

ISSN 2410-4981. E-ISSN 2508-1055

2024. 11(1). Issued 3 times a year
Has been issued since 2014.

EDITORIAL STAFF

Jacob Owusu Sarfo – University of Cape Coast (Ghana) & Centre for Behaviour and Wellness Advocacy [CBWA] (Ghana), Ghana (Editor in Chief)
Josephine Cudjoe – University of South Africa (South Africa) & CBWA, Ghana (Member)
Michael Asiedu – Ashesi University (Ghana) & CBWA, Ghana (Member)
Dean Attigah – University of Ghana (Ghana) (Member) & CBWA, Ghana (Member)
Newton Isaac Gbordzoe – University of Ghana (Ghana) (Member) & CBWA, Ghana (Member)

EDITORIAL BOARD

Arturo García-Santillán – Cristóbal Colón University, Mexico
Priscilla Yeye Adumoah Attafuah – Maastricht University, Netherlands
Marina Drushlyak – Makarenko Sumy State Pedagogical University, Ukraine
Luan Nguyen Thanh – Thuyloi University, Vietnam
Mustapha Amoadu – University of Cape Coast, Ghana
Olena Semenikhina – Makarenko Sumy State Pedagogical University, Ukraine
Uzma Azam – Aligarh Muslim University, India
Alexander Fedorov – Rostov State University of Economics, Russian Federation
Jade Kouletakis – Abertay University, United Kingdom
Azaz Bin Sharif – North South University, Bangladesh
Serhii I. Dehtiarov – Sumy State University, Ukraine

Journal is indexed by: **Scopus** (Netherlands), **DOAJ** (Sweden), **EBSCOhost Electronic Journals Service (EJS)** (USA), **Open Academic Journals Index** (USA), **Sherpa Romeo** (Spain), **Crossref** (USA), **ROAD**, the Directory of Open Access scholarly Resources.

Disclaimer: All manuscripts are peer-reviewed by experts in their respective fields. Authors of the manuscripts bear responsibility for their content, credibility, and reliability.
The Editorial Board does not expect the authors of the manuscripts to always agree with its opinion.

Postal Address: P. O. Box FW 22, Effiduase-Koforidua, Eastern Region, Ghana

Release date 30.04.24
Format 21 × 29,7/4.

Website: <http://kadint.net/our-journal.html>
E-mail: jacob.sarfo@cherkasgu.press

Headset Georgia.

Founder and Editor: Centre for Behaviour and Wellness Advocacy, Ghana
Co-publisher: Cherkas Global University, USA

Order № 29.

C O N T E N T S

Editorial

| | |
|---|---|
| Artificial Intelligence Use, Technostress, and Academic Productivity among Students in Sub-Saharan Africa J. Owusu Sarfo | 4 |
|---|---|

Articles

| | |
|--|-----|
| Enhancing Vision Care through Psychological Assessment in Sub-Saharan Africa: An Overview E. Doe-Yo Tawiah, P. Mord | 7 |
| Economic Loss and Mental Health Experiences among Flood Disaster Victims in Ghana E. Dziwornu | 15 |
| Harmful Cultural Traditions: An Analysis of Female Circumcision Practice in Maldives F. Ibrahim, A. Ibrahim Sulaiman, A. Ahmed | 23 |
| Financial Behavior and Knowledge Regarding Debt Payment and Its Relationship with Sociodemographic Variables A. García-Santillán | 38 |
| Technostress and Determinants of Academic Success among University Students: Mediation Role of Technological Literacy Prince Addai, M. Afrifah, I. Okyere, G. Tachie-Donkor, J. Owusu Sarfo | 47 |
| Integrating Neurocognitive Support into HIV/AIDS Management in Ghana: A Position Statement N. Isaac Gbordzoe | 61 |
| Perinatal Mental Health in Africa: A Mini-Review of Screening, Prevalence, and Impact T. Pritchard Debra | 66 |
| Perceived Discrimination and Other Factors Influencing Self-Esteem in Persons with Albinism in North Central Nigeria R. Otelahu Adah, G. Ujah Adah | 77 |
| Beyond Teacher Competencies: A Position Statement on Meeting the Needs of Neurodevelopmental Disorders in Inclusive Classrooms in Ghana V. Deide Commey | 87 |
| Western Cinema on the Pages of the <i>Soviet Screen Magazine</i> (1969–1985): Ideologized Articles Emphasizing Criticism of Bourgeois Cinema and Its Harmful Influence on the Audience A. Fedorov | 92 |
| Perceived Effectiveness of Ghana’s School Feeding Programme in Improving the Livelihood of Beneficiaries in Assin South District D. Adjei, A. Tetteh Kwasi Nuer, S. Omega, B. Chris Ampimah | 122 |

**Harsh Reality of Low-Income Individuals in Acquiring Social Houses in Vietnam:
Outlining Contradictions and Illogicalities of Ongoing Laws
and Proposing Practical Amendments**

N. Thanh Luan 138

**Changes in Haematological and Clinical Parameters in Sickle Cell Disease Patients
on Hydroxyurea: A Before and After Non-Experimental Retrospective Study**

A. Asante-Offei, A. Gafaru Mohammed, I. Sumaila, W. Ghunney,
A. Gafaru Mohammed, D. Duah, I.A. Kretchy, A. Adjei Druye, E. Olayemi,
H. Affran Bonful 148



Publisher: Centre for Behaviour and Wellness Advocacy, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
ISSN 2410-4981. E-ISSN 2508-1055
2024. 11(1): 4-6

DOI: 10.13187/jare.2024.1.4

Journal homepage:
<http://kadint.net/our-journal.html>



Editorial

Artificial Intelligence Use, Technostress, and Academic Productivity among Students in Sub-Saharan Africa

Jacob Owusu Sarfo  a, b, c, d, *

^a University of Cape Coast, Cape Coast, Ghana

^b Centre for Behaviour and Wellness Advocacy, Koforidua, Ghana

^c Cherkas Global University, Washington, USA

^d Volgograd State University, Volgograd, Russian Federation

Abstract

Globally, artificial intelligence is being developed and used at a growing speed in education settings. Notwithstanding artificial intelligence's immense opportunities for stakeholders in education, especially students, worries regarding its misuse, negative health impacts, and poor academic productivity outcomes are still emerging. Although research focusing on this subject matter is gaining attention in developed countries, little is known about it in Sub-Saharan Africa. This editorial opens a voice to the ongoing conversations to explore students' attitudes towards artificial intelligence use, the prevalence of technostress, and the impact on academic productivity among students in Sub-Saharan African countries. It further delves into the complexities of artificial intelligence adoption in Sub-Saharan African educational settings and the need to leverage these technologies effectively, notwithstanding the actual or perceived challenges students face.

Keywords: artificial intelligence use, academic productivity, Sub-Saharan Africa, students, technostress.

1. Artificial Intelligence in Educational Landscapes of Sub-Saharan Africa

Like all settings globally, the educational landscapes of Sub-Saharan Africa (SSA) have encountered the age of artificial intelligence technology growth. As a region with unique socio-economic and geopolitical challenges, education is also faced with diverse challenges. From infrastructure, funding, and policies to subtle challenges like post-colonial impacts on education, there is a recent emerging wave of artificial intelligence (AI) use and its associated issues. As one region that has faced major health crises like Ebola and COVID-19, conflicts, food insecurity, and poverty, AI can help mitigate quality gaps in an otherwise resource-constrained African environment (Dalberg, 2022).

The growth of AI in education cannot be underestimated in SSA, although the entire continent faces numerous challenges regarding technology growth that require urgent, practical

* Corresponding author

E-mail address: jacob.sarfo@ucc.edu.gh (J.O. Sarfo)

Received: 24 March 2024 Revised: 02 April 2024 Accepted: 02 April 2024 Published: 31 April 2024

and sustainable solutions. Notably, Chen et al. (2023) identified the essential contributions of pedagogical chatbots in supporting students' success. A systematic review by González-Calatayud et al. (2021) also observed the valuable role of AI in formative evaluation and automatic grading of students. Furthermore, AI-powered solutions can enhance the quality of teaching and learning in African settings by supporting teachers' preparedness for content delivery and facilitating time-saving assessments through automatic grading (Dalberg, 2022). However, they raised a gap for researchers to focus on the specific educational aspects of AI instead of its technical development (González-Calatayud et al., 2021).

2. Attitudes on Artificial Intelligence Use and Related Factors

In SSA, where digital connectivity is rapidly increasing, leveraging AI technologies in education can potentially bridge educational gaps and enhance learning outcomes. However, this cannot be done without fully considering the specific demographic differences and challenges faced in this region, such as limited infrastructure and varying levels of awareness about AI (Dalberg, 2022). By addressing these factors and tailoring AI interventions to meet the needs of students in SSA, educational institutions can harness the potential of AI to improve academic productivity and create more inclusive and equitable learning environments.

One crucial contextual factor worth exploring is the attitudes of educational stakeholders like students toward AI use. Although multifaceted, attitudes towards AI use among students in SSA have been studied less. While some students in the region embrace the potential of AI to enhance learning experiences and bridge educational gaps, others express concerns about the technology (Adelana, Akinyemi, 2021; Ofosu-Ampong, 2023). For example, senior secondary school students in Nigeria indicated their preparedness to adopt AI-based tutoring systems for learning. In another study in Ghana, Ofosu-Ampong (2023) observed that 56 % of a total sample size of 50 tertiary students in Ghana knew AI-driven health platforms. Besides, Salifu et al. (2024) observed that factors like perceived trust, social influence, performance expectancy, hedonic motivation, and habits facilitated the attitudes toward the use of ChatGPT among economics students in Ghana.

