a private television station in Ghana. GMB showcases beauty, intelligence, cultural knowledge, and traditional values, celebrating Ghana's rich cultural heritage through female contestants representing the country's diverse ethnic groups. In response to the lack of coherent Ghanaian artistic elements in previous set designs, this study employed an artistic methodology to incorporate four Adinkra symbols, Okodee Mmowere, Duafe, Dweninimmen, and Mate Masie, into the set design for the show's eighth season. These symbols, signifying beauty, strength, wisdom, and unity respectively, were creatively integrated into a crown-like set design for the grand finale, harmonizing aesthetic trends with cultural significance. The design process was informed by rigorous research and stakeholder interviews, ensuring that the selected symbols conveyed the intended cultural messages. The results highlight the potential of traditional symbols to enhance both the cultural relevance and visual appeal of television productions. The project enriches the cultural depth of GMB production and offers a blueprint for incorporating indigenous symbols into contemporary set design. The study recommends that future productions continue exploring traditional symbols to deepen the appreciation of Ghanaian heritage and strengthen cultural identity through visual arts.

**Koomson, S., & Brako, D. K. (2024). Theatrical Metamorphosis: Naturalism's Legacy in Shaping Scenic Design Narratives. *International Journal of Education Humanities and Social Science*, 7(3), 744-753. <https://doi.org/10.54922/IJEHSS.2024.0742>**

### **Abstract**

The late nineteenth and early twentieth centuries were periods of global transformation, marked by significant scientific, political, and economic breakthroughs. These changes profoundly influenced various aspects of society. This article examines the shifts in theatrical presentation during this era, focusing specifically on the role and impact of Naturalism in scenic design. The objective was to explore the origins, components, and impact of Naturalism on set design. In tracing the history of scenic design from classical to modern times, this paper highlights the influence of Naturalism on modern theatre. The paper adopts a historical and analytical approach, examining the works and theories of renowned designers. Through the analysis of primary and secondary sources, the study explores the evolution of scenic design, focusing on the contributions of prominent figures of the period. The findings reveal that Naturalism significantly shaped scenic design by emphasizing a meticulous portrayal of everyday life. It challenged romantic and idealistic styles, advocating for realistic representation. The study highlights how Naturalist designers strived to create set designs that mirrored reality with high fidelity evident in the works of figures such as Emile Zola, who championed a return to nature and humanity through direct observation and accurate representation. The article underscores the impact of Naturalism on modern scenic design. By bridging the gap between evolving theatrical trends and the broader socio-scientific landscape, Naturalism transformed the aesthetic dimensions of theatre and enhanced its capacity to reflect and critique contemporary life and the legacy continues to influence theatrical practices today.

**Koomson, S., & Asamoah, A. N. (2024). Gblobalɔi and the language of naming: A study of revenant children in Ga communities in Ghana. *African Journal of Culture, History, Religion and Traditions*, 7(3), 10-21. <https://www.doi.org/10.52589/AJCHRT-OFPCVDF>**

### **Abstract**

This ethnographic study examines the naming practices of revenant children otherwise known as gblobalɔi, in the Ga communities of Ghana. It delves into the cultural beliefs associated with these children, the rituals performed during their naming ceremonies, and the implications of their unique names. Focusing on the Osu traditional area within the Greater Accra Region, the research utilised an explorative and descriptive approach. The sample comprised five elderly individuals, three men and two women chosen for their deep knowledge of local cultural practices related to gblobalɔi naming. Data was collected through interviews with strict adherence to ethical considerations like informed consent and confidentiality. The study finds that gblobalɔi are perceived as reincarnated spirits necessitating specific rituals and names for community integration. The names given often carry negative connotations or reflect the circumstances of their birth, intended to dissuade spiritual forces from claiming them. The research also addresses the challenges of preserving these traditions amidst modern influences. Overall, the study enhances understanding of naming practices in African societies and emphasises the role of names as crucial markers of identity and social roles.

Owusu, X. A., & Koomson, S. (2023). Crossroads of Culture: The African Storyteller and The Western Theatre (Drama) Actor, Director, Producer. *British Journal of Multidisciplinary and Advanced Studies*, 4(3), 18-33. [https://www.researchgate.net/publication/371435727\\_Crossroads\\_of\\_Culture\\_The\\_African\\_Storyteller\\_and\\_The\\_Western\\_Theatre\\_Drama\\_Actor\\_Director\\_Producer](https://www.researchgate.net/publication/371435727_Crossroads_of_Culture_The_African_Storyteller_and_The_Western_Theatre_Drama_Actor_Director_Producer)

Amponsah, E. K., & Horsu, I. (2023). Appreciating African Theatre through the concept of Social Identity: the case of Ananse in the land of idiots. *Journal of Research in Humanities and Social Science*, 11(1), 248-253.

### Abstract

The proponents of African Theatre agenda to a large extent seek to create and restore the identity of the African. The measurement of the success or otherwise of this agenda cannot be used to retard the worthwhile idea to forge to keep alive this schema. For a better and broader appreciation, leveraging on other established concepts in other domains has the potency to provide some illumination on the discourse so far and also to provide the impetus to forge ahead with the agenda. Social Identity, an established theory in psychology, interestingly has categorization or identity as a major meeting point with African Theatre. In the African social identity discourse, one cannot underestimate tradition and culture, because they have become an integral part of our society and since drama is the reflection of life, this study will consider specific social elements that could help categorize or identify a group of people. It is in the light of these that this paper considers the relationship between African Theatre and Social Identity based on Yaw Asare's play Ananse in the land of idiots.

## Department of Textiles and Fashion Education

### Articles In Journal

Botsio, L., Essel, O. Q., & Amissah, E. R. (2023). Historical roots of makai hairstyle of Elmina people of Ghana. *International Journal of Arts & Social Sciences*, 10(6), 216-225.

Botsio, L., Essel, O. Q., & Amissah, E. R. K. (2023). Historical roots of makai hairstyle of Elmina people of Ghana. *International Journal of Arts & Social Sciences*, 10(6), 216-225. <https://www.ijassjournal.com/2023/V6I10/4146663681.pdf>

### Abstract

The study traced the historical roots of the makai hairstyle, including its sociocultural significance in the celebration of the annual Bakatue festival celebrated by the people of Elmina in Ghana. The historical research design under the qualitative research approach constituted the research design. The expert sampling technique was used to select a sample size of nine (9) consisting of indigenous hairstylists in active practice with experience ranging from 20 to 35 years on the job and opinion leaders, historians, and cultural experts in Elmina for the study. Unstructured interviews, focus group discussions, and document reviews were used for the data collection. Data analysis was done using narrative inquiry and historical analysis. The Akan Fantse (or Fante) hairstyle spanned over six centuries, with a deep historical root in Elmina in the Central Region of Ghana and therefore an established precolonial hair grooming fashion. The history of the hairstyle can be traced to the very foundation of setting up the town in about 1300 CE, the inception of the annual Bakatue festival, and the African traditional religious beliefs of worshipping the supreme being and smaller gods (river god

Nana Benya). It recommended the creation of an online virtual gallery on makai hairstyles to share their educational relevance, be it historical, social, cultural, economic, aesthetical, religious, or psychosocial.

**Essel, O. Q. (2023). Fashion on currency: Analysis of the 1977 – 1986 millinery fashion in post-independence Ghana.** *International Journal of Multidisciplinary Studies and Innovative Research*, 11(3), 1474-1481. DOI: <https://doi.org/10.53075/Ijmsirq/8764564543454%20>

### Abstract

This article showed interest in millinery displayed pictorially on the currencies as well as the significance of those fashion representation in Ghana's fashion culture. The article specifically analysed the millinery fashion that featured on currency notes of 1977 and 1986 and the Yaa Asantewaa's imagery on the currency note of 1984. Three Ghanaian currencies purposively sampled for the study were the Five Cedis note issued on July 4, 1977; the Fifty Cedis note issued on 15th July 1986; and the Twenty Cedis note issued on 15th May 1984. These currency notes were released within nine years interval, that is, between 1977 and 1986. Content analysis of visual images, and social semiotics methods of visual data analysis constituted the method of analysis for the study focusing on the dominant feminine figures on the currency accessorised with millineries. The study put forward those feminine images represented on the Five Cedis, Fifty Cedis, and Twenty Cedis currency notes issued on July 4, 1977, 15th July 1986 and 15th May 1984 respectively that displayed the repertoire of straw-woven and the Akan militaristic millinery fashion in post-independence Ghana. The millinery practices depicted on the currencies embodied historical allusions to Ghanaian women irrespective of economic background; and ingrained in the memory of the citizenry the fashioned feminine identities constructed through millinery fashion in relation to the popular culture of twentieth-century Ghana. The selected indigenous millinery-inspired visuals also celebrated female vitality and brought to the fore the visibility of women in the public sphere and represented an epitome of independent women of the twentieth century Ghana who contributed to national development. It also made a strong socio-political fashion statement about the indigenous classic millinery fashion consciousness of Ghanaians and the millinery structural design in use at the post-independence era.

**Essel, O. Q. (2023). Rise of Rasta Hairstyle Culture in Ghana.** *International Journal of Novel Research and Development*, 8(10), 348-353. <https://www.ijnrd.org/papers/IJNRD2310040.pdf>

### Abstract

The study examined the rise of rasta hairstyles among the youth in Ghana despite the stigma about rasta hairstyle. This is because the upsurge and diffusion of rasta hairstyle culture among the youth in the urban centres and villages and its diffusion beyond the metropolitan centres in Ghana needed further investigation to establish the formal structures for rasta hair promotion. In examining the experiences that come with being a Rasta in Ghana, descriptive case study research design situated in the qualitative research paradigm was used for the study while semi-structured interview and focus group discussion constituted the data collection instruments. Narrative inquiry and descriptive analyses were used as method of data analysis. The study zoned Ghana into three: southern, northern and middle belt, within which a total of 18 respondents were sampled using simple random and expert sampling techniques. Aesthetic sensation and clout of the rasta hairstyle, its association as marker of African identity, personal

beliefs of wearers about the hairstyles (including personal philosophy), and fashion lifestyle pleasures were the motivational and compelling reasons that accounted for the rise in the hairstyle amongst the youth in urban centres and villages in Ghana. These reasons caused the high self-esteeming youthful male to a large extent, relegate the negative consequences of wearing the rasta hairstyle to the background. It recommended that rasta hair culture needs to be accommodated and destigmatised for Ghanaian cultural reorientation. Further research into the relationship between rasta hair culture and crime would be helpful to establish whether or not the wearing of rasta hairstyle is a reliable indicator of crime susceptibility.

**Essel, O. Q., Coffie, M., & Acquah, E. O. (2023). Second-hand clothing and colonialist-inspired criticisms through highlife music in post-independence Ghana. *International Journal of Multidisciplinary Research and Development*, 10(6), 85-92. <https://www.allsubjectjournal.com/assets/archives/2023/vol10issue6/10105-1688195354764.pdf>**

### **Abstract**

The study examined the lyrical texts of four Ghanaian highlife music in the 1960s and 1970s to decipher their communicative role in giving exposure to post-independence Ghanaian fashion history. Four classical Ghanaian Highlife music of the 1960s and 1970s were purposively selected since they centre on a common subject matter – second-hand clothing and colonialist inspired fashion artifice critiques. The selected songs were Obroni Woewu, released in 1962, by Ramblers International Band; Ewuraba Artificial, composed by Joe Eyison and recorded by Ramblers International Band in 1963; Wobe tumi No, by Kwadwo Donkoh, and recorded by Uhuru Dance Band in 1966; and Rokpokpo by Joe Mensah in 1977. The selected songs were analysed using textual analysis to unravel their social and historical contents and contexts to fashion practice during the post-independence (republican status change) of Ghana. The four classical Ghanaian Highlife music of the 1960s and 1970s drew attention to the growth of second-hand clothing and colonialist-inspired fashion practice at the time, which the colonialists portrayed as superior to indigenous Ghanaian dress fashion culture. The musicians raised the red flag for the colonialists’ undermining of the indigenous Ghanaian dress and fashion culture for policy direction. The musical compositions of the highlife musicians served as Ghanaian dress cultural and beauty standards gatekeepers and ambassadors through their repulsion against colonialists’ fashion ideological imposition. It is envisaged that further studies on governmental policy efforts to ban and or minimise second-hand clothing in Ghana from the post-independence period to the present would benefit the study of Ghana’s fashion history.

**Essel, O. Q., Navei, N., & Donkoh, S. (2023). Decolonising Ghana parliamentary dress code. *European Journal of Social Sciences Studies*, 6(10), 77-100. <https://oapub.org/soc/index.php/EJSSS/article/view/1491/2068>**

### **Abstract**

Dress fashion has sociocultural, economic and political expressions. In the political purview, dress fashion remains a viable catalyst capable of provoking dialogue for democratic action as people could proclaim their allegiance to a group or country through their dress fashion. In Ghana, there have been several attempts to decolonise the dress fashion culture. This study sought to deepen the advocacy dialogue through analysis of Facebook reactions to Right Honourable Alban Sumana Bagbin’s adornment of indigenous Ghanaian royal dress regalia for parliamentary business and his clarion call on the floor of Ghana’s parliament on



January 25, 2022, on the need to decolonise Ghanaian parliamentary dress code. Through the adoption of a mixed approach situated within the convergent parallel research design, censused Facebook reactions of Ghanaians regarding Speaker Bagbin's clarion call were examined. Sentiment analysis was used as the data analysis tool. The study revealed Ghanaians' overwhelming endorsement and commendation for Speaker Bagbin's adornment of indigenous Ghanaian royal dress fashion for parliamentary business. The study concluded that Ghanaians are clamouring for parliamentary dress code decolonisation as part of the pragmatic steps to revamp the sickening textile and fashion industry to deal with increasing fashion needs of the people. To ensure exemplary leadership of wearing made in Ghana by the legislature, executive and other arms of government to push the decolonisation agenda beyond mere rhetoric of wear Ghana, is to make the practice statutory. In that regard, Ghana's parliament must make laws to make what the executive, legislature and judicial wear in discharge of their duties in the public sphere statutory to contribute to developing the textiles and fashion industry for job creation, preservation of Ghanaian cultural values and national identity.

**Ghartey, K. E., & Essel, O. Q. (2023). African wax print fabric design and production history of Akosombo Textiles Limited in Ghana. *Journal of African Art & Culture*, 6(1), 67-89. <https://jaac-sca.org/wp-content/uploads/2024/02/Ghartey-and-Essel.pdf>**

## Abstract

Studies on the economic impacts of the wax print companies in Ghana abound. However, the design history of the wax prints design culture in post-independence Ghana has received little or no scholarly focus. This study focuses on Akosombo Textiles Limited (ATL) now Akosombo Industrial Company Limited, one of the giants in wax prints in Ghana. Historical research design and expert purposive sampling were used. In all sixteen (16) respondents were selected which comprised of designers, production managers, sales representatives and managers. Semi-structured interview and document review was used to collect the data while available artefacts formed part of the data collected. Historical and document analyses were used as data analysis methods. The study traced the wax prints fabric design and production history of Akosombo Industrial Company Limited, which has been in existence since 1967, highlighting its major fabric design evolution for over five decades of its existence. The study concluded that from 1967 to 2018, ATL produced two (2) main types of designs: ABC Wax designs and Java designs. ABC Wax designs were designed and printed in England while Java designs were designed and printed in Ghana. From 1967 to 2022 the company produced its 19,837 design and counting. AICL design and print both ABC and Java in Ghana from 2018 to present (2023). The study therefore recommends that, AICL should prioritize the creation of fabric design catalogue from 1967 to 2023 for reference, and teaching and learning of designing in Textiles and Fashion related schools in Ghana. The creation of such a catalogue will serve as resource material for analysis on the ABC wax print designs and Java design and to establish how they appertain to Ghanaian culture; as well as for fabric design idea development.