3. Implications for Artificial Intelligence Use, Technostress, and Academic Productivity Studies in SSA

Notably, this editorial's implications focus on practical considerations for researchers within the SSA context. Researchers must consider factors driving AI use and its consequences, especially among students. For example, factors like academic performance and the psychosocial impact of AI use, like technostress, require further research attention in SSA (Salifu et al., 2024). Technostress among students is characterised by anxiety, fatigue, and frustration associated with the use of technology in their academic work (Upadhyaya, Vrinda, 2020; Wang et al., 2020). Although less is known in the context of SSA students, researchers should critically examine the linkages between AI use in education, technostress, and associated academic productivity.

As the call to advance AI use in SSA to promote the quality of education [Sustainable Development Goal 4], the contextual challenges and ethical issues should be a concern to researchers. Exploring these challenges in SSA will not only inform the quality of education but also help mitigate these negative factors. Besides, studies providing innovative and sustainable findings are required to enhance educational policies, teaching methods, digital infrastructure, and foster a supportive learning environment that prioritises student well-being and academic success.

4. Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Availability of data and materials

Not applicable.

Conflict of interest statement

The author reports no conflicts of interest.


Funding

Not applicable.

5. Acknowledgements

I express my gratitude to the Centre for Behaviour and Wellness Advocacy, Ghana, for their editing support.

Authors' ORCID

Jacob Owusu Sarfo  <https://orcid.org/0000-0003-2859-7278>

References

- [Adelana, Akinyemi, 2021](#) – Adelana, O.P., Akinyemi, A.L. (2021). Artificial intelligence-based tutoring systems utilization for learning: A survey of senior secondary students' awareness and readiness in Ijebu-Ode, Ogun State. *UNIZIK Journal of Educational Research and Policy Studies*. 9: 16-28.
- [Chen et al., 2023](#) – Chen, Y., Jensen, S., Albert, L.J., Gupta, S., Lee, T. (2023). Artificial intelligence (AI) student assistants in the classroom: Designing chatbots to support student success. *Information Systems Frontiers*. 25(1): 161-182.
- [Dalberg, 2021](#) – Dalberg (2022). Transforming classrooms: The growing impact of artificial intelligence in African education. Dalberg. [Electronic resource]. URL: <https://dalberg.com/our-ideas/transforming-classrooms-the-growing-impact-of-artificial-intelligence-in-african-education/>
- [González-Calatayud et al., 2021](#) – González-Calatayud, V., Prendes-Espinosa, P., Roig-Vila, R. (2021). Artificial intelligence for student assessment: A systematic review. *Applied Sciences*. 11(12): 5467.
- [Ofosu-Ampong, 2023](#) – Ofosu-Ampong, K. (2023). Gender Differences in Perception of Artificial Intelligence-Based Tools. *Journal of Digital Art & Humanities*. 4(2): 52-56.
- [Salifu, et al., 2021](#) – Salifu, I., Arthur, F., Arkorful, V., Nortey, S.A., Osei-Yaw, R.S. (2024). Economics students' behavioural intention and usage of ChatGPT in higher education: A hybrid structural equation modelling-artificial neural network approach. *Cogent Social Sciences*. 10(1): 2300177.
- [Sarfo, 2023](#) – Sarfo, J.O. (2023). Artificial intelligence chatbots, high-tech plagiarism, and academic publishing integrity conundrum: Are local journals in Africa ready? *Journal of Advocacy, Research and Education*. 10(1): 3-5. DOI: <http://doi.org/10.13187/jare.2023.1.3>
- [Sarfo, 2023](#) – Sarfo, J.O. (2023). Artificial intelligence chatbot–ChatGPT and high-tech plagiarism concerns in a digital age: Is detection possible. *Journal of Advocacy, Research and Education*. 10(2): 55-58. DOI: <http://doi.org/10.13187/jare.2023.2.55>
- [Upadhyaya, Vrinda, 2020](#) – Upadhyaya, P., Vrinda. (2020). Impact of technostress on academic productivity of university students. *Education and Information Technologies*. 25: 3457-3471. DOI: <https://doi.org/10.1007/s10639-020-10319-9>.
- [Wang et al., 2020](#) – Wang, X., Tan, S.C., Li, L. (2020). Technostress in university students' technology-enhanced learning: An investigation from multidimensional person-environment misfit. *Computers in Human Behavior*. 105: 106206. DOI: <http://doi.org/10.1016/j.chb.2019.106206>

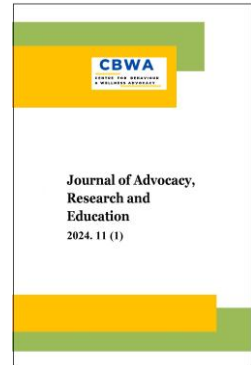


Publisher: Centre for Behaviour and Wellness
Advocacy, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
ISSN 2410-4981. E-ISSN 2508-1055
2024. 11(1): 7-14

DOI: 10.13187/jare.2024.1.7

Journal homepage:

<http://kadint.net/our-journal.html>



Enhancing Vision Care through Psychological Assessment in Sub-Saharan Africa: An Overview

Esther Doe-Yo Tawiah  ^{a, b, *}, Prince Mordi  ^{a, b}

^a Centre for Behaviour and Wellness Advocacy, Koforidua, Ghana

^b University of Cape Coast, Cape Coast, Ghana

Abstract

Accessing quality vision care in Sub-Saharan Africa (SSA) remains a significant obstacle for persons with visual impairment. Practitioners are also confronted with numerous challenges when providing eye care services. These challenges are due to inadequate infrastructure, limited access to care, and a shortage of skilled healthcare personnel, which causes unique physical hardships for practitioners and patients. The physical burdens extend beyond mere physiological discomfort to encompass various psychosocial consequences, including increased levels of stress, depression, anxiety, Stigmatisation, and overall negative impacts on their well-being. To enhance treatment adherence, promote holistic well-being, and foster resilience among patients with visual impairment, practitioners in the field incorporate individual interviews and participant observations in their clinics to provide more comprehensive care. Addressing the challenges of assessing quality vision care in SSA requires an integrated approach that considers both visual impairments' physical and psychological consequences.

Keywords: psychological assessment, Sub-Saharan Africa, vision care, visual impairment.

1. Introduction

Vision care in Sub-Saharan Africa (SSA) faces significant challenges due to the prevalence of visual impairments, socio-economic disparities, and cultural factors that influence eye health (Abraham et al., 2023). The age-standardised prevalence of blindness, moderate or severe distance vision impairment, and mild vision impairment in SSA in 2015 were reported to be 1.03 %, 3.64 %, and 2.94 %, respectively, for males and slightly higher for females (Naidoo et al., 2020). Another study estimated that more than 25 % of individuals aged 50 and above in Sub-Saharan Africa were visually impaired, excluding presbyopia, which affected an additional 58.49 % of this age group (Kempen et al., 2017). The bulk of blindness in the region is often observed as preventable or curable (Lewallen, Courtright, 2001).

Furthermore, socio-economic disparities are evident in the prevalence of vision loss and access to ophthalmic services. For example, the prevalence of vision loss is highest among people over 80 years, those in the poorest socio-economic status (SES) group, and those with no formal education (Alrasheed, 2021). Cultural factors also play a role in eye health in SSA. For instance, some parents believe that childhood eye diseases do not require treatment and can resolve

* Corresponding author

E-mail addresses: esther.tawiah004@stu.ucc.edu.gh (E.D-Y. Tawiah)

Received: 04 March 2024 Revised: 19 April 2024 Accepted: 19 April 2024 Published: 31 April 2024

spontaneously (Alrasheed, 2021). Cultural beliefs and practices intersect with SES to impact eye health (Shahin et al., 2019). Inadequate intake of foods rich in micro-nutrients like Vitamin A can lead to conditions such as xerophthalmia, a type of Vitamin A deficiency that can cause night blindness and eventual blindness from corneal scarring when untreated. Socio-economic disparities contribute to reduced access to good nutrition, exacerbating the development of visual impairments (Addo et al., 2021).

Given how these factors influence eye health in SSA, a comprehensive approach to vision care is necessary. This includes addressing the psychological aspects of vision care, such as understanding the beliefs and attitudes that affect access to and utilisation of eye care services. Psychological assessment can help identify and address these factors, leading to more effective vision care interventions.

2. Factors Impacting Vision Care in Sub-Saharan Africa

Xulu-Kasaba and Kalinda (2021) reported that West Africa and East Africa had the highest prevalence of blindness in 2020. The leading causes of blindness identified were cataracts, accounting for 46 % of cases (Xulu-Kasaba, Kalinda, 2021). Additionally, studies suggest that approximately 1 % of Africans are blind, with cataracts being the major cause, followed by trachoma and glaucoma (Lewallen, Courtright, 2001). Other significant causes of blindness include refractive error, macular degeneration, trachoma, glaucoma, and diabetic retinopathy (Alrasheed, 2021).

Despite these challenges, achieving universal health coverage across the continent remains elusive, with less than half of Africa's citizens accessing necessary healthcare services (Orjingene et al., 2022). A study analysing recent Demographic and Health Surveys from 36 countries in Sub-Saharan Africa revealed that only 42.56 % of reproductive-age women had access to healthcare services (Tessema et al., 2022). Factors such as urban residence, literacy levels, education status of women and their husbands, media exposure, wealth status, and desired pregnancy were associated with accessing healthcare services (Tessema et al., 2022). Additionally, individuals with visual impairments face significant stigma and discrimination, impacting their social inclusion and access to essential services (Rohwerder, 2018). Studies conducted in Uganda and Kenya revealed overwhelmingly negative attitudes towards disability in communities due to harmful traditional beliefs and misconceptions about the causes and nature of disabilities (Rohwerder, 2018). These negative perceptions hinder the social integration and acceptance of individuals with disabilities (Rohwerder, 2018). Overcoming negative societal views is crucial for individuals to develop a sense of pride in their lives (Abraham et al., 2024).

These societal challenges not only hinder social integration but also exacerbate mental health issues among individuals coping with vision loss (Lester et al., 2023). According to a report published in Vision Science Academy, visual impairment negatively affects one's autonomy, options, and life. Individuals with eye diseases in Sub-Saharan Africa may experience heightened stress and mental health challenges due to the impact of their condition on daily activities, social interactions, and overall well-being (Courtright et al., 2016). The psychological burden of coping with vision loss can lead to feelings of frustration, anxiety, and depression, affecting their mental health (Akuffo et al., 2021; Courtright et al., 2016), hence the need for psychological assessment in eye clinics in SSA.

3. Benefits of Psychological Assessment in Vision Care

Integrating psychological assessment into vision care practices across SSA offers significant benefits to the overall well-being of individuals with visual impairments (Akuffo et al., 2021). This integration can lead to a comprehensive approach to eye care, considering the psychological impacts of visual impairments. The study by Akuffo et al. (2021) suggested that individuals with visual impairments often experience psychological distress, hence the need for psychological assessment and care alongside traditional practice.

Psychological assessment in vision care can also help identify and address mental health issues that may accompany vision impairment (Boagey et al., 2022). By conducting a psychological assessment, healthcare providers in vision care may identify the issues of stress, anxiety and depression early and provide appropriate interventions such as counselling, therapy, or coping support, enhancing patients' quality of life (Shah et al., 2018). Additionally, psychological assessment in vision care can help address barriers to treatment and compliance with prescribed

interventions (Demmin, Silverstein, 2020). In many instances, persons with visual impairment in SSA are faced with practical challenges such as difficulties accessing healthcare services or adhering to treatment plans due to financial constraints or cultural beliefs. Psychological assessment can help identify these barriers and inform the development of more tailored interventions that address each patient's specific needs and circumstances (Baker et al., 2010). This will improve treatment strategies and adherence, optimise clinical outcomes, and potentially reduce the burden of vision-related mental distress (Bennett et al., 2019).

Furthermore, individuals with visual impairment in SSA are faced with unique socio-cultural challenges; hence, psychological assessment plays a significant role in addressing the socio-cultural challenges (Elisha, 2019). Individuals' cultural beliefs and practices may influence their perception of care and treatment seeking (Sarfo, 2014). Likewise, individuals with visual impairment may be influenced by their cultural beliefs and practices concerning their vision care and treatment-seeking behaviour, leading to differences in access and utilisation of the available services (Bakkar, Alzghoul, 2018). By incorporating cultural sensitivity and awareness into psychological assessments, healthcare providers can better understand and address socio-cultural factors impacting patients' experience and outcomes, promoting equity and inclusivity in vision care delivery. This paper suggests that the integration of psychological assessment into eye care practices in SSA offers several benefits. These include enhancing well-being, improving treatment outcomes, and addressing the socio-cultural challenges of individuals with visual impairments, hence promoting holistic and effective care that meets the needs of the patients in this region.

4. Challenges and Potential Solutions

Regions in SSA face resource constraints, including funding, equipment, and trained personnel, hindering the integration of psychological assessments into vision care services (Abraham et al., 2024; Graham, 2017). Limited resources often lead to challenges in acquiring the necessary infrastructure and equipment for psychological assessments (Graham, 2017). Limited resources in implementing psychological assessment in vision care in Sub-Saharan Africa can be addressed through task-shifting strategies where non-specialist healthcare workers are trained to conduct basic psychological assessments, easing the burden on specialised professionals and addressing resource limitations (Graham, 2017).

Socio-cultural beliefs further compound the challenges posed by resource constraints. Diverse socio-cultural beliefs in Sub-Saharan Africa also influence perceptions of mental health and hinder acceptance of psychological assessments in vision care (Foxcroft, 2011). The historical reliance on Eurocentric theories and philosophies in scientific psychology in Sub-Saharan Africa has led to the development of psychological tests based on Western models (Oppong et al., 2022). This Western influence hinders the development of indigenous African theories and assessments, creating a challenge in aligning assessments with local cultural beliefs and practices (Oppong et al., 2022). As seen, cultural beliefs can be mitigated by handling elements that complicate the proper implementation of the psychological assessment into vision in SSA, involving local communities in the learning of cultural beliefs, and tailoring approaches to the psychological evaluation sensitively and acceptably (Foxcroft, 2011).

Insufficient training among healthcare professionals in psychological assessment techniques also poses a significant challenge to effective implementation (Oppong et al., 2022). Professionals need training to develop multicultural awareness and adapt their practices to diverse cultural contexts in Sub-Saharan Africa (Oppong et al., 2022). Addressing professional training in implementing psychological assessment in vision care in Sub-Saharan Africa involves developing training programs that focus on multicultural awareness and worldview to equip assessment practitioners and researchers with the necessary skills to understand and provide services to culturally diverse populations (Foxcroft, 2011).

5. Training Needs for Vision Care Professionals

To ensure that eye care professionals in SSA can provide comprehensive care for individuals with visual impairments, it is important to include psychological assessment training in their existing curricula (Dean et al., 2021). This inclusion will enable them to recognise and address the psychological aspects of vision care. The training can be integrated into both the undergraduate and postgraduate education programs. Additionally, the organisation of continuous education

sessions on psychology assessment for eye care professionals to keep them updated on best practices and emerging trends in mental health assessment and interventions. Continuous Professional Development programs such as workshops, virtual training, and certificate programs are important to ensure practitioners remain competent and proficient (Merry et al., 2023) in conducting psychological assessments. Thus, evidence-based interventions should be implemented to support patients with visual impairment effectively (Dean et al., 2021). Also, programs such as the WHO-AFRO Primary Eye Care training packages can help strengthen the eye health system and improve coverage by providing regular professional development opportunities. Developing a deeper understanding of the interplay between psychology and vision health enables eye professionals to provide more holistic and patient-centred care.

Furthermore, collaborative approaches involving government, educational institutions, professional organisations, and non-governmental organisations are important in addressing the human resources crisis in SSA (Graham, 2017; Willcox et al., 2015). By collaborating with counsellors, psychologists, and other healthcare professionals, vision care providers can leverage their expertise to deliver integrated and coordinated care that addresses vision health's physical, social, economic, and psychological aspects. The interdisciplinary collaboration facilitates knowledge sharing, skill exchange and the development of innovative approaches to vision care delivery, improving patient outcomes and enhancing the overall and holistic quality of care.

6. Implementation Strategies

Integrating psychological assessment into vision care practices in Sub-Saharan Africa requires a multifaceted approach that emphasises interdisciplinary collaboration, community engagement, and capacity-building initiatives. These strategies are essential for supporting the effective implementation of psychological assessment and addressing the holistic needs of individuals with visual impairments in the region.

Interdisciplinary collaboration initiatives are crucial in supporting the effective implementation of psychological assessment in Sub-Saharan Africa. The limited availability of psychological tools developed for Sub-Saharan Africa underscores the significance of interdisciplinary collaboration. Consulting with target populations and engaging professionals from diverse fields can facilitate the development of culturally relevant and effective psychological assessments tailored to the region's needs (Akuffo et al., 2021; Rohwerder, 2018).

Community engagement initiatives are vital in supporting the effective implementation of psychological assessment in Sub-Saharan Africa. Community engagement initiatives involve raising awareness and sensitising communities about the importance of psychological assessment in vision care (Bain et al., 2022). Through various channels such as drama, social media, and community events, awareness can be increased, reducing stigma and promoting participation in assessment programs (Bain et al., 2022).

Capacity-building initiatives are essential in supporting the effective implementation of psychological assessment in Sub-Saharan Africa. Capacity-building initiatives involve providing professional development opportunities for healthcare professionals in Sub-Saharan Africa. These opportunities focus on enhancing psychological assessment skills, cultural competence, and ethical practice, thereby improving the quality of psychological assessment services (Oppong et al., 2022). Studies illustrate the positive impact of psychological assessment in vision care settings through successful interventions, improved patient outcomes, and the role of psychological assessment in addressing the needs of individuals with visual impairments in the region (Abraham et al., 2024; Abubakar et al., 2009). A study by Abubakar et al. (2009) highlights the role of participant consultation in enhancing psychological assessment in Sub-Saharan Africa. This approach has contributed to enhancing construct, content, and criterion validity of studies conducted in the region.

7. Ethical Considerations

Cultural sensitivity, patient autonomy, and informed consent are components of key principle considerations in psychological assessment and vision care in SSA. These considerations encompass cultural sensitivity, patient autonomy, and informed consent (Currier et al., 2023). These principles are paramount as they ensure respect for dignity and individual rights and acknowledge and address unique cultural norms and values (Dell'Osso, 2016). With the significant variation in cultures, languages, and belief systems in place, it becomes necessary to closely observe the appreciation of

cultural sensitivity in caring for and providing psychological assessment of visually impaired individuals within the region (Dell'Osso, 2016). Cultural beliefs, practices, and norms influence individuals' perceptions, hence the willingness and commitment towards assessment and treatment regarding vision care (Brooks et al., 2019; Kaihlanen et al., 2019). Respecting cultural diversity fosters trust, facilitating effective communication and assessment processes.