**Mintson, T., Essel, O. Q., & Acquah, E. K. (2023). Krobo Dipo dress fashion trends and culture in contemporary Ghana from 1950 to 2019. *Journal of African Art Education*, 3(1), 81-105. <https://www.jaae.atagonline.org/wp-content/uploads/2023/06/Mintson-et-al.pdf>**

## Abstract

The study investigated the major fashion trends that have characterised Dipo rite from 1950 to 2019. The narrative and descriptive research designs, under the qualitative approach, were used to investigate the major Dipo dress fashion trends. The sample for the study comprised of four (4) respondents consisting of two (2) traditional rulers knowledgeable in Dipo traditions and customs and have experienced the Dipo rite for at least two decades; one (1) opinion leader, and one (1) photographer who has been a paparazzi during Dipo rites for more than a decade. Interview and non-participant observation constituted the data collection instruments while thematic and descriptive analysis were the analytical tools used. The suboe (red fabric), Kraala (white fabric), wax print and kente Fabrics are some of such materials that signal the major Krobo Dipo dress fashion trends. The dominant presence of the Euro-Christian and Islamic ideological infiltration and stereotyping of the Dipo rite of passage in Ghana has been unsuccessful in depleting Dipo dress cultural practice. Four major stages of Dipo rites were identified with each displaying an array of Dipo dress fashions in observance of the rite. They are the tying of string (soni), cleansing initiation (wearing of red loincloth), victory initiation (wearing of white loincloth), and dress-ups (Newuom and kawɔ). The wearing of variations of red and white loincloth, and dress-ups (Newuom and kawɔ) that characterised the last three stages of Dipo rite, revealed interesting stylistic Dipo fashion trends that serve as sources of inspiration for fashion designing. These fashion trends are predominately wraparound with accessories to match. Wax print fabrics were dominant fabrics used by initiates during the first dress-up called Newuom while Kente dominated in use for Kawɔ. The flamboyant public display of Dipo contemporary fashion is undoubtedly a unique advertising platform that textile manufacturing companies in Ghana should take advantage of to market their products.

## Conferences/Workshops/Symposia/Seminars with Presentations

**Essel, O. Q. (2024, April 7 - 11).** *Invited as resource person for workshop on development of learner materials for the new Senior High Technical School (SHTS) and Science Technology, Engineering & Mathematics (STEM) curriculum [Paper presentation], Ejisu.*

**Essel, O. Q. (2024, March 23).** *Invited as Guest Speaker for 33rd Anniversary and Speech & Day Celebrations of Obrachire Senior High Technical School (SHTS) [Paper presentation], Awutu Obrachire.*

**Essel, O. Q. (2024, February).** *Invitation to participation in the first workshop on the Development of a Trans-disciplinary Art Education textbook [Paper presentation], Johannesburg.*

**Essel, O. Q. (2023, September 3).** *Academic gown designs in Ghana: An aesthetic discourse of Patrick Osei-Poku's decolonial effort [Paper presentation]. The Burgeon Society ONLINE TALK Series*

- Essel, O. Q. (2023, June 13 & 14).** *Invited as resource person for Workshop on Writing Transnational textbook on the power of images in the teaching of Art Education in high School in Ghana and Germany* [Paper presentation]. **Exploring Visual Culture (EVC), Bayreuth.**
- Essel, O. Q. (June 15, 2023).** *Decolonial reflections on Creation and implementation of teaching and learning materials on the topic of Africa for Geography lessons at Bavarian grammar schools (Art-historical perspective)* [Paper presentation]. **Department of Geography, Bayreuth University.**
- Essel, O. Q. (June 2023).** *Invited as resource person for Development of Year One Teacher Manuals for the Secondary Education Curriculum (Art & Design)* [Paper presentation]. **National Council for Curriculum and Assessment (NaCCA), Ho.**
- Essel, O. Q. (2023, February 13 - 14).** *Writing a good studio-based research proposal* [Paper presentation]. **Centre for Research in Culture & Creative Arts (CeRCCA).**
- Essel, O. Q. (2023, March 7).** *Dealing with cultural plagiarism and appropriation in multicultural textbook for Art Education* [Paper presentation]. **Exploring Visual Culture (EVC) and Centre for Research in Culture and Creative Arts seminar, University of Education.**
- Essel, O. Q. (2023, January 14).** *Exploring social media space as an intervention for non-formal art therapy education and practice* [Paper presentation]. **INSEA Africa and Middle East webinar.**
- Howard, P. M. A., & Essel, O. Q. (2023, September 3).** *Investigation into the design history of academic gowns of selected technical universities in Ghana* [Paper presentation]. **The Surgeon Society ONLINE TALK Series.**

### **Article(s)/Chapters in an Edited Book**

- Essel, O. Q. (2023).** *Telling the indigenous Ghanaian fashion cosmovision: The case of royal ahenema sandals.* In M. A. Gardetti, & R. P. Larios-Francia, *Sustainability challenges in the fashion industry: Civilization crisis, decolonization, cultural legacy, and transitions.* **Springer.**
- Essel, O. Q. (2023).** *Fashion: A decolonisation conversation.* In E. Acquah, P.-H. S. A. Assako, P. deGraft-Yankson, M. C. Kidenda, N. Pauli, & A. Sooful, *Collective memory: Visual perspective from Cameroon, Germany Ghana, Kenya & South Africa.* **Kopaed, Munich.**

# SCHOOL OF EDUCATION AND LIFE-LONG LEARNING

## Department of Basic Education

### Conferences/Workshops/Symposia/Seminars with Presentations

Annobil, C. N. (2024, April 8 - 12). *Your department, digitalization and skills in education* [Paper presentation]. International Week Celebration and Conference on Digital Tools and Skills in Education -Theme: Introduction to Digital Lives – Balancing Potentials and Challenges, University College of Copenhagen, Copenhagen.

Annobil, C. N. (2023, August 9 - 11). *Obtaining training in religious and moral education in public universities: Choices, challenges and prospects* [Paper presentation]. 7th International Multidisciplinary Conference for Postgraduate Students - Theme: Paradigm Shift in Pedagogical Innovation for Transformative Education, Jophus Anamuah Conference Centre, North Campus, UEW, Winneba, Central Region.

Twumasi, O. A. (2023, January 17-19). *Conflict resolution mechanism of the manhyia palace court of the kumasi traditional council* [Paper presentation]. Promoting Staff Development through Collaborative Research and Quality Teaching in Education, Winneba, Central.

### Articles In Journal

Acquaye, V. N., & Kleeberg-Niepage, A. (2024). No mums allowed ever!!! Ghanaian young adolescents' perceptions of their relationship with their parents. *International Multidisciplinary Journal of Research and Education (IMJRE)*, 2(1), 16-31. <https://journals.uew.edu.gh/index.php/imjre/article/view/281>

### Abstract

In most societies, mothers invest more time in being physically and emotionally available to their children than fathers. Therefore, for most children, the relationship with their mothers is the most important in their lives for many years. However, in adolescence and thus in the struggle for their own identity, young people have to reshape their family relations and thus their relations with their mothers to become autonomous subjects. In a study with children (aged 10-13 years) in Winneba, Ghana, they were asked to write an essay about their fantasies regarding an ideal childhood. Envisioning their ideal life as a child, they repeatedly addressed—among other issues—their relationship with their mothers and fathers with regard to availability (i.e., time together), financial or emotional support, responsibility, and (in)dependence. Using selected examples from the essays that were analyzed using the documentary method, we discussed the following issues and questions in this paper: What do children imagine to be an ideal relationship with their parents? What are the characteristics and differences in the children's conceptualization of a perfect mother, and an ideal father?

How do they imagine ideal gender relations? In addition, we examined what these ideals can tell us about their perceptions and experiences with family, cross-generational, and gender-specific relationships in their current life in Ghana. Among others, the findings show that young adolescents define ideal parents, predominantly, with images of availability. Although egalitarianism is portrayed as the best family structure, with domestic chores, traditional gender roles are mostly favored.

Keywords: fantasy, ideal childhood, adolescents' perception, parents, gender relations, availability

**Adenyoh, C. K., Donkor, S. K., Seibu M., Agyeibea, B. A., & Omotayo, O. (2024). From campus life to global health: Understanding non-communicable diseases and physical inactivity among Ghanaian University Students. *International Journal for Early Childhood Care and Educational Research*, 1(1), 1-26. <https://journals.uew.edu.gh/index.php/ijecceer/article/view/259>**

## **Abstract**

Non-communicable diseases (NCDs) have become a significant global health concern, with the majority of mortalities occurring in low and middle-income countries. This study focused on the rising prevalence of physical inactivity among regular university students and aimed at contributing to the limited literature on barriers to physical activity (PA) in this demographic. While the impact of NCDs extends beyond physical health, causing societal and economic repercussions, there is insufficient attention on physical inactivity among regular university students in Africa. The study utilised a cross-sectional research design with primary quantitative data collected through Google Forms. The results were analysed using a 2x3 factorial Analysis of Variance (ANOVA). Interaction between gender and age was also significant,  $F(1, 667) = 13.593, p < 0.000, \eta^2 = 0.020$ . Results also indicated a significant decline in PA levels as regular university students progress from adolescence to early adulthood. Health reasons predominantly motivate PA, while barriers include lack of time and access to sports environments. The findings underscore the importance of targeted health promotion initiatives within universities, considering the influential role of health and wellness factors. Additionally, the study highlights the need for gender specific strategies and ongoing monitoring of PA levels to inform interventions and contribute to global efforts in achieving Sustainable Development Goal 3 Target 4 by 2030.

**Donkor, S. K., Adenyoh, C. K., Osei, C. A., Nkrumah, A. A., Atsu, S. F., Appiah, M., Agortey, J. J., Darko, R. A., Asare, M., & Okala, C. (2023). Coach-guided instructional cues and pre-service teachers' netball shooting skill acquisition in physical exercise and sports context. *Faculty of Natural and Applied Sciences Journal of Mathematics, and Science Education*, 5(1), 93-101. <https://fnasjournals.com/index.php/FNAS-JMSE/article/view/245>**

**Donkor, S. K., Domfeh, C., Hormenu, T., Okala, C., Nkrumah, A. A., Osei, C. A., Agortey, J. J., Asare, M., Adenyoh, C. K., Selase, F. A., & Appiah, M. (2023). Instructional supervision and practices of teachers in physical exercise and sports programmes in public primary schools of Volta Region, Ghana. *Faculty of Natural and Applied Sciences Journal of Mathematics, and Science Education*, 5(1), 111-117. <https://fnasjournals.com/index.php/FNAS-JMSE/article/view/247>**

## Abstract

Regular supervision of instructional tasks of the teacher is a powerful contributor to classroom achievement and effectiveness. The purpose of this study was to investigate instructional practices and frequency of supervision of teachers of PES programme in public primary schools and to explore gender differences in supervision of teachers in six educational circuits in the Volta Region, Ghana. We adopted a cross-sectional descriptive survey to investigate the pedagogical problems. We used 172 participants out of a population of 300 teachers in the study area. Good results based on the validity and reliability of the data collection instrument were achieved through expert consultation and the Cronbach alpha reliability test ( $\alpha \geq .71$ ). We conducted pre-data analyses to clean data from probable errors during data entering. Analyses of data using Statistical Package for Social Sciences (SPSS for Windows, Version 21) revealed that most teachers in public primary schools did not receive any form of supervisory assistance in teaching the PES programme in public primary schools. Findings showed that the PES programme was not taught regularly in public primary schools. Again, the findings revealed frequent cancellation of PES lessons and the use of PES time for other subjects such as English, Mathematics and Science in public primary schools. In terms of instructional supervision of the PES programme, both male and female teachers did not differ significantly. We recommended that the Ghana education service assign supervisory roles to qualified PES coordinators and resource persons to help teachers in public primary schools implement the PES curriculum successfully.

**Ali, C. A., & Tangku, M. (2024). Student-Teacher Experiences in Numeration Systems. *Turkish Journal of Mathematics Education (TJME)*, 15(1), 66-73. <https://tujme.org/index.php/tujme/article/view/94/52>**

**Baidoo, J., & Ali, C. A. (2024). Students' mathematics and real-life contexts in solving algebraic word problems. *Al-Tabar Journal of Pendidikan Mathematica- Journal of Mathematics Education*, 14(2), 483-500. <http://dx.doi.org/10.24042/ajpm.v14i2.19272>**

**Issahaku, M. M., & Ali, C. A. (2024). Exploring student and teacher factors influencing students' performance in mathematics. *Futurity Education*, 4(2), 45-60. <https://doi.org/10.57125/FED.2024.06.25.03>**

**Ndebil, M. B., & Ali, C. A. (2024). Cooperative learning as a strategy of improving mathematics performance and attitudes. *International Journal of Educational Innovation and Research (IJEIR)*, 3(1), 62-74. <https://doi.org/10.31949/ijeir.v3i1.7163>**



- Padmore, E. A. & Ali, C. A. (2024). Exploring effective differentiated instruction in the teaching and learning of mathematics. *ASEAN Journal for Science Education (AJSEd)*, 3(1), 41-54. <https://ejournal.bumipublikasinusantara.id/index.php/ajsed/article/viewFile/320/269>
- Ali, C. A. (2023). Re-Enacting affective mathematics values through cultural symbols. *Indonesian Journal of Science, Technology, Engineering, Art, and Mathematics Education*, 2(2), 68-85. <https://ijsteame.ejournal.unri.ac.id/index.php/ijsteame/article/view/13/23>
- Ali, C. A. (2023). Using indigenous artifacts to support conceptual field approach of learning special trigonometric angles. *Journal of Mathematics and Science Teacher*, 3(2), 1-11. <https://doi.org/10.29333/mathsciteacher/13698>
- Ali, C. A. (2023). Exploration of the ability of preservice mathematics teachers using Kolb's experiential learning theory & learning styles. *Indonesia Journal of Science and Mathematics Education*, 6(1), 1-16. <https://doi.org/10.24042/ijisme.v6i1.10440>
- Ali, C. A., & Davis, E. K. (2023). Pupils' recognition of geometric tessellations as patterns of traditional culture. *Symmetry: Culture and Science*, 34(3), 251-280. [https://doi.org/10.26830/symmetry\\_2023\\_3\\_251](https://doi.org/10.26830/symmetry_2023_3_251)
- Ali, C. A. (2023). (2023). The mismatch between indigenous Ghanaian and Hindu Arabic systems in didacticising counting and place value. *Acta Didactica Napocensia*, 16(1), 51-65. <https://doi.org/10.24193/adn.16.1.4>
- Alorki, I., & Ali, C. A. (2023). Attitudes coded as measures of determining students' performance in mathematics. *Futurity Education*, 3(4), 198-216. <https://doi.org/10.57125/FED.2023.12.25.12>
- Biney, S. K. & Ali, C. A. (2023). Errors and misconceptions in solving linear inequalities in one variable. *Journal of Advanced Sciences and Mathematics Education [JASME]*, 3(1), 15-30. <https://doi.org/10.58524/jasme.v3i1.195>
- Yeng, E., Ali, C. A., & Adzifome, N. S. (2023). Relationship between familiarity and competency in integrating information and communication technology into mathematics instruction. *Contemporary Mathematics and Science Education*, 4(2), 20-32. <https://doi.org/10.30935/conmaths/13405>
- Anyimah, B., & Ghanney, R. A. (2024). Coping with Academic Work and Nursing Motherhood: The Case of Akenten Appiah Minkah University of Skills, training and Entrepreneurial Development (AAMUSTED), Kumasi. *Global Journal of Arts, Humanities and Social Sciences (GJAHSS)*, 12(3), 1-21.
- Ghanney, R. A., & Wotordzor, P. (2024). Factors Affecting Academic Performance in Social Studies Among Students in Selected Public Junior Schools in Hohoe Municipality, Ghana. *International Journal of Education, Learning and Development (IJELD)*, 12(4), 47-66.
- Nyamekye, M., & Ghanney, R. A. (2024). Influence of Work Stress on Public Basic School Teachers and their Work Performance in Kadjebi District. *International Journal of Quantitative & Qualitative Research Methods (IJQORM)*, 12(2), 20-37.