Respect for patient autonomy builds trust between the patient, their family and the practitioners (Barello et al., 2020). Through such assessment, the practitioner is assured that such a patient knows the type of care that can be given, further promoting autonomous judgment. Ethical practice through informed consent is well explained by detailed information sharing (Yu et al., 2020). Sharing information in a way and manner that is easy yet assuring consent underlines a patient's involvement in their care. International guidelines such as the International Test Commission make it clear that tests should be used only in appropriate, professional, and ethical ways, and they should consider people's needs and rights in being assessed. Therefore, Vision care services in SSA must be fair, just, and transparent. This will be brought to pass through the cooperation of professionals, policymakers and the communities (Murgic et al., 2015). Achieving sustainable cooperation at regional and international levels is paramount for over-representation in answering mental health issues in low and middle-income countries, gaining mentorship, gaining political support and shaping policy development.

8. Conclusion

In conclusion, from the ever-rising complexities in dealing with issues of vision care in SSA, there has to be an approach that rises obligatorily to the occasion by coming up with a multi-strategic approach that captures both physical and psychological aspects of vision care without discrimination. Quality will be realised when issues such as resource constraints, socio-cultural beliefs, and professional training can be pinpointed and addressed by practitioners. Underpinning all these are the values of cultural sensitivity, patient autonomy, and informed consent, which point to the fact that care is just, transparent, and inclusive. Doing so would help sustain work across stakeholders in mental health issues and policy building towards better outcomes for low- and middle-income countries.

9. Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

All authors read and approved the final version of the manuscript for publication and agree to be accountable for all aspects of the work, ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Availability of data and materials

Not applicable.

Conflict of interest statement

The authors report no conflicts of interest.

Funding

Not applicable.


Authors' contributions

All authors (E.D-Y.T and P.M.) contributed equally to this work. They collaboratively developed the concept and design of the review, participated equally in searching the literature and collecting data, and contributed to the analysis and interpretation of the collected data. Additionally, all authors were involved in drafting, revising, and finalising the manuscript and critically revising it for important intellectual content.

10. Acknowledgements

We appreciate the editorial staff of the Centre for Behaviour and Wellness Advocacy, Ghana, for their free editing support.

Authors' ORCID

Esther Doe-Yo Tawiah  <https://orcid.org/0009-0007-2333-8644>

Prince Mordi  <https://orcid.org/0009-0007-4692-6406>

References

- Abraham et al., 2020 – Abraham, C.H., van Staden, D., Rampersad, N. (2024). Barriers and enablers to low vision care and rehabilitation in sub-Saharan Africa within a global context. *Clinical, Experimental Optometry*. 107(1): 3-13. DOI: <https://doi.org/10.1080/08164622.2023.2254766>
- Abubakar et al., 2009 – Abubakar, A., van de Vijver, F.J.R., van Baar, A., Kitsao-Wekulo, P., Holding, P. (2009). Enhancing psychological assessment in Sub-Saharan Africa through participant consultation. In G. Aikaterini, K. Mylonas (Eds.), *Quod Erat Demonstrandum: From Herodotus' ethnographic journeys to cross-cultural research: Proceedings from the 18th International Congress of the International Association for Cross-Cultural Psychology*. DOI: <https://doi.org/10.4087/WHNY1676>
- Addo et al., 2021 – Addo, E.K., Akuffo, K.O., Seupaul, R., Dukhi, N., Agyei-Manu, E., Asare, A.K., Kumah, D. Ben, Awuni, M., Reddy, P. (2021). Prevalence and associated factors of vision loss in the South African National Health and Nutrition Examination Survey (SANHANES-1). *BMC Ophthalmology*. 21(1): 1-15. DOI: <https://doi.org/10.1186/S12886-020-01714-4/TABLES/4>
- Aghaji et al., 2021 – Aghaji, A., Burchett, H.E.D., Oguego, N., Hameed, S., Gilbert, C. (2021). Primary health care facility readiness to implement primary eye care in Nigeria: Equipment, infrastructure, service delivery, and health management information systems. *BMC Health Services Research*. 21(1): DOI: <https://doi.org/10.1186/s12913-021-07359-3>
- Akuffo et al., 2021 – Akuffo, K.O., Seupaul, R., Darrah, S., Dukhi, N., Kumah, D.B., Agyei-Manu, E., Addo, E.K., Asare, A.K., Osei Duah, I., Jr, Reddy, P. (2021). Vision loss, vision difficulty and psychological distress in South Africa: Results from SANHANES-1. *BMC Psychology*. 9(1): 66. DOI: <https://doi.org/10.1186/s40359-021-00558-x>
- Alrasheed, 2021 – Alrasheed, S.H. (2021). A systemic review of barriers to accessing paediatric eye care services in African countries: *African Health Sciences*. 21(4): 1887. DOI: <https://doi.org/10.4314/AHS.V21I4.47>
- Baker et al., 2010 – Baker, R., Camosso-Stefinovic, J., Gillies, C., Shaw, E.J., Cheater, F., Flottorp, S., Robertson, N. (2010). Tailored interventions to overcome identified barriers to change effects on professional practice and health care outcomes. In R. Baker (Ed.). *Cochrane Database of Systematic Reviews*. John Wiley, Sons, Ltd.
- Bennett et al., 2019 – Bennett, C.R., Bex, P.J., Bauer, C.M., Merabet, L. (2019). The assessment of visual function and functional vision. In *Seminars in pediatric neurology*. 31: 30-40. WB Saunders. DOI: <https://doi.org/10.1016/j.spen.2019.05.006>
- Boagey et al., 2022 – Boagey, H., K. Jolly, J., E., Ferrey, A. (2022). Psychological impact of vision loss. *Journal of Mental Health and Clinical Psychology*. 6(3): 25-31. DOI: <https://doi.org/10.29245/2578-2959/2021/3.1256>
- Brain et al., 2022 – Bain, L.E., Akondeng, C., Njamnshi, W.Y., Mandi, H.E., Amu, H., Njamnshi, A.K. (2022). Community engagement in research in sub-Saharan Africa: current practices, barriers, facilitators, ethical considerations and the role of gender - a systematic review. *The Pan African Medical Journal*. 43: 152. DOI: <https://doi.org/10.11604/PAMJ.2022.43.152.36861>
- Brooks et al., 2019 – Brooks, L.A., Manias, E., Bloomer, M.J. (2019). Culturally sensitive communication in healthcare: A concept analysis. *Collegian (Royal College of Nursing, Australia)*. 26(3): 383-391. DOI: <https://doi.org/10.1016/j.colegn.2018.09.007>
- Cloitre et al., 2018 – Cloitre, M., Shevlin, M., Brewin, C.R., Bisson, J.I., Roberts, N.P., Maercker, A., Karatzias, T., Hyland, P. (2018). The International Trauma Questionnaire. Development of a self-report measure of ICD-11 PTSD and complex PTSD. *Acta Psychiatrica Scandinavica*. 138(6): 536-546. DOI: <https://doi.org/10.1111/acps.12956>
- Courtright et al., 2016 – Courtright, P., Mathenge, W., Kello, A.B., Cook, C., Kalua, K., Lewallen, S. (2016). Setting targets for human resources for eye health in sub-Saharan Africa: What evidence should be used. *Human Resources for Health*. 14(1): 1-8. DOI: <https://doi.org/10.1186/S12960-016-0107-X/PEER-REVIEW>
- Currier et al., 2023 – Currier, J.M., Fox, J., Vieten, C., Pearce, M., Oxhandler, H.K. (2023). Enhancing competencies for the ethical integration of religion and spirituality in psychological services. *Psychological Services*. 20(1): 40-50. DOI: <https://doi.org/10.1037/ser0000678>

- Dean et al., 2021 – Dean, W.H., Buchan, J.C., Gichuhi, S., Faal, H., Mpyet, C., Resnikoff, S., Gordon, I., Matende, I., Samuel, A., Visser, L., Burton, M.J. (2021). Ophthalmology training in sub-Saharan Africa. A scoping review. *Eye*. 35(4): 1066-1083. DOI: <https://doi.org/10.1038/s41433-020-01335-7>
- Demmin, silverstein, 2020 – Demmin, D.L., Silverstein, S.M. (2020). Visual impairment and mental health: Unmet needs and treatment options. *Clinical Ophthalmology*. 14: 4229-4251. DOI: <https://doi.org/10.2147/OPHTH.S258783>
- Elisha, 2019 – Elisha, S.J. (2019). Participation of adults with visual impairment in literacy skill development programmes a case study of Tabora municipality, Tanzania (Doctoral dissertation).
- Foxcroft, 2011 – Foxcroft, C.D. (2011). Ethical issues related to psychological testing in Africa: What I have learned (so far). *Online Readings in Psychology and Culture*. 2(2). DOI: <https://doi.org/10.9707/2307-0919.1022>
- Graham, 2017 – Graham, R. (2017). Facing the crisis in human resources for eye health in sub-Saharan Africa. *Community Eye Health*. 30(100): 85. /pmc/articles/PMC5820633.
- Guerette et al., 2011 – Guerette, A.R., Smedema, S.M. (2011). The relationship of perceived social support with well-being in adults with visual impairments. *Journal of Visual Impairment, Blindness*. 105(7): 425-439. DOI: <https://doi.org/10.1177/0145482x1110500705>
- Kaihllanen et al., 2019 – Kaihllanen, A.M., Hietapakka, L., Heponiemi, T. (2019). Increasing cultural awareness: A qualitative study of nurses' perceptions about cultural competence training. *BMC Nursing*. 18(1): DOI: <https://doi.org/10.1186/s12912-019-0363-x>
- Kempen et al., 2017 – Kempen, J.H., Bourne, R.R., Wong, T.Y., Taylor, H., Tahhan, N., Stevens, G., ... , Naidoo, K.S. (2017). Estimated prevalence of visual impairment in Sub-Saharan Africa (2015). *Investigative Ophthalmology & Visual Science*. 58(8): 2197-2197.
- Lester et al., 2023 – Lester, E.G., Wang, K.E., Blakeley, J.O., Vranceanu, A.M. (2023). Occurrence and severity of suicidal ideation in adults with neurofibromatosis participating in a mind-body RCT. *Cognitive and Behavioral Neurology. Official Journal of the Society for Behavioral and Cognitive Neurology*. 36(1): 19-27. DOI: <https://doi.org/10.1097/wnn.0000000000000332>
- Lewallen, Coughtright, 2001 – Lewallen, S, Courtright, P. (2001). Blindness in Africa: present situation and future needs. *The British Journal of Ophthalmology*. 85(8): 897. DOI: <https://doi.org/10.1136/BJO.85.8.897>
- Marquès-Brocksopp, 2014 – Marquès-Brocksopp, L. (2014). Mindfulness, spiritual well-being, and visual impairment. An exploratory study. *The British Journal of Visual Impairment*. 32(2): 108-123. DOI: <https://doi.org/10.1177/0264619614528343>
- Merry et al., 2023 – Merry, L., Castiglione, S.A., Rouleau, G., Létourneau, D., Larue, C., Deschênes, M.F., ... , Ahmed, L. (2023). Continuing professional development (CPD) system development, implementation, evaluation and sustainability for healthcare professionals in low- and lower-middle-income countries: a rapid scoping review. *BMC Medical Education*. 23(1): 498.
- Naidoo et al., 2020 – Naidoo, K., Kempen, J.H., Gichuhi, S., Braithwaite, T., Casson, R. J., Cicinelli, M.V., ... , Bourne, R.R. (2020). Prevalence and causes of vision loss in sub-Saharan Africa in 2015: magnitude, temporal trends and projections. *British Journal of Ophthalmology*. 104(12): 1658-1668. DOI: <https://doi.org/10.1136/BJOPHTHALMOL-2019-315217>
- Oppong et al., 2022 – Oppong, S., Asante, K.O., Anum, A. (2022). Psychological assessment in West Africa. *International Histories of Psychological Assessment*. 59-81. DOI: <https://doi.org/10.1017/9781108755078.005>
- Orjingene et al., 2022 – Orjingene, O., Okoli, U., Adetunji-Hassan, A., Ganama, M. (2022). Universal health coverage. A catalyst for achieving 2030 Sustainable Development Goals. *Archives of Current Research International*. 25-33. DOI: <https://doi.org/10.9734/acri/2022/v22i530289>
- Rohwerder, 2018 – Rohwerder, B. (2018). *Disability stigma in developing countries*. K4D Helpdesk Report. Brighton, UK: Institute of Development Studies.
- Sarfo, 2014 – Sarfo, J.O. (2014). Role of Clinical Neuropsychologists in the evaluation and management of diabetes mellitus in Ghana: A position statement. *Journal of Advocacy, Research and Education*. 1(1): 37-40.
- Shah et al., 2018 – Shah, P., Schwartz, S.G., Gartner, S., Scott, I.U., Flynn, H.W., Jr. (2018). Low vision services. A practical guide for the clinician. *Therapeutic Advances in Ophthalmology*. 10: 251584141877626. DOI: <https://doi.org/10.1177/2515841418776264>

[Shahin et al., 2019](#) – *Shahin, W., Kennedy, G.A., Stupans, I.* (2019). The impact of personal and cultural beliefs on medication adherence of patients with chronic illnesses: a systematic review. *Patient Preference and Adherence*. 13: 1019-1035. DOI: <https://doi.org/10.2147/ppa.s212046>

[Stevellink et al., 2016](#) – *Stevellink, S.A.M., Fear, N.T.* (2016). Psychosocial impact of visual impairment and coping strategies in female ex-Service personnel. *Journal of the Royal Army Medical Corps*. 162(2): 129-133. DOI: <https://doi.org/10.1136/jramc-2015-000518>

[Tessema et al., 2022](#) – *Tessema, Z.T., Worku, M.G., Tesema, G.A., Alamneh, T.S., Teshale, A.B., Yeshaw, Y., ... Liyew, A.M.* (2022). Determinants of accessing healthcare in Sub-Saharan Africa: a mixed-effect analysis of recent Demographic and Health Surveys from 36 countries. *BMJ Open*. 12(1): e054397. DOI: <https://doi.org/10.1136/BMJOPEN-2021-054397>

[Willcox et al., 2015](#) – *Willcox, M.L., Peersman, W., Daou, P., Diakité, C., Bajunirwe, F., Mubangizi, V., ... , Mant, D.* (2015). Human resources for primary health care in sub-Saharan Africa: progress or stagnation? *Human Resources for Health*. 13(1): 76. DOI: <https://doi.org/10.1186/s12960-015-0073-8>

[Xulu-Kasaba, Kalinda, 2021](#) – *Xulu-Kasaba, Z.N., Kalinda, C.* (2022). Prevalence of blindness and its major causes in sub-Saharan Africa in 2020: A systematic review and meta-analysis. *British Journal of Visual Impairment*. 40(3): 563-577. DOI: <https://doi.org/10.1177/02646196211055924>



Publisher: Centre for Behaviour and Wellness
Advocacy, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
ISSN 2410-4981. E-ISSN 2508-1055
2024. 11(1): 15-22

DOI: 10.13187/jare.2024.1.15

Journal homepage:
<http://kadint.net/our-journal.html>



Economic Loss and Mental Health Experiences among Flood Disaster Victims in Ghana

Emmanuel Dziwornu  ^{a, *}

^aUniversity of Health and Allied Sciences, Ho, Ghana

Abstract

Disasters have become a common threat to many societies across the globe. There is a severe impact on developing communities as disasters tend to wash away the little gains they have made. These disasters will continue to occur, and their impacts will not cease to accompany them. Meanwhile, in developing countries like Ghana, little empirical information is recorded on the impacts disaster victims endure. Concerns for victims are short-lived, whereas the concerns of victims are largely ignored. As much as there are community-level effects, disasters leave significant individual impacts that deserve attention. Different domains of disaster impact exist: economic, social, and psychological. These need to be explored, especially in poor resource settings such as Ghana. This qualitative study used 13 victims of the 3rd June 2015 flood disaster with a fire explosion in Accra, Ghana, a disaster that claimed over 150 lives. The study employed a descriptive qualitative design to explore victims' economic and mental health experiences. It was found that victims lost their livelihoods, such as jobs, homes, and possessions. Psychological impacts such as anxiety, behavioural changes, and mood effects were also recorded. It is concluded that the struggles of disaster victims in Ghana are real and that there is a need for comprehensive investigation, intervention, and support for victims. The implications of the findings are discussed.

Keywords: disaster, economic loss, Ghana, mental health, victims.

1. Introduction

Disasters present diverse experiences, including economic impacts (Panwar, Sen, 2019). Mental health experiences are also common among disaster victims. It is possible that economic experiences can further exacerbate the mental health outcomes among the victims (Frasquilho et al., 2015). Unfortunately, little has been said about this subject within the Ghanaian context in particular and Africa in general. Economic loss is a significant concern in every sphere of life. Thus, the short-lived interest shown in the agony of disaster victims in Ghana (Dziwornu, Kugbey, 2015) leaves room for much to be desired.

When victims lose their livelihood to an unexpected event through no fault of theirs, it may have a long-term effect on them, including mental health concerns (Frasquilho et al., 2015). Meanwhile, floods are the most common disaster in Ghana, occurring on a perennial basis. Therefore, there is a need to explore how victims have been impacted economically and mentally to inform policy decisions and interventions (Makwana, 2019). The global prevalence of disaster victims continues to increase (Dolman et al., 2018; United Nations, 2015). This indicates that the

* Corresponding author

E-mail addresses: edziwornu@uhas.edu.gh (E. Dziwornu)

Received: 07 December 2023 Revised: 23 March 2024 Accepted: 25 March 2024

number of individuals with various concerns emanating from disasters globally is high. Sadly, this is expected to increase in African and Asian countries (EM-DAT, 2015). It is important to elicit the first-hand experiences of the victims through qualitative studies in order to appreciate their concerns. Using a descriptive qualitative approach, this study sought to answer the question of what economic and mental health experiences flood disaster victims endured.

2. Methods

Study design

The descriptive qualitative design was used for this study. It was aimed at recording and understanding the story of the victims of the disaster (Kim et al., 2017). This provided the basis for understanding the victims' experiences through their narratives. Their experiences explored include their economic losses and their mental health challenges. Victims in this study are those who survived a flood disaster that occurred on the 3rd of June 2015 in Accra, Ghana.

Population and sample

This study was conducted in Accra, the capital city of Ghana, specifically at the Kwame Nkrumah Circle among the victims of the 3rd June 2015 flood disasters in Accra. This disaster was unique in the history of disasters in Ghana because of an explosion of a fuel station at the Kwame Nkrumah Circle, which claimed over 150 lives in the capital city. Three (3) contacts were established during a meeting of the victims' leadership to select the participants, where their grievances were discussed. The three contacts agreed to participate in the study and served as a point of reference to other victims. In total, 13 participants were selected for the study using the snowball technique (Sarfo et al., 2022). This sample size was used because the study prioritised richness of information over number of participants (Pietkiewicz, Smith, 2014; Sarfo et al., 2021) while being guided by Creswell (1998) who argued that a sample size of five (5) to 25 is recommended for a qualitative study. There were seven males and six females. All participants interviewed were Christians. These are presented in the table 1 below.