**Owusu, I., & Ghanney, R. A. (2024). Exploring community participation in managing the Colleges of Education in Ashanti Region. *International Journal of Social Science and Human Research*, 7(5), 2973-2983.**

**Donkor, M., Ghanney, R. A, Wiafe, D., & Dwamena, E. (2023). Social studies teachers' ICT proficiency for teaching in schools for the deaf in Ghana. *British Journal of Education*, 11(10), 81-98.**

**Asante, R., Addae, A., & Kusi Danquah, G. (2024). Lexico-syntatic analysis of antonyms in some speeches of John Dramani Mahama. *World Journal of Advanced Research and Reviews*, 6(2), 528 - 542.**

**Addae, A., Kusi Danquah, G., Hamidu, A., & Adjei-Yeboah, K. (2023). Ideological discursive structures in political speeches: A critical discourse analysis of selected speeches of Mr. John Dramani Mahama. *World Journal of Advanced Research and Reviews*, 20(3), 1314 - 1333.**

**Arthur, R., Addae, A., Owusu Nyarko, I., & Arko Fenyi, D. (2023). Misconceptions and perceived importance of literacy across the curriculum among student teachers in Ghana. *European Journal of English Language Teaching*, 8(3), 172 - 190.**

**Hamidu, A., Addae, A., & Quarcoo, A. M. (2023). Corpus-based analysis of modality in the Covid-19 addresses by President Akufo Addo. *European Journal of Applied Linguistics Studies*, 6(2), 112 - 131.**

**Atta-Agyapong, K., Asamoah, E. F., Adjei-Fianko, D., & Kwafu, A. E. (2024). A contemporary pentecostal theodicy of a just god on a killing spree. *Pentecostalism, Charismaticism and Neo-Prophetic Movements Journal*, 5(1), 12-19. <https://doi.org/10.38159/pecanep.2024512>**

## **Abstract**

The portrayal of God in the Old Testament differs from that in the New Testament, suggesting an evolving perception and understanding over time. This has led to confusion and a dualistic view of God among individuals throughout history. Particularly perplexing is the divine sanction for the complete annihilation of the Canaanite population, seemingly contradicting God's just nature. This study investigates the command to exterminate men, women, children, and infants belonging to the Canaanite nations and seeks to reconcile the notion of a just God sanctioning such perceived cruelty and bias. Analyzing the moral, religious, and theological complexities surrounding this issue, the study aims to shed light on the hypothetical inconsistency in God's attitude. Ultimately, the study asserts that God's sanctioned killings were justifiable actions driven by His foreknowledge and intended for the salvation of humanity as a whole. However, the study emphasizes that this divine approach does not justify or endorse any contemporary acts of religious extremism, as such violence serves no salvific purpose in God's current plan for humanity. Grounded in the principles of action, consequence, and responsibility, the Pentecostal theodicy explored in this qualitative investigation, based on literature review and textual analysis, provides insights into the academic question of why a just God would command the total obliteration of the Canaanites. Through this analysis, this study contributes to the advancement of knowledge on the topic. Keywords: Pentecostal Theodicy, Justice, Canaanites, Violence, Extremism, and Biblical text.

**Atta-Agyapong, K., Adjei-Fianko, D., Kwafo, A. E., & Asamoah, E. F. (2023). A Pentecostal Perspective of the Cultural and Spiritual Significance of House of Joshua in Jewish and Christian Traditions. *E-Journal of Humanities, Arts and Social Sciences*, 4(13), 1481-1492. <https://doi.org/10.38159/ejass.20234137>**

### **Abstract**

This academic paper delved into the cultural and spiritual significance of the House of Joshua in Jewish and Christian traditions from a Pentecostal perspective. The enquiry employed qualitative research methods, including historical and textual analysis, and comparative analysis to analyze the House of Joshua in contemporary Jewish and Christian practices from various magnitudes. The study through analysis of historical documents, texts, and scriptures from both Jewish and Christian traditions investigated the historical context of the House of Joshua, its cultural symbolism, and its role in shaping the religious identities of both Jewish and Christian communities. The paper further explored the many ways in which the House of Joshua is understood and revered within these religious traditions. The study sheds light on the rich tapestry of Jewish and Christian traditions by highlighting the shared historical and theological connections between these religious communities while also recognizing their unique perspectives and interpretations. The study contributes to a deeper understanding of the house of Joshua's continuing relevance in contemporary Jewish-Christian religious practices and beliefs by accenting their common ground and fostering interfaith dialogue.

**Bentil, J. (2024). Information communication technology competence and technological pedagogical content knowledge of Senior High School social studies teachers: A footpath to 21st Century classroom instructional practices in the Bono Region of Ghana. *European Journal of Research in Social Sciences*, 12(1), 46-68. <https://www.idpublications.org/wp-content/uploads/2024/05/Full-Paper-INFORMATION-COMMUNICATION-TECHNOLOGY-COMPETENCE-AND-TECHNOLOGICAL-PEDAGOGICAL-CONTENT-KNOWLEDGE-OF-SENIOR.pdf>**

### **Abstract**

In spite of the undeniable reality of technology explicitly or implicitly influencing classroom instruction in the 21st century, evidence from developing economies have shown that relatively few teachers fully integrate technology in their instructional delivery, thereby bringing into inquiry their Information Communication Technology (ICT) and Technological Pedagogical Content Knowledge (TPACK) competencies. Accordingly, this study employed Shuman 1986 Theory on Pedagogical Content Knowledge to investigate Senior High School Social Studies teachers' competence in the use of ICT as well as their knowledge on TPACK. Additionally, the study investigated the effect of TPACK on Social Studies teachers classroom instructional practices. In line with positivist paradigm, this study utilized cross-sectional descriptive survey design with quantitative approach where through census sampling, 303 Social Studies teachers were sampled to participate in the study with the main instrument being structured questionnaire whose reliability was assessed using Cronbach alpha. Descriptive statistics (mean and standard deviation) and inferential statistics (multiple and stepwise regression) were used to analyse the research questions and hypothesis outlined in the study. The findings of the study revealed that Senior High School Social Studies teachers had high competence in the use of ICT and TPACK. It was again established that teacher competence on TPACK significantly predicted their classroom instructional practices and that competence in the use of ICT strengthened the effect of TPACK on the classroom instructional practices. Therefore, it was recommended that the strategies aimed at improvement in use of ICT should run

concurrently with approaches to enhancing knowledge in TPACK of the teachers for more improved classroom instructional practices. The study, therefore, concluded that teachers use of ICT and knowledge of TPACK is a crucial determinant of their effectiveness and efficiency in classroom instructional practices.

**Bentil, J. (2023). Study habits and academic performance among public Junior High School students in the Ekumfi District: Investigating the controlling effect of learning styles. *European Journal of Social Sciences Studies*, 8(6), 187-205. <https://doi.org/10.46827/ejsss.v8i6.1505>**

### Abstract

Despite the increased prominence of research on the influence of study habits and learning styles on students' academic performance in recent years, there are still controversies and debates in literature on whether learning style strengthens the effect of study habits on academic performance. Therefore, this study utilized Bakare (1977) study habits theory and the VAK learning styles theory postulated by Fernald and Keller (1920) as theoretical lenses to examine the influence of study habits on academic performance among students in public Junior High Schools in the Ekumfi District, while controlling for the possible effect of learning styles. A cross-sectional descriptive survey design was used to collect quantitative data through a questionnaire and checklist from 475 students using proportionate stratified sampling techniques. After meeting validity and reliability requirements, inferential statistical tools such as Pearson Product Moment Correlation and hierarchical multiple regression were used to analyze the data. The study revealed that overall, study habits attained a strong and statistically significant positive relationship with students' overall academic performance. Besides, the study revealed that learning styles exclusively contributed significantly to academic performance. It was further revealed that learning styles did not impede the effect of study habits on academic performance. Instead, learning styles reinforced the link between study habits and academic performance among the students. Specifically, it was established that auditory learning style, visual learning style, kinesthetic learning style, reading and note-taking and time management made a unique and significant contribution to academic performance, however, the individual contributions of examination, homework and assignments, and concentration did not reach statistical significance. Therefore, it is recommended that strategies aimed at the improvement of study habits should runconcurrently with approaches to enhancing the learning styles of the students for better academic performance.

Keywords: study habits, learning styles, academic performance, junior high school

**N-yelbi, J., Acquah, S., Dzakadzie, Y., & Eshun, P. (2024). Level of education, marital longevity and religion as determinants of marital stability among couples in Tamale Metropolis, Ghana. *Advances in Research*, 25(4), 137-147. <https://doi.org/10.9734/air/2024/v25i31059>**

### Abstract

The study was a descriptive survey aimed at investigating couples' level of education, marital longevity and religion as determinants of marital stability among couples in the Tamale Metropolis. The population of the study were married couples drawn from the Metropolis who have been married for 1-25 years and could read and understand. A sample of 381 married couples aged between 30 to 50 years was drawn from the region using stratified random sampling. A questionnaire was used to gather data for the study. Quantitative data

was analysed by using one-way ANOVA. Hypothesis one revealed a statistically significant difference in marital stability of couples based on their level of education. Hypothesis two revealed a statistically significant difference in the length of marriage and marital stability of couples. For hypothesis 3, it was revealed that there is a statistically significant differences in marital stability among couples based on their religion. It was concluded that married couples' levels of education, how long they have

been married and couples' religion were key determinants of marital stability among couples. It is therefore recommended that couples intending to marry should have some level of education to effectively resolve conflicts during marriage. Also, couples should be educated on the need to stay longer in marriage despite conflicts and misunderstandings and adherence to religious practices, values and teachings on marriage should be adhered to.

**Dwamena, E., Acquah, S., & Kumi-Manu, R. N. (2024). Perception of authentic assessment in the standards-based curriculum in the Effutu Municipality. *International Journal for Early Childhood and Educational Research, 1(1)*, 174–194. <https://journals.uew.edu.gh/index.php/ijeccer/article/view/269>**

### **Abstract**

The study explored primary school science teachers' perception of authentic assessment in the Standards-based Curriculum in the Effutu Municipality. The study was modelled on an explanatory sequential mixed methods design. A simple random sampling technique was used to select a sample size of 180 teachers for the quantitative phase out of which four teachers were purposively sampled for the qualitative phase of the study. A structured questionnaire was used to gather the quantitative data on the respondents. Quantitative data was analysed using descriptive statistics (means, standard deviations, frequencies, and percentages) and inferential statistics (One-way ANOVA) was used to analyse the hypotheses. In the qualitative phase, a semi-structured interview guide was used to collect data, and the data from the interview was analysed and presented according to the research question. The study results revealed that the majority of the teachers generally had a positive perception of authentic assessment. Again, it came to light from the study that there was no statistically significant difference between teachers' academic qualifications and their perception of authentic assessment. The study, however, established that there was a statistically significant difference between teachers' teaching experience and their perception of authentic assessment. It was recommended amongst others that periodic in-service training programs and workshops, organized by educational stakeholders in the Effutu Municipality, would foster a positive perception of authentic assessment among the teachers in the municipality.

**Kumi-Manu, R. N., Acquah, S. & Addo-Wuver, F. (2023). Preservice teachers' professional experiences during internship at the University of Education, Winneba, Ghana. *East African Journal of Education and Social Sciences, 4(3)*, 198-208. <https://doi.org/10.46606/eajess2023v04i03.0291>**

### **Abstract**

This study examined the effectiveness of how preservice teachers of the University of Education, Winneba are mentored when on internship. The study employed the sequential explanatory mixed-methods research design, utilizing a researcher-made close-ended questionnaire and interview guide to collect data. A simple random sampling technique determined 125 preservice teachers in the biology, chemistry, and physics departments for

the quantitative phase of the study. Ten preservice teachers participated in the qualitative phase of the study. Quantitative data was analyzed using descriptive statistics. Qualitative data was categorized into themes generated from the research questions. The results revealed that preservice teachers have mentoring needs that were not adequately addressed by the mentors. Mentoring preservice teachers in the typical classroom situation is critical for professional development as it aims at inculcating in them practical experiences in teaching to enhance their abilities and develop their knowledge and skills in the areas studied. Mentors and mentees, therefore, need to know what their associated roles are and how to interact for a positive impact. Mentors should be engaged based on their specialization in the subject area, their rich experience and their willingness to mentor preservice teachers.

**Atta, A., S., Asiedu-Addo, S. & Asemani, E. (2023). The impact of the use of the problem-solving approach in linking classroom mathematics to real-life activities on learners' performance. *International Multidisciplinary Journal of Research and Education (IMJRE)*, 1(1), 36 - 47. [https://scholar.google.com/scholar?hl=en&as\\_sdt=0%2C5&q=The+Impact+of+The+Use+of+The+Problem-Solving+Approach+in+Linking+Classroom+Mathematics+to+Real-Life+Activities+on+Learners%20%80%99+performance&btnG=](https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=The+Impact+of+The+Use+of+The+Problem-Solving+Approach+in+Linking+Classroom+Mathematics+to+Real-Life+Activities+on+Learners%20%80%99+performance&btnG=)**

### Abstract

The study aimed to determine the impact of using the Problem-solving approach to link classroom mathematics to daily life activities on learners' performance. The constructivist theory and Polya's problem-solving approach were employed to create a link between classroom mathematics and real-life mathematical perspective. A sample of two intact classes comprising 101 students was used for the study. The control class received the traditional instruction, while the experimental class was treated with the designed intervention. The results indicated a statistically significant improvement in the post-test of the Experimental Group. It is recommended that teachers should endeavour to use the problem-solving approach in teaching to enhance learners' performance.