Table 2.1. Demographic Information of Participants

| Participant | Age | Gender | Occupation | Religion |
|-------------|-----|--------|--------------------------|-----------|
| 1 | 36 | Female | Health worker/student | Christian |
| 2 | 44 | Female | Trader | Christian |
| 3 | 38 | Female | Trader | Christian |
| 4 | 48 | Female | Trader | Christian |
| 5 | 37 | Male | Herbalist | Christian |
| 6 | 63 | Female | Not working | Christian |
| 7 | 60 | Male | Transport owner / driver | Christian |
| 8 | 47 | Male | Driver | Christian |
| 9 | 42 | Male | Civil servant | Christian |
| 10 | 30 | Male | Trader | Christian |
| 11 | 67 | Female | Retired | Christian |
| 12 | 32 | Male | Civil servant | Christian |
| 13 | 43 | Male | Teacher | Christian |

Inclusion and Exclusion Criteria

The study participants were included or excluded on the following basis: an individual must be a victim of the 2015 flood disaster in Accra at Kwame Nkrumah Circle, Alajo, Kaneshie, Malam and New Town (all communities are around the disaster zone and were affected), be 18 years and above, and be in Accra at the time of the study. An individual was not qualified to participate in the study if they were currently on admission/treatment for any chronic or terminal illness not caused by the disaster, they currently suffer significant memory loss and a significant psychiatric condition.

Data Collection Tool

A semi-structured interview guide was developed and used for data collection. This asked questions about what economic experiences they had uncounted due to the disaster and what mental health impacts they had experienced from the disaster. The guide consisted of prompts and

questions for follow-ups. Meanwhile, there was room for follow-up questions depending on the responses given by participants. This provided the in-depth information required for the study. Two independent Professors with expertise in qualitative study reviewed the guide for appropriateness before it was used.

Data collection procedure

Participants were contacted either via phone or in person. When they agreed to participate in the study, a date was set together for the interview. The majority of them were interviewed in their homes. However, Five participants were interviewed in their workshops due to their schedules. All participants signed a consent form indicating their agreement to participate in the study. Data was collected using the semi-structured interview guide. Interviews were conducted one-on-one and audiotaped with the consent of participants. Interviews lasted 50 to 60 minutes.

Data processing and analysis

Each audiotaped interview was named distinctively to avoid overlapping information. The researchers all transcribed the tapes verbatim. Tapes of interviews with participants who used local expressions in the course of the interview, those who answered some questions in their local language to express themselves well and those who were interviewed in a local language (in this case, Twi) were transcribed verbatim and translated by a professional translator at the Department of Linguistics, University of Ghana, Legon. Transcribed and translated scripts were reviewed for spelling, punctuation and correctness of the transcriptions, along with the audio tape by the researcher and two other experts in qualitative data analysis for clarity of the information they contained. The data was organised using Atlas. ti and analysed using thematic analysis. The data was organised into themes, subthemes, and main study objectives.

3. Results

Two main themes emerged from the analysis: economic losses and mental health impacts. The economic losses had two subthemes: loss of jobs and loss of homes and properties. Mental health impact had three subthemes, namely mood, anxiety, and behavioural change experiences. The main themes and their subthemes are presented below with corresponding quotes. The themes were carefully named to reflect the participants' information and satisfy the research objectives.

Theme 1: Economic losses

This theme describes the economic impact of the disaster on victims. Participants lost their jobs, shops, and their homes and possessions. There were participants whose cars were submerged, burnt and washed away, rendering them jobless since the car was their source of livelihood. Some had their houses burnt, flooded, or broken down, with all possessions in the house condemned. Therefore, The two subthemes are loss of job, and loss of home and property.

Subtheme 1: Loss of job: participants had their shops where they traded destroyed by the flood. Some had the cars they use for commercial activities damaged. This caused their job loss. The loss of their job appears to have completely redefined their state, and some perceive that they have been reduced to nothing. Some who previously imported goods into the country and sold have now resorted to selling sachet water. Below are some of their narratives.

"...I am into business; I import things. My customer is in Italy, and one is in the USA. They send me things, such as a mattress, television, fridge and other things. I cleared them; I do supply to my customers in Bogoso, Goaso, Prestea, and Tarkwa... Now I sell pure water; my ice chest is behind you" (Participant 2, female, 44 years)

Some victims have a hard time making a living because their source of livelihood has been severely affected.

For example, some participants said,

"...Since then, we have been through hardship. We don't get money to do anything"
(Participant 3, female, 38 years).

Others also indicated;

"...I sleep outside, those are my things. My bags, sponge, everything is inside. I sleep in front of Vienna City." (Participant 2, female, 44 years).

Another added,

"...it has cost me my children's schooling" (Participant 6, female, 63 years).

Subtheme 2: Loss of home and property: Participants lost their properties in the disaster. Some lost their homes, clothing, cars, shops, and other belongings. For some, it was all their lifetime possession that they had lost. Due to this, some participants find it difficult to resettle. Some sleep outside because they are unable to raise funds to rent an apartment.

Some participants who lost properties said,

"...We lost everything. We didn't pick anything from that house. But you know people even came and robbed the few things that remained" (Participant 1, female, 36 years).

"...I lost all my possessions. My electronic devices, wardrobe, the building even had cracks" (Participant 5, male, 37 years).

"...Well, we lost a lot of material things. Our clothes, cars and many things" (Participant 12, male, 32 years).

Psychological impact

This theme captures the psychological experiences of victims over the years due to the disaster they experienced. This encompasses three subthemes: mood, anxiety, and behavioural change experiences.

Subtheme 1: Anxiety experiences: Long after the disaster, participants still expressed feelings of uneasiness and fear about the event and related situations. They reported nightmares and uncomfortable memories about the event. Some participants expressed anxiety over the location of the disaster, as shown in the following narratives;

"...I stopped going to Circle or passing there. I remember one day, I was going to Accra from Achimota; I used 37 (another route) instead of Circle. It makes my heart beat. But this year, I managed to go there like three times" (Participant 10, male, 30 years).

"...Eei, I get scared when I see it [i.e. the Circle fuel station], I panic. After we were discharged from the hospital, I didn't want to come here. I came and stood at an area and decided boldly to come; if not, the fear would be there forever. So, I came with boldness and courage, but sometimes I get frightened with goose bumps" (Participant 4, female, 48 years).

"...I still use Circle to work and back. When I get there at first, it scares me. Right now, it annoys me" (Participant 12, male, 32 years).

Some participants also indicated that they experience anxiety at specific times, such as towards night and during rain.

"...I get panics, when I am sleeping or walking around and when it's getting to evening" (Participant 3, female, 38 years).

Another said, *"...I am better now, but whenever it rains, my fears and anxieties resurge"* (Participant 5, male, 37 years)

"...When it is about to rain, I remember that day. It often keeps me awake, especially if the rain falls at night. Aha! And also, I don't know, when I go upstairs, I remember the incident a lot. It looks like it is happening again. Fortunately, my room is downstairs, so I avoid the top as much as possible" (Participant 11, female, 67 years).

One participant expressed his experience of nightmare as follows:

"...I always dream about it. It's like the thing is happening again. I fear at night because of the dreams. Even during the day, sometimes, I dream about it. When I have the dream, and I wake up, then I become 'basaa' (i.e. disturbed)" (Participant 8, male, 47 years)

Subtheme 2: Behavioural changes: this includes information on some negative changes in the behaviour of victims following the disaster. This includes changes in sleep, eating and physical activities. Below are some extracts from their narratives;

"...I can't sleep. I lie down like that, then I open my eyes. I don't feel fine now" (Participant 3, female, 38 years).

"...Currently, I do not sleep so well; I wake up at 2 am and can't go back to bed. Whereas I sleep better outside" (Participant 4, female, 48 years).

For those experiencing eating-related changes:

"...Eating, it is the worst of it all. Sometimes I can be stressed and forget whatever I am doing. I don't even feel like eating" (Participant 2, female, 44 years),

"...As for food, I can eat a little. When I am eating, I don't feel its taste, especially when I remember that I have nowhere to sleep" (Participant 3, female, 38 years).

Regarding physical activities, some participants reported a loss of energy and zeal or motivation. One participant said the following;

"...I wasn't enjoying myself and the things I used to do in the past, and it also impacted my work. Because now even waking up and preparing for work became a challenge" (Participant 1, female, 36 years).

Subtheme 3: Mood experiences: this describes the emotional feelings such as sadness, depression, loss of interest by victims of the disaster and anger. Some said they cried, felt sad and lost interest in activities.

One of the participants responded that;

"...I wasn't enjoying myself and the things I used to do in the past" (Participant 1, female, 36 years).

Largely, these experiences underscore depressive symptoms among the victims. Below are some other quotes from other participants;

"...My brother, it is tough for me. If not my wife, hmmm. If it were some women, they would have left me. I have been crying aaa. I feel really sad" (Participant 8, male, 47 years),

"...I was thinking a lot. I still think but not like last year... I was getting angry too. The only thing is that I try not to offend the children" (Participant 9, male, 47 years).

A victim who was physically deformed by the disaster shared how difficult it is for him in public places. His ordeal affects the children, and he indicates that his children's friends will mock them when he turns up at the children's school. This is what he said;

"...I can be very sad because my children, when they say their parents should come to PTA (Parent-Teacher Association) meetings, I can't go again because their friends will laugh at them" (Participant 8, male, 47 years).

He also lamented how the general public add to his pain.

"...It's not easy, my brother. If I go and join a trotro, people don't want to sit on the seat with me. Meanwhile, I didn't bring this upon myself. But the thing is that the people don't know what happened to me. No, I look very scary. When I see people's reactions, I start to cry. I can't hold the tears. Hmmmm." (Participant 8, male, 47 years).

4. Discussion

The experiences of disaster victims are important when considering the support to offer them, thereby guiding interventions that will benefit victims. This study found significant economic and psychological experiences of disaster victims in Accra, Ghana, with important implications for clinical, socio-economic and political interventions. The victims lost their livelihood. This can present a long-term impact that can translate into other effects (Frasquilho et al., 2015). This disaster took over 150 lives, some of which may be the economic backbones for their families. Meanwhile, the disaster destroyed the resources to deal with the post-disaster effects. Some had to depend on the benevolence of others to survive for a long time before things were restored. Some have suffered permanent physical disabilities that could render them unable to walk, work and socialise.

Lindell and Prater (2004) reported that natural disasters cause massive property damages or losses. As a result, victims usually become homeless (Paidakaki, 2012). As the result of this study showed, some participants reported that they have been sleeping outside in front of shops for some time now because the disaster has destroyed their houses, and they are currently unable to rent a place to stay. Apart from homes, jobs were lost. Victims had their workshops destroyed completely. People had their goods destroyed, and their monies burnt up in the explosion. A participant reported that she used to import goods and sell them, but now she sells sachet water. This has significant implications for psychological health among victims (Frankenberg et al., 2008).

These effects may also affect national economic activities (Klomp, 2016). The government was compelled to foot the medical bills of victims who were hospitalised due to the disaster. To date, victims expect and demand compensation for their losses from the government. Immediately after a disaster, the government also needed to reconstruct affected roads, bridges, and monuments. In Ghana, the NADMO becomes overstretched during disasters since victims tend to require relief items beyond expectation. Since many people get affected by disasters, their jobs and earnings get affected, translating into poor savings, a decrease in gross domestic product, and related economic indicators (Brei et al., 2018; Klomp, 2016; Ladds et al., 2017).

Indeed, victims expressed the psychological impacts of the disaster on their lives. The psychological impacts associated with disasters are extensively demonstrated in the literature. For the current study, mood disturbances, anxiety-related effects and behavioural problems were reported. These reports are in tune with Haqqi (2006), Griensven et al. (2006), Chung and Kim (2010), and Hussain et al. (2011). The American Psychiatric Association (APA) reported that survivors usually experience anxiety, depression, hypersensitivity, and insomnia (APA, 2013). Victims in this study reported most of these distresses. They felt depressed, cried a lot, were anxious, unable to sleep, had high interpersonal sensitivity, and had poor appetite. This distress has implications for victims' suicidality (Guo et al., 2017; Kolves et al., 2013). Orui and Harada (2014) noted that suicidal implication of disasters is high among females on the whole. Another group that may be of concern in this instance is those with higher losses during the disaster. Fang and Chung (2019) reported higher psychological impacts among these groups compared to those with fewer losses. For example, a victim who loses the whole family, house, cars and shops in the disaster will be more psychologically distressed compared to one who loses only a shop. This must be of concern to policymakers and therapists. In this regard, resources must be harnessed to assist such victims in dealing with their ordeals.

5. Implications of study findings

There are implications for policy, practice and research regarding disaster survivors in Ghana and Africa. Generally, Ghana's disaster management policy is too physical and short-lived, and it has very little budget for disaster interventions. The mental health component is largely missing in managing disaster-related effects in Ghana. The government needs to redesign the disaster policy by making psychiatric and psychological components for disaster-related interventions mandatory. Mental health research on disaster is lacking in Ghana. The academic and scientific community must turn to this subject to make information available to the government and clinicians. The government should not only provide short-term economic relief for victims. There must be a deliberate attempt to re-establish victims economically. This will, in turn, avert any long-term mental health and socio-economic impacts victims will live with (Makwana, 2019).

6. Limitations of the study

There are some limitations associated with the current study. One of these limitations is that the best design would have been a longitudinal design. It would have been beneficial to follow the victims over a long enough period to understand the dynamics of their challenges and how the various factors played out, especially regarding how they have coped over the years. Also, the study excluded victims below the age of 18. This means that there is still a population of victims whose information is missing in the knowledge about experiences after the disaster in Ghana. Under 18 victims are a significant unit of the disaster population. They are also deemed vulnerable. Therefore, they need to be studied in this regard.

7. Conclusion

Victims of disasters endure significant challenges. Unfortunately, little attention is paid to this population in Ghana and Africa in general. There is limited knowledge of what happens with this population, and this can seriously impede policy and intervention. Victims suffer economic impacts from disasters. They experience psychological impacts as well. These two could possibly be linked to poor economic circumstances, which can affect one's mental health and vice versa. Policy decisions must be well considered for this situation since disasters are not choices people make.

8. Declarations

Ethics approval and consent to participate

Ethical approval was obtained from the Ethics Committee for Humanities (ECH) of the University of Ghana, Legon (Approval No. ECH 084/17-18). The study also adhered to the relevant ethical guidelines and regulations in accordance with the Helsinki declarations. All participants signed a written informed consent form approved by the Ethics Committee for Humanities (ECH) of the University of Ghana, Legon.

Consent for publication

Not applicable.

Availability of data and materials

Not applicable.

Conflict of interest statement

The author reports no conflicts of interest.


Funding

Not applicable.

9. Acknowledgements

I am grateful to all participants for their contributions. I also thank the Centre for Behaviour and Wellness Advocacy for their free professional editing services following the acceptance of this paper.

Authors' ORCID

Emmanuel Dziwornu  <https://orcid.org/0000-0003-4637-2371>

References

- APA, 2013** – American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders: DSM-V*. 2013. 991. DOI: <https://doi.org/10.1176/appi.books.9780890425596.744053>
- Beri et al., 2018** – *Brei, M., Mohan, P., Strobl, E.* (2019). The impact of natural disasters on the banking sector: Evidence from hurricane strikes in the Caribbean. *The Quarterly Review of Economics and Finance*. 72: 232-239. DOI: <https://doi.org/10.1016/j.qref.2018.12.004>
- Dolman et al., 2018** – *Dolman, D.I., Brown, I.F., Anderson, L.O., Warner, J.F., Marchezini, V., Santos, G.L.P.* (2018). Re-thinking socio-economic impact assessments of disasters: The 2015 flood in Rio Branco, Brazilian Amazon. *International Journal of Disaster Risk Reduction*. 31: 212-219. DOI: <https://doi.org/10.1016/j.ijdr.2018.04.024>
- Dziwornu, Kugbey, 2015** – *Dziwornu, E., Kugbey, N.* (2015). Mental health problems and coping among flood victims in Ghana: A comparative study of victims and non-victims. *Current Research in Psychology*. 6(1): 15-21. DOI: <https://doi.org/10.3844/crpsp.2015.15.21>
- EM-DAT, 2015** – *EM-DAT, H.* (2015). The human cost of weather-related disasters, 1995–2015. *Centre for Research on the Epidemiology of Disasters, UN Office for Disaster Risk Reduction (UNODRR), Brussels*, 1-25.
- Fang, Chung, 2019** – *Fang, S., Chung, M.C.* (2019). The impact of past trauma on psychological distress among Chinese students: The roles of cognitive distortion and alexithymia. *Psychiatry Research*. 271: 136-143. DOI: <https://doi.org/10.1016/j.psychres.2018.11.032>
- Frankenberg et al., 2008** – *Frankenberg, E., Friedman, J., Gillespie, T., Ingwersen, N., Pynoos, R., Rifai, I. U., ... , Thomas, D.* (2008). Mental health in Sumatra after the tsunami. *American Journal of Public Health*. 98(9): 1671-1677. DOI: <https://doi.org/10.2105/AJPH.2007.120915>
- Frasquilho et al., 2015** – *Frasquilho, D., Matos, M.G., Salonna, F., Guerreiro, D., Storti, C.C., Gaspar, T., Caldas-de-Almeida, J.M.* (2015). Mental health outcomes in times of economic recession: A systematic literature review Health behavior, health promotion and society. *BMC Public Health*. 16(1). DOI: <https://doi.org/10.1186/s12889-016-2720-y>
- Griensven et al., 2006** – *an Griensven, F., Chakkraband, M.S., Thienkrua, W., Pengjuntr, W., Cardozo, B.L., Tantipiwatanaskul, P., ... , Thailand Post-Tsunami Mental Health Study Group.* (2006). Mental health problems among adults in tsunami-affected areas in southern Thailand. *Journal of American Medical Association*. 296(5): 537-548.
- Guo et al., 2017** – *Guo, J., He, H., Fu, M., Han, Z., Qu, Z., Wang, X., Guan, L.* (2017). Suicidality associated with PTSD, depression, and disaster recovery status among adult survivors 8 years after the 2008 Wenchuan earthquake in China. *Psychiatry Research*. 253(February): 383-390. DOI: <https://doi.org/10.1016/j.psychres.2017.04.022>
- Haqqi, 2006** – *Haqqi, S.* (2006). Mental Health Consequences of Disasters. *Medicine Today*. 4(3): 102-106.
- Hussain et al., 2011** – *Hussain, A., Weisaeth, L., Heir, T.* (2011). Psychiatric disorders and functional impairment among disaster victims after exposure to a natural disaster: A population based study. *Journal of Affective Disorders*. 128(1–2): 135-141. DOI: <https://doi.org/10.1016/j.jad.2010.06.018>

Kim et al., 2017 – Kim, H., Sefcik, J.S., Bradway, C. (2017). Characteristics of qualitative descriptive studies: A systematic review. *Research in Nursing & Health*. 40(1): 23-42. DOI: <https://doi.org/10.21061/jcte.v21i1.647>

Klomp, 2016 – Klomp, J. (2016). Economic development and natural disasters : A satellite data analysis. *Global Environmental Change*. 36: 67-88. DOI: <https://doi.org/10.1016/j.gloenvcha.2015.11.001>

Kolves et al., 2013 – Kolves, K., Kolves, K.E., De Leo, D. (2013). Natural disasters and suicidal behaviours: A systematic literature review. *Journal of Affective Disorders*. 146: 1-14. DOI: <https://doi.org/10.1016/j.jad.2012.07.037>

Ladds et al., 2017 – Ladds, M., Keating, A., Handmer, J., Magee, L. (2017). How much do disasters cost? A comparison of disaster cost estimates in Australia. *International Journal of Disaster Risk Reduction*. 21: 419-429. DOI: <https://doi.org/10.1016/j.ijdrr.2017.01.004>

Lindel, Prater, 2004 – Lindell, M.K., Prater, C.S. (2004). Assessing community impacts of natural disasters. *Natural Hazards Review*. 4(4): 176-185.