**Kleeberg-Niepage, A., Eshun, E. S., & Perzy, A. (2023). Real danger or urgent necessity? Young Ghanaian's perspectives on smartphone use in relation to academic success. *Informing Science: The International Journal of an Emerging Transdiscipline*, 26, 191-208. <https://doi.org/10.28945/5197>**

### Abstract

Digital media devices and Internet access are conditional on people's social, economic, and educational participation. Many people in the Global South in particular are not yet granted such access. For children and young people worldwide, the educational opportunities offered by digital media are associated with potential threats to mental health and well-being. However, young people's views on digital media are rarely addressed, especially in the Global South. The aim is to make the positions of young people visible in the often adult-dominated discourse on digital media and to overcome adult-centered considerations in academic and public debates. In addition, the focus on young people from the Global South is intended to help make their underrepresented voices present in this discourse. Based on a qualitative thematic analysis of responses to open-ended questionnaire questions, young Ghanaians' views on smartphone use and how it affects academic success are examined. By focusing on the subjective perspectives of young people, especially from the Global South, voices that have hardly been heard in the discourse on digital media are made audible. This should help



overcome the dominant adult-centered perspectives in this discourse. Findings show that for young people in Ghana, digital media are part of their everyday lives and often necessary to succeed at school. At the same time, they are concerned about the dangers, e.g., from overuse or cybercrime, for which they have few strategies to deal with. In their answers, they refer to socio-culturally specific discourses and values as well as to generational hierarchies that they perceive and deal with, which go far beyond the topic of digital media use. This makes clear the social tensions in which the debate about digitalization is embedded. It is recommended that, young people's knowledge of and perspectives on digital media is an important resource for learning to use them in an emancipated way. Again, through the increased use of qualitative research designs, deeper insights into the reflective appropriation of digital media can be gained by people in general as well as children and young people in particular.

## Article(s)/Chapters in an Edited Book

**Donkor, S. K., Nkrumah, A. A., Osei, C. A., Darko, R. A., Adenyoh, C. K., Asare, M., & Ocansey, R. (2024). Investigating institutional barriers and frequency of teaching the school physical exercise and sport programme in public primary schools of three selected districts. In J. Eyisi, B. Ogunleye, A. Ukwueze, E. Nwafor, A. Mac-Ozigbo, S. Olatunji, J. Eyisi Jr., & Nwafor, E. (Eds.) *Excellence in Nigerian education system: A festschrift for Professor Patrick Eke Eya*. National Open University of Nigeria, Nigeria.**

### Abstract

The process of teaching and learning physical exercise and sport (PES) programme in public primary schools is largely influenced by the availability of institutional resources. It is widely acknowledged that the PES programme is an essential component of basic education curriculum that promotes fitness, social wellbeing and academic achievement. Institutions that have adequate teaching and learning resources for the PES programme are able to spark the interest of students as well as motivate them (students) to engage in a lifetime physical activity (PA) for health and wellbeing. Despite these benefits, there are concerns about lack of teaching the PES programme in public primary schools. The absence of instructional resources is a potential threat to effective implementation of the PES programme in schools. Therefore, the purpose of this study was to 1) examine perceived institutional barriers that impeded teaching of PES programme, 2) determine the order of magnitude by which these perceived barriers impeded lesson delivery in PES and 3) explore the relationship between perceived institutional barriers and the frequency at which PES lessons were taught in the public primary schools. The study design was cross-sectional descriptive survey. We acquired ethical clearance from Institutional Review Board of the University of Cape Coast, Ghana. Multistage sampling technique yielded a sample of 172 subjects out of estimated population of 300 from three selected districts. Validated and reliable self-structured questionnaire was used for data collection. Pre-data analyses were performed to screen and clean data from probable errors during data entering. All data were analyzed using Statistical Package for Social Sciences (SPSS, version 17). The findings of the study suggested that institutional barriers negatively impacted the frequency of teaching PES programme in public primary schools. The study found that lack of resources such as equipment, facilities, and supplies were the major barriers to the implementation of the PES program. Lack of equipment ranked the highest institutional barrier to effective teaching of PES programme, while large class ranked the least. Negative correlation was found between institutional barriers and frequency at which PES lessons were taught. The institutional barriers which included inadequate supply of equipment, facilities and supplies have practical and policy implications. The findings of this study suggested that policies should be developed to ensure that PES programme is taught regularly in public primary schools. We recommend that policymakers should

address these institutional barriers by allocating adequate funds, providing a comprehensive curriculum, and training for teachers to effectively teach the school PES programme. Doing so will ensure that children in basic schools have access to effective PES programmes that will enhance their overall development.

**Eshun, E. S. (2023). Akan Verbs of Perception: Hu & Hwɛ. In E. Kweku Osam and O. B. Kambon, *Aspects of Akan Verbal Semantics*. Linguistics Association of Ghana, Accra - Ghana. <http://creativecommons.org/licenses/by/4.0/>**

## Abstract

This paper examines verbs of perception (VPs), focusing on visual perception in Akan from a cognitive linguistics perspective. It also explores the various usages of VPs in the language. Vision is one of the sensory-perception signals in animate objects. It regulates the activities of sight and shapes how physical perceptions are mapped onto abstract and metaphorical experiences. This study uses data from multiple approaches such as semistructured interviews and observations from natural discourses. A significant conclusion is that the meaning of hwé ‘look’ and hú ‘see’, the main VPs in Akan, overlap in usage depending on the argument they select and the context in which they occur. The study further reveals that hwé and hú select [+animate; +/-human] as the percipient that controls sight, but the target could be both animate and inanimate entities. In the basic clause structure of the VPs, there is always an experiencer and a stimulus forming simple transitive constructions. Also, these two visual verbs can exhibit other extended meanings which sometimes connect directly to metaphors. These extended meanings are described as secondary elements to the core meanings of the visual verbs in Akan.

**Eshun, E. S. (2023). Language attitude and ethno-linguistic vitality study of Effutu community in Winneba. In Esther Yeboah Danso-Wiredu and Jim Weiler *Winneba: The geography, peoples and systems*. Digibooks Ghana Ltd, Accra, Ghana.**

## Books

**Vanderpuije, A. J., Eshun, E. S., Quaitoo, A., Andoh-Robertson, K., & Tetteh, A. (2024). *Differentiated Learning, English Language Learners' Workbooks (Levels 4-6) for Upper Primary*. Ministry of Education, Accra, Ghana.**

**Addison, A. K. (2023). *Foundations of Education in Ghana*. University Press, Winneba.**

## Published Proceedings of Conferences/Workshops/ Symposia/Seminars

Ali, C. A., Adzifome, N. S., & Asemani, E. (2023). *Female trainee teachers and inequalities in mathematics. In 31st annual conference of the Southern African Association for Research in Mathematics, Science and Technology.*

### Abstract

The issue of inequality in mathematics has lingered for decades and one wonders when we can become satisfied on female participation. With two integrated models, we proposed a two-stage design process to explore female trainee teachers' knowledge and competencies in addressing inequality in mathematics teaching and learning. Samples of 50 female trainees and 200 pupils were involved in this study. Standardized tests were conducted for trainees and pupils to determine the influence of inequality on mathematics teaching and learning outcomes. The results did not only show enormous strengths and weaknesses but also opportunities and threats. Also, the results of the pupils showed that many girls lacked basic knowledge and competencies in mathematics. We therefore concluded that the two models contributed significantly to enriching the teacher trainees' knowledge and competencies in bridging female inequality in mathematics. Consequently, we recommended that stakeholders offer varied assistance, grants and scholarships for female teacher trainees and girls who wish to pursue mathematics professions.

## Department of Educational Management and Administration Education

### Conferences/Workshops/Symposia/Seminars with Presentations

Amponsah, N. (2023, January 17-19). *Essential relevance of professional learning communities to teacher attitude to educational change and classroom effectiveness in Ghanaian Basic Schools [Paper presentation]. Inter-University Conference for Doctoral Studies, Winneba, Central Region*

### Abstract

Professional Learning Communities (PLCs) model of continuous professional development was introduced into Ghanaian basic schools in 2019 educational reforms to enhance professional competencies of teachers. However, empirical studies into the effectiveness of PLCs in schools is at teething stages worldwide. Therefore, this study sought to test the hypothesis that effective PLC affects teacher attitude towards educational change (TAC) which ultimately affects teacher classroom effectiveness (TCE). Kennedy's (2005) community of practice theory guided the study. Working within the positivist's philosophy, the study employed the quantitative research approach using the causal-comparative research design. The census and proportionate stratified random sampling techniques were used to select 87 headteachers and 339 teachers respectively for the study. Olivier et al.'s (2010) PLCA-R, Prakash et al.'s (2020) TCE, and Dunham et al.'s (1989) TAC questionnaires were used to collect data. The data was analysed using descriptive statistics such as mean and standard deviation and structural equation modelling (SEM) with the aid of SPSS and AMOS version 28. The findings established that PLCs had significant positive effect on TAC and TCE. The findings further discovered that TAC fully mediated the effect of PLCs on TCE. Therefore,

the study confirmed the hypothesis that PLC affects TCE through TAC in Ghanaian basic schools. The study contributes to the field of educational leadership in understanding the networks through which PLCs impact classroom effectiveness of teachers. Hence, the study recommended that the Ghana Education Service should promote attitudinal change among teachers to enhance the effect of PLCs on TCE.

## Articles In Journal

**Bampo . J, Bortsie-Ghartey. D, Agyena-Karikari. H, Asenso. K. (2024). Unleashing teacher potential: Examining motivation in West Akim Municipality’s Public Primary Schools, Ghana. *International Journal of Research and Innovation in Social Science (IJRISS)*, 8(2), 231-246. <https://dx.doi.org/10.47772/IJRISS.2024.802017>**

### Abstract

This study investigates the impact of motivational provisions on the performance of public basic school teachers and evaluates the influence of the school environment in West Akim Municipality, Ghana. Employing a positivist stance and quantitative research methodologies, the research addresses persistent challenges faced by teachers, such as the absence of structured motivational benefits and suboptimal working conditions. Utilizing a cross-sectional survey research design, the study comprehensively explores the dynamic relationship between motivation and teacher performance. The target population consists of 953 teachers in public basic schools across eight circuits, with a sample size of 238 teachers selected through simple random sampling, ensuring a 65 percent response rate. Data collection involves a carefully designed questionnaire administered by the researcher, prioritizing confidentiality and clear communication of the study’s purpose. Validity and reliability are enhanced through quantitative research paradigms supported by SPSS software version 22. A crucial finding reveals that schools in West Akim Municipality do not allocate any budget for teacher allowances. Identified deficiencies in staff common rooms, security concerns, and sanitation issues underscore the need for improved infrastructure and safety measures within school premises. Recommendations include the allocation of a dedicated budget for teacher allowances, encompassing meetings, transportation, overtime, and other relevant aspects. Additionally, enhancing common areas for teachers and prioritizing investments in security measures within school premises are emphasized to cultivate a positive working environment and foster collaboration among teachers.

**Bampo. J. (2024). Making supervision effective: Collaboration of the Ghana Education Service and the Cape Coast Metropolitan Basic Schools Heads Association. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*, 72(1), 322-356. <https://gssrr.org/index.php/JournalOfBasicAndApplied/index>**

### Abstract

The study investigated Making Supervision Effective: Collaboration of the Ghana Education and Cape Coast Metropolitan Basic Schools Heads Association. The questions addressed issues on supervisory practices of headteachers, perceptions of respondents about the instructional leadership role of the headteacher and factors hindering effective supervision in public basic schools. The descriptive survey design was employed combining qualitative and quantitative data sources. The sample for the study was made up of 60 respondents including

teachers, headteachers and SISOs. Questionnaire and interview schedule were utilized in the data collection. The data were analysed in frequency counts and percentage. Data were presented in tables and verbatim quotation of respondents. The conclusions drawn from the findings indicated that instructional supervision experienced problems such as low motivation of school heads by the government, negative attitude of teachers towards supervision as well as poor communication between teachers and the school heads. These challenges mentioned above, had an adverse impact on the supervision of instructions in schools. This study has identified that instructional supervision in basic schools is not conducted properly. In this study, teachers indicated that instructional supervision was a fault-finding mission and punitive in nature. This resulted in teachers having negative attitudes towards instructional supervision. However, a greater proportion of respondents acknowledged that instructional supervision is a good initiative that could improve performance by schools if conducted properly.

**Bampo. J. (2023). Assessing influence of School Feeding Programme on learners' enrollment, attendance and academic performance in basic schools in Komenda Edina Eguafo Abrem Municipality. *Global Educational Research Journal*, 11(8), 117-135.**

## Abstract

Abstract: This study utilized the qualitative research design to explore the influence of the School Feeding Programme (SFP) on learners' enrollment, attendance and academic performance in Basic Schools in Komenda, Edina Eguafo Abrem (KEEA) Municipality. The research sought to address the objectives which include; to examine the influence of school feeding programme on improving enrolment, attendance and retention of Basic school learners in Komenda, Edina Eguafo Abrem (KEEA) Municipality; to exploring the influence of school feeding programme on the academic performances of Basic School learners in Komenda Edina Eguafo Abrem (KEEA) Municipality and to examining challenges encountered by the school feeding programme in the Komenda, Edina Eguafo Abrem (KEEA) Municipality.

The study used Maslow's Hierarchy of Needs to explore between hunger and educational outcomes. Twenty-one respondents were selected from five selected schools in the Komenda, Edina Eguafo Abrem (KEEA) Municipality of the Central Region, Ghana to participate in the research. Respondents for the research were selected through the purposive type of sampling and they included head teachers, school feeding coordinators, parents, teachers in charge of the school feeding programme in the various schools, and caterers of the programme. Data were collected through semistructured interviews. The findings of the study revealed the perceptions respondents have about the SFP and its influence on enrollment, attendance, completion and the academic performances of Basic School learners. Overall, the research respondents perceive the SFP to improve the educational and academic outcomes of Basic school learners. The research also found other issues such as improvement in cognitive development and reduction of hunger associated with the programme. Furthermore, the research found some major challenges of the SFP and its implementation. These include lack of financial resources, the delay of funds to support the implementation of the SFP and poor nutrition mainly associated with improper menu planning by caterers and the frequent absence of vegetables and fruits in school meals. The research also explored respondents' knowledge on the SFP and whether the programme should be expanded to other schools. The study also made some recommendations on the various ways in which the implementation of the school feeding programmes (SFP) can be improved to meet its objectives. This include; the government should ensure that money allocated to the programmes is expanded in the annual fiscal spending of the state, the government must ensure that there are increased

collaborations and partnerships for the programme and periodic monitoring and evaluation could ensure that the objectives of the programme are met.

**Bampo, J., & Kumah, E. A. (2023). An exploration of the water, sanitation and hygiene programme in the provision of facilities in public basic schools in the Krachi Nchumurun District. *Global Educational Research Journal*, 11(6), 79-89.**

### Abstract

This study explored the effectiveness of the Water, Sanitation, and Hygiene (WASH) programme in the provision of facilities in public basic schools in the Krachi Nchumurun District and identified ways of improving the mobilization of facilities to enhance the health of teachers and learners in the district. It was qualitative research underpinned by a case study research design. The semi-structured interview guide was employed to collect data for the study and the purposive homogenous sampling technique was used to select six (6) teachers from each of the six (6) Circuits in the Krachi Nchumurun District for the study. The qualitative data collected was analyzed thematically. The study showed that, facilities provided under the WASH programme in basic schools in the district were woefully inadequate, hence, many of the schools in the district still practice open defecation. However, with the intervention of the provision of tippy tap handwashing facilities, which are predominantly used in all schools due to the outbreak of the coronavirus pandemic in 2019, the study revealed that the outbreak of diseases such as diarrhoea, cholera and typhoid have reduced mainly due to the availability of the tippy taps, which teachers and learners are encouraged to wash their hands regularly under close supervision from GES with enforcement of an award and punishment system for that purpose. Also, the study ascertained that available facilities such as boreholes and latrines were not disability friendly especially for persons with mobility challenges. In addition, the few latrines available are not user-friendly to adolescent female children in school for ensuring privacy and hygienic conditions during their menstrual periods, thereby, contributing to high school absenteeism, and poor academic performance of these learners including children with disability. The study therefore, recommended that, GES at the Regional level must swiftly intervene to solicit for more facilities to schools in the district and empower the newly created District Education Office (DEOC) in the Krachi Nchumuru District with human, material and financial resources to enable the DEOC to support schools to play their roles more meaningfully in the provision of accessible facilities to all teachers and learners to enhance sanitation issues and improve school attendance and academic performance in the schools.

**Kuranchie, A., & Bampo, J. (2023). Continuous professional development for public school teachers: Benefits and concerns. *Journal of African Education*, 4(1), 137-158. <https://doi.org/10.31920/2633-2930/2023/v4n1a6>**

### Abstract

Teacher continuous professional development (CPD) is an issue for stakeholders of education. Consequently, stakeholders of education have been expending a lot to ensure that teachers continuously and incessantly enjoy this sort of training in varied forms. CPD has been introduced in response to the growing need for 21st century skills and knowledge for teachers to be able to train learners for the new era's social and job market demands. Research has also been executed to study varied aspects of CPD programmes and activities provided for teachers to unearth how beneficial they have been to patrons. This study was conducted to garner more ideas about CPD and to deepen the understanding on how it is faring in



Ghanaian senior high schools. The quantitative study made use of descriptive survey design to guide the conduct of the study. A sample of 117 teachers who met the inclusion criteria were randomly selected to participate in the study. The sample size constituted a return rate of 92.3%. Questionnaire was developed and used to gather data from respondents who had participated in a number of CPDs. The instrument aided soliciting data on the benefits of the programmes as well as the concerns the participants had about the programmes. The study unveiled that continuous professional development programmes have been beneficial to the participants. The programmes have benefited them in various aspects of their work. Nonetheless, the study disclosed that the participants had concerns that, if they are well addressed by stakeholders, it would help improve the quality of subsequent programmes to immensely benefit participants and the education service. Stakeholders are urged to pay more attention to and improve on when, where, and how CPDs are organised for them to yield the desired dividends.

**Kwame, O.T., Judith, B., & Benedicta, B. (2023). Dismantling Ghana's Educational System? Regime Change, Political Formations and the Politics of Educational Policy Reforms. *Public Policy and Administration Research*, 13(1), 23-38. <https://doi.org/10.7176/ppar/13-1-03>**

## Abstract

This paper is premised on the assumption that world-system and national levels political formation are inherently ridden with conflict and characterized at the same time by fundamental contradictions in the economy, the state and education. In these formations, different nations, classes, ethnic and gender groups occupy different positions in extant relations of domination and subordination. Due to the contradictions, there are always groups that try to restructure education to serve their interests. At any time, various groups (both inside and outside of education systems) do express different criticism about education and articulate the reforms that should be carried out, which are precipitated by regime change. This article seeks to enhance an understanding of the political spectacles that have been subsumed under the rubric of 'educational reform' in Ghana. We have attempted to develop not only a clearer conceptualization of what is meant by educational reform but also a more comprehensive explanation of the forces, timing and focus of the associated rhetoric and activities. We have therefore critically reviewed various theoretical approaches that have been used to analyze reform talk and efforts. These include the examination of both national-level and world-system explanations, and we also have attempted to show how world-systems link and subsume the national level hopes and aspirations. With respect to both levels of explanation, we have explored the approaches developed within equilibrium and conflict paradigms and devoted particular attention to the state and its relation to the economy via education. We do not seek to argue that the two paradigms are equally compelling, however we recognize that they reinforce each other. At the same time, we have sought to provide a deterministic account that explains 'educational reform' with reference to political motives, and devoid of the individual and collective actions of citizens as epitomised sometimes by equilibrium and conflict structuralist perspectives. These analyses are rooted through developing an understanding of Ghana's 'educational reforms' as a phenomenon occurring in economic and cultural contexts but driven by political motives.

## Department of Educational Foundations

### Conferences/Workshops/Symposia/Seminars with Presentations

**Addai-Mununkum, R. (2023, June 6).** *Cool qualitative tools you can use [Paper presentation]. Rhodes University Institute for the Study of the Englishes of Africa, Makenda, Eastern Cape.*

#### Abstract

Technological advancement has opened avenues for making qualitative research a bit easier. In this seminar, I present on four computer softwares that can aid qualitative research. Topics include: Using Microsoft Word for dictation and transcription; Using Speak and Write for transcription; Using Taguette for qualitative data analysis and Literature Review; and Managing references with Zotero. Participants will be exposed to the benefits and affordances of these tools and equipped with skills to begin using them for their research.

### Articles In Journal

**Addai-Mununkum, R., Amoah, S. A., Tamanja, E. M. J., Amos, P. M., Agyeman, E. A., Addai-Poku, C., Akayuure, P., & Kusi, H. (2024).** “It Makes Us Feel More Professional!” Stakeholders’ Perception of the Ghana Teacher Licensure Examination. *Teacher Education and Curriculum Studies*, 9(1), 21–29. <https://doi.org/10.11648/j.tecs.20240901.13>

#### Abstract

The professionalism of teaching has been subject of an age long debate. Teachers beseech others to recognize them as professionals and they become belligerent when they fail to receive recognition. Since 2018, Ghana has instituted the Ghana Teacher Licensure Examinations (GTLE) to regulate entry into the teaching profession. This policy has received a mixed bag of reactions with the populace sharply divided in opinion. Given that knowledge gap existed, it was important to interrogate the general perception of all stakeholders across Ghana to unravel how the GTLE is perceived among stakeholders. This paper is culled out of a broader study that employed a mixed-methods research approach in a nationwide study involving over 2800 respondents. For this paper, we report on the qualitative data generated from 145 participants. We describe the concerns of stakeholders who are in favour, against, or ambivalent about the GTLE. Drawing on an adaptation of CBAM model, we discuss stakeholders’ perceptions of GTLE as stages of concern. We conclude that stakeholders opposed to the licensing of teachers do so because of their concerns about its form, content, and other logistical challenges. To sustain the policy, it is recommended for the National Teaching Council and the Ministry of Education to take steps to address these concerns. Regardless, what stakeholders agree to be the biggest strength of the GTLE is that it is a positive step towards professionalizing teaching. It is a useful yardstick to determine who is qualified to perform the function of teaching, and prevents all others who do not qualify from accessing classrooms.

**Addai-Mununkum, R. (2023). Non-formal education in digital spaces: A digital ethnography of Ghanaian teachers' use of whatsapp group.** *International Journal of Qualitative Research*, 3(1), 104-114. <https://doi.org/10.47540/ijqr.v3i1.961>

### **Abstract**

Research on social media use in education has found evidence of positive outcomes. While the benefits of social media in formal education discourse are known, there is still limited knowledge about its use in non-formal education. This study explored the use of WhatsApp groups in non-formal education. The researcher designed a qualitative virtual ethnographic study based on a community of Ghanaian teachers who utilized WhatsApp to prepare for their promotion examination. The researcher immersed myself as a participant observer in this digital community for 16 months, observing web interface, visuals, text, threaded discussions, and participant interaction. Data generated were analyzed thematically with the aid of Targuette, a qualitative data analysis software. The outcome of the study was an affirmation of limitless possibilities existing in digital spaces to promote non-formal education. Based on this, I recommend a reexamination of curriculum and pedagogical constructs to forge new directions for teaching and learning.

**Addai-Mununkum, R & Setordzi S. (2023). Implementing curriculum change in Ghana: exploring teachers' experiences with enacting 21st century pedagogies.** *American Journal of Qualitative Research*, 7(4), 119-139. <https://10.29333/ajqr/13660>

### **Abstract**

Research has long established that teachers' characteristics such as attitude, knowledge, and pedagogical skills are superior expeditors of curriculum implementation. Following Ghana's recent introduction of a standards-based curriculum in K6 schools, we ponder how Ghanaian teachers are implementing change through their utilization of 21st century pedagogies. We implemented a qualitative descriptive phenomenology research that explored teachers' experiences with emerging pedagogies. Twenty-one participants from four schools were observed and interviewed to reflect on their experiences and to facilitate a comprehensive description of the phenomenon. Having analyzed the data thematically, we observed that teachers adopt teasers, cooperative, experiential, and inquiry-based approaches in implementing the new curriculum. Regardless, the curriculum implementation is challenged by inadequate resources and teachers' personality and competency factors. We discuss these findings in line with Fullan's characteristics of change and conclude by categorizing our respondents along the line of an adapted Roger's diffusion model; innovators, early majority, and laggards. For this, we confirm that the difference among the three groups of teachers lies in their personal motivation to embrace change. We therefore recommend for innovative teachers be motivated, early majority teacher to be offered training and laggards to be effectively supervised for the attainment of the goals of the new curriculum.

**Amponsah, R. O., Addai-Mununkum, R., Commey-Mintah, P., Awoniyi, F. C., & Amponsah, K. D. (2023). Perspectives of basic school level headteachers in Accra Metropolitan Education Directorate about their job satisfaction amid the COVID-19 Pandemic. *African Journal of Educational and Social Science Research*, 11(1), 21-29. <https://dx.doi.org/10.4314/ajessr.v11i1.3>**

## Abstract

The study's goal was to investigate the job satisfaction of basic level headteachers in the Accra Metropolitan Education Directorate during the COVID-19 Pandemic. An explanatory sequential methodology was used in this investigation. A purposive sampling technique was also utilized to choose a total of 67 basic school heads, 15 of whom were males and 52 of whom were females. Data on job happiness was collected using the BGSU Abridged Job Descriptive Index. For statistical analysis, descriptive statistics (mean and standard deviation) and inferential statistics (independent samples t-test and one-way between-group analysis of variance) were used. The findings show that basic school headteachers think that their current employment is good and that their current compensation is sufficient to support them. However, they were dissatisfied with their jobs in general. The results demonstrated that gender, level of headship, age differences, as well as marital status, did not have a substantial impact on job satisfaction in general during the COVID-19 pandemic.

**N-yelbi, J., Acquah, S., Dzakadzie, Y., & Eshun, P. (2024). Level of education, marital longevity and religion as determinants of marital stability among couples in Tamale Metropolis, Ghana. *Advances in Research*, 25(3), 137-147.**

**Eshun, P., Dabone, K. T., Annan-Brew, R. K., Mahama, I., & Danquah, S. O. (2023). Personality Traits and Levels of Self-Efficacy as Predictors of Academic Dishonesty among Higher Education Students in Ghana. *Psychology*, 14, 13-34.**

**Mahama, I., Baidoo-Anu, D., Eshun, P., Ayambire, B., & Egglely, V. E. (2023). ChatGPT in academic writing: A threat to human creativity and academic integrity? An exploratory study. *Indonesian Journal of Innovation and Applied Sciences*, 3(3), 229-239.**

**Mahama, I., Dampson, D. G., & Eshun, P. (2023). (2023). Tutors' chronological age and characteristics as predictors of creative nurturing behaviour in the 21st Century classroom. *Frontiers in Education*, 1, 121-138.**

**Mahama, I., Danquah, S., Ammah, C., Amos, P., & Eshun, P. (2023). An Examination of mindfulness and academic resilience among higher education students amidst COVID-19 pandemic in Ghana. *Psychology*, 14, 974-999.**

**Mahama, I., Eshun, P., Amos, P. M., Antwi, T., Amoako, B. M., & Egglely, V. E. (2023). Psychological precursors of entrepreneurial intentions among higher education students in Ghana. *Discover Education*, 2(29), 101-111. <https://doi.org/10.1007/s44217-023-00047-w>**

**Ntumi, S., Nimo, D. G., Yeobah, A., Tetteh, A., Boateng, D.A., Kuupile, D. D., Antwi, E. S. (2024). Validating a scale for measuring the influence of social responsibility behaviour and organizational culture on the employee performance in the Ghanaian context. *Open Science Journal*, 9(1), 1-23. <https://osjournal.org/ojs/index.php/OSJ/article/view/3378/467>**

Ntumi, S., Agbenyo, S., Tetteh, A., Yalley, C. A., Yeboah, A., & Nimo, D. G. (2023). Teacher preparedness and implementation of the national pre-tertiary education curriculum framework in Ghana. *Journal of educational research and practice*, 13(1), 251-269. <https://doi.org/10.5590/JERAP.2023.13.1.18>

Agormedah, E. K., Quansah, F., Srem-Sai, M., Ankomah, F., Hagan, J. E. Jr., & Schack, T. (2023). Reproducibility of the brief religious coping inventory with African athletes' sample using ordinal factor analytical approach. *Frontiers in Psychology*, 13(13), 1-11. <https://doi.org/10.3389/fpsyg.2022.1038202>

## Abstract

**Background:** Previous studies have revealed that religious coping strategy is common among athletes due to the stressful experiences before and during competitions as part of the mental preparations they go through, the uncertainty of sporting outcomes, and other organizational issues they encounter. This research assessed the reproducibility of the Brief Religious Coping (RCOPE) instrument in an African setting using athletes' samples from different countries. Particularly, the research sought to assess the (1) factor structure of Brief RCOPE with an African sample, (2) construct validity of the RCOPE measure, and (3) measurement invariance of the RCOPE instrument based on gender and nationality.

**Methods:** The study surveyed a convenient sample of 300 athletes, including 164 male and 136 female athletes, from 3 African countries (Benin, Ghana, and Nigeria) who participated in the 2018 West African University Games. The Brief RCOPE instrument was administered to the athletes for validation purposes before the competition. Exploratory and confirmatory factor analyses were conducted using the ordinal factor analytic approach.

**Results:** This validation study confirmed the two-factor dimension (positive and negative religious coping) of the Brief RCOPE measure. Further, all items for each of the dimensions of the inventory contributed significantly to the measure of the Brief RCOPE domains. The positive and negative religious coping dimensions contributed more than half of the variance of their respective indicators. Measurement invariance across gender and nationality was confirmed.

**Conclusion:** Sufficient evidence was gathered to support the interpretation and use of the Brief RCOPE measure. Coaches and sports psychologists could adopt the Brief RCOPE measure to understand the mental or thought patterns of religious athletes based on existential concerns or stress accrued from impending competitions to inform appropriate religious coping interventions. This notwithstanding, the Minimum Clinical Important Difference (MCID) of the Brief RCOPE should be further investigated to enhance the utility of the instrument for use in intervention-based studies.

**Amoako, I., Srem-Sai, M., Quansah, F., Anin, S., Agormedah, E. K., & Hagan, J. E. Jr. (2023). Moderation modelling of COVID-19 digital health literacy and sense of coherence across subjective social class and age among university students in Ghana. *BMC Psychology*, 11(337), 1-14. <https://doi.org/10.1186/s40359-023-01334-9>**

## Abstract

**Background** The study assessed the moderation modelling of digital health literacy and sense of coherence across subjective social class and age among university students in Ghana during the COVID-19 pandemic.

**Methods** A total of 1160 students were conveniently sampled from two universities namely, the University of Education, Winneba and University of Cape Coast, using the descriptive cross-sectional survey design. Preliminary analysis was performed using descriptive statistics, whilst multivariate multiple regression and moderation analyses (Haye's Model) were employed to analyze the main data.

**Results** The study revealed that COVID-19 digital health literacy is directly and positively associated with sense of coherence among university students. Further, higher subjective social class positively and strongly moderated the relationship between COVID-19 digital health literacy and sense of coherence among university students. Additionally, the relationship between COVID-19 digital health literacy and sense of coherence was indirectly prominent among relatively older university students than younger ones.

**Conclusions** The findings have implications for university management/authorities and public health agencies to organize effective orientation and self-management training programmes for university students.

**Azaiez, F., Tannoubi, A., Selmi, T., Quansah, F., Srem-Sai, M., Hagan, J. E. Jr., Azaiez, C., Bougrine, H., Chalghaf, N., Boussayala, G., ... & AL-Sadoon, N. M. N. (2023). Uncovering Cognitive distortions in adolescents: Cultural adaptation and calibration of an Arabic version of the "How I Think Questionnaire". *Psych*, 5(4), 1256-1269. <https://doi.org/10.3390/psych5040083>**

## Abstract

This study adapted and validated the How I Think Questionnaire (HIT-Q), intending to develop an Arabic version of the measure. The study assessed the (a) factorial structure of the Arabic version of the How I Think Questionnaire (A-HIT-Q), (b) construct validity evidence of the A-HIT-Q based on the internal structure of the scale, and (c) criterion validity evidence, highlighting how the cognitive distortions measure relates to some key theoretical variables such as depression. This study involved 762 Tunisian students aged 15–22 years, using a non-probabilistic sampling method. The students were boys (n = 297) and girls (n = 465). They completed self-report forms on Arabic-HIT-Q, depression (HADS), sleep (ISI), and physical activity participation, adhering to all relevant ethical considerations. Exploratory analysis revealed four factors which accounted for 73.46% of the variations in the distortion measure. Reliability analysis showed good internal consistency ( $\alpha = 0.915$ ) and temporal stability ( $r = 0.879$ ). Criterion validity evidence showed cognitive distortion (as measured with the A-HIT-Q) was significantly associated with physical activity participation, anxiety, depression, and insomnia. However, no significant relationship has been observed between cognitive distortion, age, gender, and study levels. The evidence gathered supports the utility



of the A-HIT-Q. Thus, the instrument demonstrates high efficacy in assessing the levels of cognitive distortions among adolescent students residing in Arabic-speaking regions.

**Britwum, F., Anin, S. K., Agormedah, E. K., Quansah, F., Srem-Sai, M., Hagan, J. E., & Schack, T. (2023). Assessing internet surfing Behaviours and digital health literacy among university students in Ghana during the COVID-19 pandemic. *COVID*, 3(3), 405-417. <https://doi.org/10.3390/covid3030030>**

## Abstract

This study assessed the internet surfing behaviours and digital health literacy (DHL) among university students in Ghana during the COVID-19 pandemic. The research was guided by three major objectives: (1) examine the online information searching behaviours of university students during the COVID-19 pandemic, (2) investigate the thematic areas university students searched during COVID-19, and (3) examine the DHL level of university students. The study conveniently sampled 1014 university students to solicit their responses through questionnaire administration. Using frequency and percent counts, multiple response analysis, as well as mean and standard deviation, the study revealed that the predominant platforms university students used were search engines ( $n = 954, 94.1\%$ ), social media ( $n = 950, 93.7\%$ ), and WhatsApp ( $n = 950, 93.7\%$ ). Predominant themes among the thematic areas university students searched during COVID-19 were symptoms of COVID-19 ( $n = 701, 81.7\%$ ), COVID-19 vaccines ( $n = 689, 80.3\%$ ), and transmission routes of the coronavirus ( $n = 664, 77.4\%$ ). Further, other results showed that students enrolled in health-related programmes showed significantly higher levels of DHL compared to those in non-health-related programmes. The findings suggest the need to implement health education measures to strengthen students' health literacy capacities and their DHL ability. This finding requires governments and health authorities to implement evidence-informed health communication strategies to provide valid and reliable health information concerning the COVID-19 pandemic and support individuals to make health-promoting decisions.

**Dzakadzie, Y., & Quansah, F. (2023). Modelling unit non-response and validity of online teaching evaluation in higher education using generalizability theory approach. *Frontiers in Psychology*, 14(1202896), 1-18. <https://doi.org/10.3389/fpsyg.2023.1202896>**

## Abstract

**Introduction:** Unit non-response is a common phenomenon in online teaching evaluation in higher education institutions. However, little is known about the relationship between the rates of unit non-response and the quality of online teaching evaluation exercise. This study explored the incidence of unit non-response and how this phenomenon relates to the reliability of students' responses to online teaching evaluation.

**Methods:** Adopting the generalizability theory approach, students' evaluation of teaching data from a university in Ghana was analyzed by conducting both generalizability study (G-study)- and decision study (D-study) analyses.

**Results:** The results revealed that unit non-response among students was predominant in online teaching evaluation exercise. The study demonstrated that higher rates of non-response among students were associated with high levels of measurement errors and low reliability of responses.

Discussion: The findings of this study have implications for the accuracy of online evaluation data obtained for decision-making in higher education contexts. The study calls on higher education administrators to embark on sensitization and awareness campaigns that target students on the need to actively participate in the appraisal of teaching at the university to address the issue of unit non-response.

**Gbagbo, F. Y., Rockson, G. N. Y., Quansah, F., & Ameyaw, E. K. (2023). Sexual coercion and harassment of students with disabilities in a public university in Ghana. *Journal of Sex & Marital Therapy*, 49(7), 1-18. <https://doi.org/10.1080/092623X.2023.2211577>**

### Abstract

There is limited literature on sexual coercion/harassment of university students with disabilities, hence we, explored this phenomenon in Ghana, using a sequential explanatory-mixed method design that involved 119 (62 males and 57 females) students with various disabilities in the quantitative study and 12 (7 females and 5 males) students in the qualitative phase using questionnaire and interview guide for data collection respectively. We found that participants were not aware of the university's sexual coercion/harassment policy nor involved in its formulation/dissemination. Persistently asking for sexual relationships, pressurized for outings, attempted/forced kissing, being sexually looked at, engaging in uncomfortable sexual conversations, and sexually provocative touch were common. The main perpetrators of these acts included physically able people (24.4%), colleagues with disabilities (14.3%), and Lecturers/Administrative staff (10.9%). We recommend policies and programs' strengthening to protect students with disabilities from such unwarranted acts.

**Hagan Jr, J. E., Quansah, F., Ankomah, F., Agormedah, E. K., Srem-Sai, M., & Schack, T. (2023). Evaluating the moderating role of information seeking platforms on university students' risk perception and anxiety during the COVID-19 pandemic in Ghana. *Frontiers in Communication*, 8(1035593), 1-11. <https://doi.org/10.3389/fcomm.2023.1035593>**

### Abstract

Introduction: The emergence of COVID-19 resulted in heightened usage of online information seeking platforms among students aimed at obtaining information about the virus. This situation further increased the levels of risk perception and anxiety levels as students managed to stay safe. This study examined the roles of information seeking platforms; specifically, social media platforms and professional platforms as moderators of the link between risk perception and anxiety among university students in Ghana.

Methods: Participants were recruited from two universities in Ghana; namely, University of Education, Winneba (UEW) and University of Cape Coast (UCC) through a survey approach. The study conveniently sampled 778 participants who completed a set of questionnaires.

Results: The study results revealed that COVID-19 risk perception was positively related to anxiety. Further, the use of specific online information platforms significantly moderated the link between risk perception and anxiety. Specifically, social media platforms significantly moderated the relationship between COVID-19 risk perception and anxiety level. Primarily, students who utilized social media as a COVID-19 information source reported high anxiety levels in the presence of high-risk perception compared to those who did not use social media. Additionally, professional platform usage acted as a buffer in the positive link between

COVID-19 risk perception and anxiety levels. In the presence of high risk perception, students who used professional platforms, compared to those who did not use professional platforms, showed significantly low anxiety levels.

**Conclusions:** The findings suggest the key role social media and professional platforms played in shaping students' perceptions of COVID-19. These outcomes call for the swift scrutiny of health-related information obtained from social media platforms. Both users and disseminators of health-related information on social media platforms have the responsibility of verifying the credibility of whichever information they post and/or access. Risk perception should also be an integral part of effective risk communication planning in educational institutions during outbreak of diseases.

**Hagan, J. E. Jr, Quansah, F., Frimpong, J. B., Agormedah, E. K., Nugba, R. M., Srem-Sai, M., & Schack, T. (2023). Gender digital health literacy gap across age: A moderated moderation effect on depression among in-school adolescents in Ghana during COVID-19. *Psychology in the Schools*, 6(9), 1-17. <https://doi.org/10.1002/pits.22942>**

## Abstract

The COVID-19 pandemic amplified the need for digital health literacy aimed at reducing the psychological distress levels of people, including in-school adolescents. Available evidence suggests the presence of a gender health literacy gap among adolescents in schools in Ghana and beyond. Previous literature has established the role of age in digital health literacy levels. What is unknown is how gender and age interact with digital health literacy levels to influence the levels of depression. This research assessed how gender digital health literacy gap across different age groups relates to the depression levels of adolescents during the COVID-19 pandemic. A cross-sectional survey was conducted using 942 students from secondary schools in Ghana who were sampled using the stratified sampling technique. Study participants completed the digital health literacy scale and World Health Organization (WHO-5) well-being index. Results from the two-way analysis of variance revealed a nonsignificant interaction between age and gender on digital health literacy, with significant main effects for gender and age. Further analysis from the moderated moderation analysis revealed that gender and age interact to moderate the relationship between digital health literacy and depression. The findings of this research stress the need for gender-age-specific intervention programs on digital health literacy to moderate depression levels during pandemics and other stressful situations.

**Quansah, F., Agormedah, E. K., Hagan, J. E., Frimpong, J. B., Ankomah, F., Srem-Sai, M., ... & Schack, T. (2023). Subjective social status and well-being of adolescents and young adults in Ghanaian schools: conditional process analysis. *BMC Psychology*, 11(1), 1-14. <https://doi.org/10.1186/s40359-023-01158-7>**

## Abstract

**Background** With the growing concern and interest in the mental health and well-being of adolescents and young adults (AYAs) including those in schools, many studies have explored the bivariate relationship between subjective social status (SSS) and AYAs' subjective well-being (SWB). Acknowledging the spurious nature of this relationship, we assessed the relationship between SSS and SWB of AYAs in schools within Northern Ghana, focusing on the conditional indirect effect of monetary resource (MR) and sense of coherence (SoC).

**Methods** We utilised a cross-sectional descriptive design to survey 1096 senior high school students from two regions in Ghana's Northern zone through a stratified sampling method. A questionnaire consisting of a number of calibrated standardized measures was used for the data collection. The data were processed using SPSS and PROCESS Macro and analysed using Hayes' conditional process analysis.

**Results** The results revealed that students' MR significantly moderated the relationships between SSS and SoC as well as SSS and SWB. A significant moderated mediation effect of MR and SoC on the relationship between SSS and SWB was found. Particularly, AYAs who reported higher levels of MRI, SSS and SoC reported a better SWB.

**Conclusion** The findings underscore the relevance of providing sufficient financial support for students in secondary schools in Ghana; thus, highlighting the sheer relevance of economic capital as a leading factor for better well-being. The findings also place much emphasis on building students' personal coping mechanisms as a key variable in explaining how the students' SSS and MR translate into having positive mental health outcomes.

**Quansah, F., Ankomah, F., Agormedah, E. K., Ntumi, S., Hagan, J. E., Srem Sai, M., ... & Schack, T. (2023). A cross-sectional study of university students' pocket money variance and its relationship with digital health literacy and subjective well-being in Ghana. *Health Science Reports, 6*(2), 1-11. <https://doi.org/10.1002/hsr2.1095>**

## Abstract

**Background:** Mental health concerns of university students are gaining more attention since the emergence of the coronavirus disease. Consequently, scholars in education, health and psychology-related fields have attributed the dwindling subjective well-being (SWB) of students to their low levels of digital health literacy (DHL). However, little attention has been paid to an important variable like pocket money (PM) which might serve as a buffer against reduced levels of SWB. In this study, we explored the dynamics of PM and its linkage with DHL and SWB among university students in Ghana. **Methods:** With a cross-sectional design, a convenient sample of 1160 students was obtained from the University of Education, Winneba, Ghana. The COVID-DHL and WHO-5 Well-being instruments were used for the data collection for a 2 months period (February–March, 2021). Chi-square test, multivariate regression, simple linear regression, and PROCESS mediation analyses were performed with the use of SPSS software version 25. **Results:** The study found that while most of the students were financially supported by their parents ( $n = 715, 61.6\%$ ), a larger proportion of them reported that their PM was either less sufficient or not sufficient ( $n = 550; 76.9\%$ ). Findings revealed a positive relationship between PM and SWB ( $B = -36.419, p < 0.001; B = -13.146, p = 0.012; B = -10.930, p = 0.043$ ), with this relationship mediated by DHL ( $B = -1.139$ , confidence interval [CI]  $[-2.073, -0.263]$  vs.  $-2.300$ , CI  $[-4.290, -0.532]$  vs.  $-8.366$ , CI  $[-14.863, -1.908]$ ). **Conclusions:** Students with little to insufficient PM were vulnerable to mental health problems, although this could be buffered by the high DHL levels. In practical terms, not only should the PM of university students be increased, but the sources of PM should be complemented since the sufficiency level of PM was associated with the source of finance. More importantly, parents should be empowered through job creation so that sufficient levels of PM can be provided to university students.

Sambah, F., Quansah, F., Srem-Sai, M., Frimpong, J. B., Agormedah, E. K., Ankomah, F., & Hagan, J. E. (2023). Assessing secondary school students' digital health literacy, information searching behaviours, and satisfaction with online COVID-19 information in Northern Ghana. *HELIYON*, 9(7), 1-10. <https://doi.org/10.1016/j.heliyon.2023.e17936>

## Abstract

Available evidence suggests that managing the complexities of health information and the behaviours associated with information search call for adequate digital health literacy (DHL). Students' ability to judge the relevance of health-related information largely affects their level of satisfaction with the information. The study assessed DHL, information searching behaviours, and the link between DHL and COVID-19 information. The cross-sectional study utilised the multi-stage sampling technique in the selection of 1392 secondary school students in the Northern Region of Ghana. A DHL questionnaire was used to survey the students. The students displayed inadequate level of DHL concerning the relevance of online information. Predictably, most of them had not searched for information in the past four weeks prior to the data collection. Search engine portals, websites of public bodies, and news portals were the predominant platforms used for information search. Majority of the participants reported not being satisfied with the information they found on the internet about coronavirus. A significant association between DHL levels and utilization of COVID-19 information platforms was identified, such that students who showed high levels of DHL used platforms which had reviewed/professional content compared to those with low levels of DHL. Advanced DHL may serve as a disincentive to the consumption of information from sources which are not credible. There is an urgent call for collaboration among the ministries/agencies responsible for education and health, telecommunication networks, and civil society organisations for interventions aimed at integrating DHL in schools.

Tannoubi, A., Ouergui, I., Srem-Sai, M., Hagan, J. E., Quansah, F., & Azaiez, F. (2023). Effectiveness of video modeling in improving technical skills in young novice basketball players: A quasi-experimental study. *Children*, 10(4), 1-12. <https://doi.org/10.3390/children10040687>

## Abstract

(1) Objective: This is a quasi-experimental study that investigated the effect of four weeks of training sessions using video modeling (VM) on individual and collective technical skills in young novice basketball players. (2) Method: 20 players were equally assigned to either a control group (CG,  $n = 10$ ;  $12 \pm 0.7$  years) or a video modeling group (VMG,  $n = 10$ ;  $12.5 \pm 0.5$  years; visualizing videos before each session) were assessed before and after the four-week training period using the Basketball Skill Test of the American Alliance for Health, Physical Education, Recreation and Dance for individual techniques and three vs. three small-sided games for collective aspects. (3) Results: For the passing test, VMG induced higher performance than CG ( $p = 0.021$ ;  $d = 0.87$ ). For offensive balls post-intervention, higher values were recorded for VMG compared to CG ( $p = 0.003$ ;  $d = 1.81$ ). In addition, the number of attack balls index post-intervention was higher for VMG compared to CG ( $p = 0.001$ ;  $d = 0.28$ ). For losing the ball, VMG induced lower values than CG after the training intervention ( $p < 0.001$ ;  $d = -3.23$ ). The efficiency index was higher post-training compared to pre-training for VMG ( $p = 0.013$ ;  $d = 1.24$ ). (4) Conclusion: The study highlighted the importance of using video modeling as an effective strategy to improve technical skills and collective performance in novice young basketball players.

**Tannoubi, A., Quansah, F., Hagan, J. E. Jr., Srem-Sai, M., Bonsaksen, T., Chalghaf, N., ... & Azaiez, F. (2023). Adaptation and validation of the Arabic version of the University Student Engagement Inventory (A-USEI) among sport and physical education students. *Psych*, 5(2), 320-335. <https://doi.org/10.3390/psych5020022>**

### Abstract

The present study validated the University Student Engagement Inventory (USEI) in the Arabic language (A) by assessing its factor structure, construct validity, reliability, and concurrent validity. A total of 864 Tunisian Physical Education and Sport students provided data which was used to perform exploratory and confirmatory factor analyses, using samples comprising 366 (aged 19–25 years) and 498 (aged 19–26 years) students, respectively. The A-USEI, grade-point average (GPA), and Physical Education Grit (PE–Grit) scales were completed via online surveys. The exploratory factor analysis revealed that the A-USEI had three dimensions. The confirmatory factor analysis indicated that the second-order model was more suitable than the first-order multi-factor model. Using the indicators for the second-order model, the three factors showed good reliability, with their average variance extracted (AVE) values reflecting sufficient validity. The correlation analyses between the two scales' scores and the A-USEI scores showed a moderate correlation, confirming the adapted scale's concurrent validity. The study concludes that A-USEI is a valid tool for assessing student engagement among Arabic students. In addition, the practical implications and directions for future research are discussed.

**Tannoubi, A., Quansah, F., Magouri, I. (2023). Modelling the associations between academic engagement, study process and grit on academic achievement of physical education and sport university students. *BMC Psychology*, 11(418), 1-9. <https://doi.org/10.1186/s40359-023-01454-2>**

### Abstract

**Objective** The present study examined the impact of academic engagement, study processes, and grit on the academic achievement of physical education and sport university students. **Methods:** An internet-based survey recruited 459 university students aged 19–25 years ( $M=21\pm 1.3$ ) in physical education and sports (PES) to fill out questionnaires on Physical Education-Study Process Questionnaire (PE-SPQ), Physical Education-Grit (PE-Grit), academic engagement (A-USEI), and Grade Point Average (GPA). A path analysis was carried out to understand variable relationships. **Results:** Data from each variable exhibited symmetrical and normal distribution, as indicated by the skewness and kurtosis values. The model's fit indices showed sufficient Comparative Fit Index (CFI=0.92), Tucker-Lewis Index (TLI=0.90), Goodness of Fit Index (GFI=0.99) and Normed Fit Index (NFI=0.90) and showed acceptable levels. The results indicated a statistically significant positive impact of engagement ( $\beta=0.299$ ,  $p<0.001$ ) and study processes ( $\beta=0.397$ ,  $p<0.001$ ) on academic achievement. However, the effect of grit on achievement was non-significant. **Conclusions:** Academic engagement as well as study processes are two important factors predicting academic achievement while grit seems to be not a major predictor. Hence, physical education and sport faculty and university administrators should prioritize student engagement as a determinant of academic outcomes by reforming or redesigning physical education and sport curriculum modules that can facilitate engagement.



**Boakye, F. Y. and Amoako, R. (2023). Assessing guidance services in Senior High Schools in Ghana: A case of a Senior High School in the Sunyani West District. *International Multidisciplinary Journal of Research and Education (IMJRE)*, 1(1), 117-125.**

### **Abstract**

The study assessed guidance services in a senior high school in the Sunyani west district of Ghana. A mixed-method approach was employed for the study with the concurrent triangulation strategy as the design. The population of this study comprised all the Green Track students of the school. The sample size was 122 respondents made up of 120 students and two counselors. The students were selected through the convenience sampling method while the two counsellors were purposively selected. Instruments for data collection were questionnaire and semi-structured interview guides. The study revealed that all the students were aware of counselling departments as well as guidance services. The study recommended that the Management of the school should provide facilities like counselling offices, magazines, and audio and video tapes, for effective guidance and counselling services.

**Kumah, E. A. & Amoako, R. (2023). Performance appraisal practices and teacher effectiveness in Ghana: Perspective of teachers in the Krachi Nchumuru District. *International Multidisciplinary Journal of Research and Education (IMJRE)*, 1(1), 83-99.**

**Dzikunu, C. K. & Ansah, S. D. (2023). Free Senior High School programme implementation in Ghana: An assessment. *GHAJET*, 215, 32-54.**

### **Abstract**

This study explored the benefits and the challenges in the implementation of the free senior high school programme in Ghana. The study adopted the multi-site exploratory case study using interviews and an observation checklist for the investigation. The sample was made up of 38 respondents selected through purposive sampling techniques across four SHSs in Greater Accra and Central Regions. The results indicate that the key benefit of the policy was the removal of cost barriers through the absorption of fees approved by the GES council. All recurrent fee items that relate to utilities, examination fees, library fees, practical fees, entertainment fees, science development and teacher motivation fees were absorbed by the Government. Another benefit of the free SHS was the feeding of Day students alongside boarding students in the schools. There were infrastructural challenges of the Free SHS programme that included; classroom blocks, dormitories, staff accommodation, libraries, science laboratories, computer laboratories Information and communication technology connectivity (ICT) and places of convenience. Teacher output, punctuality, effective supervision, time on task, and assessment of students were compromised. It was also revealed that the textbooks supplied were only core subjects which included English Language, Mathematics, Social Studies and Integrated Science and were delayed in supply. The study recommends that key stakeholders such as teacher unions, policy think tanks, civil society organizations, parents and other relevant stakeholders should be engaged by the Ministry of Education (MOE) in round table discussions to build national consensus, acceptance and public confidence in the policy. It is recommended that government should forge partnerships with parents, PTAs, old student associations, and religious bodies to raise funds to support infrastructure development for the SHS programme. An increase in the Government's share of the oil revenue should be allocated to the Free SHS programme.

**Esia-Donkoh, K. (2023). Culture traits as predictors of tutor job satisfaction in selected public colleges of education in Ghana: A pre-test analysis. *Journal of African Education*, 4(3), 15-39. <https://doi.org/10.31920/2633-2930/2023/v4n3a1>**

### **Abstract**

This pre-test study investigated how culture traits predicted tutor job satisfaction in Ghana's selected public Colleges of Education (CoEs). Based on a positivist paradigm, this study adopted a quantitative form of a descriptive survey. The target population involved all tutors of three randomly sampled public CoEs in Ghana. In contrast, the eligible population included all full-time tutors of these colleges who had been at their present post for at least two years. A structured questionnaire helped obtain quantitative data from sixty-three respondents through census sampling. The internal consistency of the questionnaire was established using Cronbach Alpha (college culture:  $r=0.948$ ; job satisfaction:  $r=0.940$ ). Data were analysed using frequency, percentage, mean, standard deviation, and linear multiple regression. Significant findings were that the colleges' mission culture trait was dominant, and the tutors experienced high job satisfaction. College culture had a strong statistically significant positive relationship with tutor job satisfaction. Specifically, consistency and adaptability culture traits were good and significant predictors of tutor job satisfaction. Conclusively, college culture is a resilient variable that influences every college initiative, including tutor job satisfaction, and guarantees the college's lasting sustainability. Consequently, the Ghana Tertiary Education Commission (GTEC) should regularly train the management of public CoEs to gain the desired knowledge, skills and experiences to nurture a positive college culture that will guarantee enhanced tutor job satisfaction for the practical realisation of the aims and goals of teacher education in Ghana.

Keywords: adaptability culture, consistency culture, involvement culture, mission culture, college culture, tutor job satisfaction

**Meshanu, H. K., & Esia-Donkoh, K. (2023). Public Junior High School pupils' perceptions of their learning style preferences and their relationship with academic achievement in social studies in East Mamprusi Municipality, Ghana. *International Journal of Research and Innovation in Social Science*, 7(10), 1693-1706. <https://dx.doi.org/10.47772/IJRIS.2023.701130>**

**Mahama, I., Dampson, D. G., & Eshun, P. (2023). Tutors' chronological age and characteristics as predictors of creative nurturing behavior in the 21st-century classroom. *Front. Educ*, 8, 1-4. <https://doi.org/10.3389/educ.2023.1078017>**

### **Abstract**

Introduction: The study examined tutors' characteristics and chronological age as they influenced their creativity nurturing behaviors. Methods: The descriptive cross-sectional design was used to survey 340 tutors (male = 220, female = 120) from 16 colleges of education. The data for the study were gathered using adapted versions of teachers' characteristics and creativity nurturing behaviors scales. The data were analyzed inferentially. Results: The study revealed that tutors' characteristics influenced their creativity nurturing behaviors and teachers with 30 years and above of teaching could influence their creativity nurturing behaviors. Differences were established in tutors' creativity nurturing behaviors based on their experience but such were not found in tutors' characteristics. Discussion: It was concluded that tutors' characteristics and age are two key drivers of their creative abilities

in the 21st century classroom. Therefore, management of teacher training institutions must cultivate an appreciable and appropriate tutor characteristics and dispositions so that they can use them to nurture trainee-teachers

**Ogah, M. (2023). Implementation of Senior High School History Curriculum: a focus on teaching methodology and resources. *Cogent Education*, 10(1), 1-18. <https://doi.org/10.1080/2331186X.2022.2164021>**

### **Abstract**

The study looked at how the history curriculum was implemented in senior high schools in the Asuogyaman District of Ghana. The research used a mixed-methods research strategy, particularly the convergent design. The cluster sampling technique, proportional allocation and simple random sampling technique were used to choose a sample size of 200 Form 2 history students and censused 5 history teachers from four public senior high schools in the district. For the students, a 28-item questionnaire was used for data collection. The teachers were interviewed and their lesson delivery was observed. The qualitative data was organized into narrative themes, whilst the quantitative data were analyzed using means and standard deviations. The quantitative data was integrated with the qualitative data throughout the data integration process. From the findings, history teachers frequently used discussion, lecture, and question and answer methods of instruction. The teaching and learning aids used were supplementary textbooks and wall maps. The findings of this study point to the need to improve history teaching. As a result, head teachers of schools should encourage their teachers to lay emphasis more on the use of learner-centred teaching methods. Again, Ministry of Education should provide adequate instructional resources, especially audio and audio-visual resources to the schools.

### **Article(s)/Chapters in an Edited Book**

**Addai-Mununkum, R. (2023). From proselytization to democratization: Tracing the footprints of religion in Ghanaian Basic School Curriculum. In Amoako-Gyampah, A. K., Lundt, B., Agyeman E. A., *Education in Ghana: History and politics*. Langaa RPCIG, Yaoude. [https://books.google.co.za/books/about/Education\\_in\\_Ghana.html?id=MV27zwEACAAJ&redir\\_esc=y](https://books.google.co.za/books/about/Education_in_Ghana.html?id=MV27zwEACAAJ&redir_esc=y)**

### **Abstract**

The history of education in Ghana cannot be narrated without recourse to engaging the role of religion in both policy and curriculum practice. After decades of Religious Education (RE) in the basic school curriculum this chapter attempts an introspection that traces RE's footprints in curriculum history, assessing religion's survival as curriculum content through various curriculum reforms to the present. I draw on Michael Apple's politics of official knowledge to theoretically filter significant episodes, while highlighting the role of missions, whose vociferous agitations have created a socio-cultural capital for religion as a learning area in the curriculum. Writing from a qualitative research paradigm, the chapter is composed out of prior studies that relied on interviews, focus groups, and document analysis to generate data. Discourse, content, and thematic analysis of data was done to arrive at findings that point to religion as a contested learning area in the curriculum. Significant milestones of religion in the school curriculum from the origins of Castle schools, through education reforms in 1961, 1987, 2002 and 2019 are highlighted. These milestones have altogether catapulted the

gradual transmogrification of the purpose religious studies from single-faith proselytization agenda to multi-faith RE focused on global citizenship education. Besides this retrospective overview, the question of how the study of religion should be positioned in the 21st Century of decreasing spiritual and religious thoughts, crowns this chapter. I argue that a lot more opportunities exist in civic education if RE can be attuned to the needs and interests of the contemporary child.

**Matemba, Y. H., Addai-Mununkum, R., Nthontho, M. A., & Museka, G. (2023).** Religious minorities at school South of the Sahara. In J. Fraser-Pearce, & J. W. Fraser (Eds.). *The Bloomsbury Handbook of Schools and Religion*. Bloomsbury Publishing. <https://www.bloomsbury.com/us/bloomsbury-handbook-of-schools-and-religion-9781350297272/>

## Books

**Gabriel-Wetey, F. K. N., Esia-Donkoh, K., & Ofosu-Dwamena, E. (2023).** *Administration and management of pre-tertiary education in Ghana*. Hasraf Enterprise.

## Published Proceedings of Conferences/Workshops/ Symposia/Seminars

**Addai-Mununkum, R. (2023).** Ghanaian High School Pidgin English and the quest for a new identity: Antilanguage or Decolonial Practice? In Ian Siebörger, *University of Rhodes Seminar Series*. Rhodes University, Makenda, South Africa.

## Abstract

Pidgin English is a contact language that is lexically derived from other languages and possesses structurally simplified morphology. In the context of Africa, pidgin is predominantly a West African phenomenon, functioning as a medium of communication among people who have no first language in common. It is spoken in Cameroun, Ghana, and Nigeria where it is on the verge of becoming a creole. While scholarship has examined pidgin as a linguistic phenomenon, less attention has been given to it as a social phenomenon. Contextually situating my qualitative study in Ghanaian high schools, I explore students' acquisition and use of Ghanaian School Pidgin (GhaSPidgin) as a bigger project. For this presentation, I draw on qualitative interview and film language data to describe the features of GhaSPidgin, and to distinguish it from other pidgin varieties. From this premise, I challenge its categorization as a pidgin variety, and as an antilanguage, to argue that GhaSPidgin embodies the features of African Urban Youth Languages (AUYL). With this understanding, I contend that, viewing GhaSPidgin as a decolonial practice provides space for the appreciation of Ghanaian students' exercise of agency in liberating themselves from global coloniality.

## Office of the University Librarian

### Articles In Journal

Owusu-Ansah, S. & Korkuvi, P. J. (2023). Repositioning University Libraries for Relevance in a Dynamic Learning Environment. *Information Impact: Journal of Information and Knowledge Management*, 14(2), 63-86. <https://dx.doi.org/10.4314/ijjkm.v14i2.5>

## Office of The Vice-Chancellor

### Articles In Journal

- Awotwe-Mensah, M., Appiah-Kubi, E., & Mitchual, S. J. (2024). Assessment of density and anatomical features of young and old bambusa vulgaris (Schrad. ex JC Wendl.) culm heights as sustainable structural material in Ghana. *International Journal of Forestry Research*, 2024(1), 4459948. <https://doi.org/10.1155/2024/4459948>
- Mensah, P., Melo, R. R. D., Mitchual, S. J., Owusu, F. W., Mensah, M. A., Donkoh, M. B., & Rusch, F. (2024). Ecological adhesive based on cassava starch: a sustainable alternative to replace urea-formaldehyde (UF) in particleboard manufacture. *Matéria (Rio de Janeiro)*, 29, e20230373.
- Appiah-Kubi, E., Awotwe-Mensah, M., & Mitchual S. J. (2023). Assessment of physical and mechanical properties of juvenile and matured Bambusa vulgaris glue-laminated bamboo for structural applications in Ghana. *Sustainable Structures*, 3(2), 1-14. <https://doi.org/10.54113/j.sust.2023.000026>
- Awotwe-Mensah, M., Mitchual, S. J., Appiah-Kubi, E., Dadzie, P. K., Mensah, P., & Donkor, M. B. (2023). Assessment of the drying behaviour of young and mature Bambusa vulgaris from Ghana. *Advances in Bamboo Science*, 5, 100044.
- Dartey, E., Donkor, M. B., Mitchual, S. J. (2023). Assessment of trace elements in airborne particulates at wood processing and marketing centre in Ghana. *Chemistry Africa*, 6, 1529-1538. <https://doi.org/10.1007/s42250-022-00549-4>
- Donkoh, M. B., Mitchual, S. J., Dartey, E., Mensah, P., & Awotwe-Mensah, M. (2023). Impact of training on occupational health and safety of woodworkers at a wood processing village in Ghana. *Global Journal of Engineering and Technology Advances*, 14(3), 007-018.
- Ohemeng, E., Mensah, P., Melo, R. R. de, Ebanyenle, E., Owusu, F. W., Seidu, H., & Mitchual, S. J. (2023). Technological properties of Memecylon Lateriflorum wood: a timber species from Ghana. *Nativa*, 11(3), 256-267. <https://doi.org/10.31413/nat.v11i3.15885>

# Directorate of Health Services

## Articles In Journal

**Kuunibe, N., Yambah, J. K., & Sekyi, S. (2024). Retrospective impact evaluation using administrative data: Lessons from a study on the effect of capitation policy withdrawal on maternal health service provision in Ghana. *SAGE Methods Case Study, Sage Research Methods Cases Part 1, 1-2*. <http://dx.doi.org/10.4135/9781529683264>**

### Abstract

This case study is guided by our earlier research on the effect of the capitation policy withdrawal on maternal health service provision in Ashanti, Ghana, which was a time-series analysis. Healthcare provider payment methods affect the provision of care in general and maternal care in particular. In 2017, Ghana suspended its capitation policy in the Ashanti Region after piloting it for 5 years. Without evidence of the effect of the policy on health service provision, capitation was suspended, and Ghana missed out on learning any lessons for the future. Given that the policy was suspended and the need to learn meaningful policy lessons and bridge the gap in the literature was missed, only a retrospective evaluation using administrative data was possible. This case study walks students through the process of planning a retrospective evaluation. Critical considerations at the planning, data-acquisition, and management stages are explained. We describe the data used for our retrospective impact evaluation, the challenges that arose, and how we addressed those challenges. We also demonstrate how the retrospective design informed the analytical approach—the interrupted time-series analysis (ITSA). We explain single versus multiple ITSA and show why single ITSA was appropriate for our case study.

**Yambah, J. K., Avoke, F. K., Bonzie, M., & Smith, E. (2024). Giant lipoma of the vulva in a primary care setting: A case report. *Annales Africaines de Médecine, 17(1)*, e5531-e5533. <https://doi.org/10.4314/aamed.v17i1.11>**

### Abstract

#### French

Les lipomes géants de la vulve sont rares. Nous présentons une femme préménopausée para-4 de 49 ans qui se présente avec une masse indolore à croissance progressive qui s'est révélée comme un lipome vulvaire après histopathologie. Une discussion détaillée est présentée et met en évidence la nécessité de l'histopathologie même dans les cas où l'imagerie pré-chirurgicale est une limitation.

#### English

Giant Lipoma of the vulvar are rare. We present a 49-year-old para-4, premenopausal woman who presented with a painless progressively growing groin mass which was revealed as a vulvar lipoma after histopathology. A detailed discussion is presented and highlights the need to for histopathology even in cases where pre-surgical imaging is a limitation.



**Yambah, J. K., Avoke, F. K., Opoku, V., & Annan, R. (2024). Acquired spermatic cord hydrocoele of the cord in a Ghanaian adult: A case report. *Annales Africaines de Médecine*, 17(1), e5527-e5530. <https://doi.org/10.4314/aamed.v17i1.10>**

## Abstract

### French

Les hydrocèles du cordon spermatique (HCS) sont des tumeurs testiculaires bénignes rares. Il y a peu de littérature sur sa présentation parmi les Ghanéens et les Africains. Nous rapportons ici, le cas d'un Ghanéen de 27 ans qui s'est présenté avec une masse indolore à l'aîne qu'il a décrite comme une sensation de « troisième testicule plus mou » qui s'est révélée être une hydrocèle enkystée après exploration chirurgicale. La littérature actuelle sur l'hydrocèle enkystée est revue et discutée.

### English

Spermatic cord hydrocoeles (SCH) are rare benign testicular tumors. There is a paucity of literature on its presentation among Ghanaian and Africans. We contribute by reporting a case a 27-year-old Ghanaian who presented with a painless groin mass he described as feeling like a "softer third testicle" that turned out to be an encysted hydrocoele after surgical exploration. The current literature on encysted hydrocoele is reviewed with a discussion.

**Gyasi, F. A., Asante, F., Yambah, J. K., & Ackah, N. B. (2023). A rare incidence of ketorolac-induced anaphylaxis: A case report. *Journal of Modern Pharmacology and Pathology*, 1(11), 1. <https://doi.org/10.53964/jmpp.2023011>**

## Abstract

Anaphylaxis or type I hypersensitivity is a class of potentially life-threatening allergic reactions that may be caused by exposure to any drug or substance. These reactions are unpredictable, not dose-related and are not known adverse-reactions. Medications as a cause or trigger of anaphylaxis are of concern to health practitioners not only because of the potentially deadly out-comes, but also that, it may affect treatment efficacy and patient compliance. In resource-poor settings like ours, confirming anaphylaxis would be a challenge, requiring a high index of suspicion, and well-educated patients. Allergic reactions to analgesics are not common occurrences and ketorolac has been rarely implicated. We present a case of ketorolac-induced anaphylaxis in a 32-year-old man. We also discussed the contemporary scholarly literature.

**Yambah, J. K., Laar, K., Avoke, F. K., Gyimah, N. A., & Ackah, N. B. (2023). Clinical diagnosis of encysted hydrocoeles in Ghanaian primary care facilities, how far is this correct? A description of three cases in primary care. *Oman Medical Journal*, 40, e-copy. <https://doi.org/10.5001/omj.2025.13>**

## Abstract

An encysted hydrocoele is thought to be rare and mimics other common groin tumors. We report three cases in a primary care setting. The first, a 16-year male who reported a left groin swelling he noticed over the last 8 months. The second and third are a 7-year-old and a 4-year-old who each presented with left groin swellings noticed since birth. A discussion of the literature is done and stresses the need for primary care practitioners to consider a possible clinical diagnosis of encysted spermatic cord hydrocoeles in new onset groin swellings in teenagers and children, as they may not be so rare.

**Yambah, J. K. (2023). Giant inguinal hernia repair with mesh in a primary care facility in Ghana. *Annals of Medicine and Medical Sciences (AMMS)*, 2, 18-21.**

### **Abstract**

Giant Inguino-Scrotal Hernia (GISH) results and is aggravated by undue delay in seeking surgical care when an inguinal hernia develops. This poses special challenges to surgeons in rural settings. Their management in deprived rural settings has not previously been described in Ghana. A case report on the management of type 2 GISH in a 47-year-old farmer in a district hospital is described and discussed within the context of current literature.

**Yambah, J. K., Sulemana, A. S., Avoke, F. K., & Asante, F. (2023). Villar’s nodule: An incidental finding with uterine fibroids and infertility. *Clinical case reports. Clinical Case Reports-Wiley*, 10(11), e8077. <https://doi.org/10.1002/ccr3.8077>**

### **Abstract**

Villar’s nodule is a rare presentation of endometriosis. Only a few cases report coexistence with uterine fibroids and infertility. We report an incidental discovery of a bleeding umbilical lesion confirmed as Villar’s nodule in a 37-year-old woman with primary infertility who presented for myomectomy on account of leiomyomas.

# Institute for Educational Research and Innovation Studies

## Articles In Journal

Nyabido, B. M., Yelkpiერი, D., & Namale, M. (2024). Exploring the psychosocial challenges experienced by teenage student mothers in Senior High Schools in Asene Manso Akroso District, Ghana. *Journal of Education and Practice*, 8(5), pp.25-40.

Yelkpiერი, D., Dzikunu, C. K., Ofosu-Dwamena, E., & Kwegyir-Aggrey, P. (2023). Home related factors and its influence on learning among students in the Awutu-Senya and Effutu Districts. *Journal of Education and Practice*, 14(6), pp. 65-75.

Kyei-Arthur, F., Agyekum, M. W., Afrifa-Anane, G. F., Larbi, R. T., & Kisaakye, P. (2023). Perceptions about COVID-19 preventive measures among Ghanaian women. *PloSone*, 18(4), 1-14. <https://doi.org/10.1371/journal.pone.0284362>

## Abstract

Though the advent of COVID-19 vaccines has significantly reduced severe morbidity and mortality, infection rates continue to rise. Therefore, adhering to COVID-19 preventive measures remains essential in the fight against the pandemic, particularly in Africa, where vaccination rates remain low. However, the perceived risk associated with COVID-19 and public education and awareness campaigns has waned over time. COVID-19 vaccine hesitancy is consistently high among women globally. This study, therefore, assessed the facilitators, and barriers to adherence to COVID-19 preventive measures. A qualitative descriptive study was conducted among Ghanaian women. Twenty-seven in-depth interviews were conducted with women in the Greater Accra and Ashanti regions. All interviews were audio-recorded and transcribed verbatim into English. The data were analysed using NVivo 10 software. While some participants found the use of face masks as the easiest, others found it as the most difficult. In addition, institutional and policy decisions such as access to water and the use of public transport impacted individual level adherence to preventive measures. In conclusion, the fight against COVID-19 is not over; hence public education and the provision of facilities that would enhance compliance with preventive measures should continue to be prioritised.

# National Centre for Research into Basic Education

## Articles In Journal

**Joseph, H. K., & Acquah, A. (2023).** Teachers’ Use of “Concept Cracking” Pedagogy in Christian Religious Studies in Ghanaian Senior High Schools: A Survey. *International Journal of Religious and Cultural Practice*, 8(3), 91-105. <https://doi.org/10.56201/ijrcp.v8.no3.2023.pg91.105>

### Abstract

This research examined the use of Concept Cracking pedagogy by Christian Religious Studies teachers in the Senior High Schools in Central Region of Ghana. The study primarily looked at how the teachers unpack religious concepts, select concepts, engage students and relate students to religious concepts. The descriptive survey design was employed to carry out the study. The simple random sampling and census techniques were employed to select 327 students and 55 teachers respectively for the study. Questionnaires were used to collect the data and analyzed through the computation of frequencies, percentages, means and standard deviation. The study revealed that to a very large extent, the CRS teachers in Central Region use Concept Cracking pedagogy. They unpack religious concepts by enlisting the various theological ideas underpinning a chosen topic. The concepts that were selected for teaching are those that were useful to students’ life experiences. The study also found that with regard to the selection of concepts, teachers emphasized concepts that provoke an inquiry into values and commitment, as well as the usefulness of concepts to the life experiences of students. The study recommends that Ghana Education should adopt a strategy of organizing a regular professional development training for CRS teachers on the use of Concept Cracking pedagogy. This will go a long way to boost the pedagogical knowledge and skills of teachers and in turn help to improve the teaching of CRS.

**Ofosuhene, C., Onyame, E. A., & Acquah, A. (2023).** Educational support systems for teenage mothers in public basic schools in the Ajumako Enyan Esiam District of the Central Region of Ghana. *Quest Journal of Research in Humanities and Social Science*, 11(6), 138-148.

### Abstract

The purpose of the study was to explore educational support systems for teenage mothers in public basic schools in the AjumakoEnyanEsiam District of the Central Region of Ghana. We employed qualitative study which was based on phenomenology. The population of the study was teenage mothers and some selected heads of the various schools where the teenage mothers were schooling. The snowballing and purposive sampling procedure was used to select 5 teenage mothers and 4 heads of schools respectively. In all, a total of 9 participants were interviewed for the study. All participants were met in their various schools for the interviews. The main instrument for data collection for the study was semi-structured interview schedule. The interview data were transcribed, coded, and analysed thematically. The thematic analysis was done based on the data transcribed and the research questions. The findings of the study showed that challenges student-mothers face as they re-enroll into the formal public basic school system were difficulty in concentrating on their studies, financial constraints, absenteeism, stigmatization, and lateness to school. Finally, the study showed

that educational support systems available to participants as they re-enroll in school were; financial support, provision of stationary, remedial lessons, and provision of counseling services. Based on the findings, the following recommendations were made; Since teenage mothers are still desirous of pursuing their career ambitions, all necessary support in terms of financial and social assistance should be made available in our various schools for these mothers. Policy makers, non-governmental organization and corporate bodies should all come on board to contribute their quota to achieving this feat.