Makwana, 2019 – Makwana, N. (2019). Disaster and its impact on mental health: A narrative review. *Journal of Family Medicine and Primary Care*. 8(10): 3090-3095. DOI: https://doi.org/10.4103/jfmprc.jfmprc_893_19

Orui, Harada, 2014 – Orui, M., Harada, S. (2014). Changes in suicide rates in disaster-stricken areas following the Great East Japan Earthquake and their effect on economic factors : an ecological study. *Environmental Health and Preventative Medicine*. 19(6): 459-466. DOI: <https://doi.org/10.1007/s12199-014-0418-2>

Paidakaki, 2012 – Paidakaki, A. (2012). Addressing Homelessness through Disaster Discourses: The Role of Social Capital and Innovation in Building Urban Resilience and Addressing Homelessness. *European Journal of Homelessness*. 6(2): 137-148.

Panwar, Sen, 2019 – Panwar, V., Sen, S. (2019). Economic Impact of Natural Disasters: An Empirical Re-examination. *Margin: The Journal of Applied Economic Research*. 13(1): 109-139. DOI: <https://doi.org/10.1177/0973801018800087>

Pietkiewicz, Smith, 2014 – Pietkiewicz, I., Smith, J.A. (2014). A practical guide to using Interpretative Phenomenological Analysis in qualitative research psychology A practical guide to using Interpretative Phenomenological Analysis in qualitative research psychology. *Czasopismo Psychologiczne – Psychological Journal*. 20(1): 7-14. DOI: <https://doi.org/10.14691/CPJ.20.1.7>

Sarfo et al., 2021 – Sarfo, J.O., Debraha, T.P., Gbordzoea, N.I., Affula, W.T., Obeng, P. (2021). Qualitative research designs, sample size and saturation: Is enough always enough? *Journal of Advocacy, Research and Education*. 8(3): 60-65.

Sarfo et al., 2022 – Sarfo, J.O., Debrah, T.P., Gbordzoe, N.I., Obeng, P. (2022). Types of sampling methods in human research: Why, when and how? *European Researcher. Series A*. 13(2): 55-63.

United Nations, 2015 – United Nations. Sendai Framework for Disaster Risk Reduction 2015 – 2030 1. United Nations, 2015.

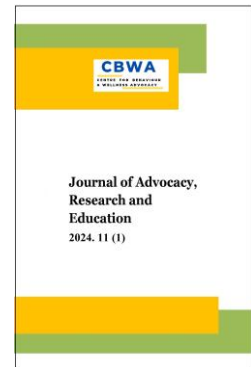


Publisher: Centre for Behaviour and Wellness
Advocacy, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
ISSN 2410-4981. E-ISSN 2508-1055
2024. 11(1): 23-37




DOI: 10.13187/jare.2024.1.23

Journal homepage:

<http://kadint.net/our-journal.html>



Harmful Cultural Traditions: An Analysis of Female Circumcision Practice in Maldives

Fazeela Ibrahim ^{a, *}, Asma Ibrahim Sulaiman ^a, Amzath Ahmed ^a

^aVilla College, QI Campus, Malé, Maldives

Abstract

Female circumcision (FC) affects the lives of millions of girls and women worldwide. This study assessed the demographic and socio-economic factors associated with female circumcision among women aged 15-49 in Maldives. Data for this study were extracted from the 2016–2017 Maldives Demographic and Health Survey, collected from a nationally representative probability sample of 7699 households interviewing women aged 15-49 years. The statistical analysis of this study focused on women aged 15-49 years who have heard about FC, excluding those who have never heard of FC ($n = 5943$). Analyses of data entailed descriptive statistics (frequencies and percentages) and estimation of logistic regression models to examine the roles that demographic, economic, and social factors play in the occurrence of FC in Maldives. The primary variable of interest (dependent variable) was the occurrence of FC. The factors included women's current age, age circumcised, highest education level, occupation, region, wealth quintile, and women's reported attitudes towards FC. Among all respondents, 17 % of the 5943 women who have heard of female circumcision reported having undergone the procedure. The findings revealed a significant difference in female circumcision by age, education, occupation, and attitudes towards FC. Furthermore, most circumcisions occurred before age 5 and were highest in Malé (capital city) and the island atolls in Maldives's South and North regions. The variables related to opinions were most strongly associated with female circumcision. Women who believed that their religion required FC or that the practice of FC should continue are more likely to be circumcised than women who do not hold this opinion. It was more than double. In addition, cross-tabulations of the opinion variables with age and region have found that the highest proportion of women who held these beliefs was in the age group 25-39 and lived in Malé. Therefore, we recommend further research and encouragement to enact policies and legislation that would eliminate the practice of female circumcision in Maldives.

Keywords: cultural norms, female genital mutilation, harmful cultural traditions, violence against women.

1. Introduction

Female genital mutilation/circumcision (FGM/C) refers to “*all procedures involving partial or total removal of the female external genitalia or other injury to the female genital organs for non-medical reasons*” (World Health Organization, WHO, 2008). The practice has no health

* Corresponding author

E-mail addresses: fazeelao708@gmail.com (F. Ibrahim)

Received: 21 February 2024 Revised: 22 April 2024 Accepted: 25 April 2024 Published: 31 April 2024

benefits for girls and women. Long-term consequences may include health problems such as menstrual problems, increased risk of childbirth complications, difficulties with sexual intercourse, the need for additional surgeries, and psychological problems (Klein et al., 2018). It is estimated that 3 million girls are at risk of undergoing FGM/C in different parts of the world every year (WHO, 2008). Internationally, the practice has been recognized as a human rights violation and discrimination against women and girls (WHO, 2008). This includes violations of the Universal Declaration of Human Rights, the Convention on Eliminating All Forms of Discrimination against Women (CEDAW), the Convention on the Rights of the Child, and many other international treaties and consensus agreements (WHO, 2008). Thus, the legislative approach is vital for eliminating FGM/C.

The WHO terminology for FGM/C classification is summarized in Table 1 (WHO, 2008). Type I and Type IV are the most common types reported across Asia (ARROW and Orchid Project 2020). FGM/C is referred to as female circumcision (FC) across many Southeast Asian countries (WHO, 2018), including Maldives.

Table 1. WHO Terminology for FGM/C Classification (WHO, 2008)

| Type | Description |
|-------------------------|---|
| Type I – Clitoridectomy | Partial or total removal of the clitoris (a small, sensitive and erectile part of the female genitals) and/or the prepuce (the clitoral hood or fold of skin surrounding the clitoris). |
| Type II – Excision | Partial or total removal of the clitoris and the inner labia, with or without excision of the outer labia (the labia are the ‘lips’ that surround the vagina). |
| Type III – Infibulation | Narrowing of the vaginal opening by creating a covering seal. The seal is formed by cutting and repositioning the inner or outer labia, with or without removal of the clitoris. |
| Type IV – Other | All other harmful procedures to the female genitalia for non-medical purposes, e.g., pricking, piercing, incising, scraping and cauterizing (burning) the genital area. |

Although it is considered a violation of human rights, FC is believed to be a practice originating from communities that want to control female sexual behaviour and ensure women’s virginity (WHO, 2008). In societies where FC is practiced, the practice is considered to be socially upheld, and it is based on the assumption that religious norms expect people to follow this practice (WHO, 2018). Some believe that FC is a religious requirement, although it is not mentioned in major religious books (Williams-Breault, 2018). In most Southeast Asia countries, FC practices are broadly accepted within communities and adhere to social norms associated with a range of complex and disputed motivations. Since Islamic Southeast Asia countries such as Indonesia and Malaysia largely adhere to Islamic law, religious leaders have strongly supported FC (Dawson et al., 2020). Some religious scholars in The Maldives have made similar pronouncements. In 2011, a religious scholar in The Maldives encouraged the practice of FC and suggested that FC was part of practicing Sunni Islam, the largest branch of Islam (Dawson et al., 2020). The continuing religious support for this practice in the region increases the sensitive nature of FC. Thus, collaborative approaches are required to prevent this practice from continuing.

Parallel to traditional practitioners performing FC, the practice has largely become medicalized in many Southeast Asia countries, including Indonesia, Malaysia, and Singapore (Ainslie, 2015; Cappa et al., 2019; Patel, Roy, 2016). These actions appear to disregard the zero-tolerance approach adopted by the United Nations. The goal of Sustainable Developmental Goal (SDG) 5 is to achieve gender equality and empower all women and girls, while SDG 5.3 calls for eliminating “*all harmful practices such as child, early and forced marriages and female genital mutilation*” (United Nations, 2022).

To achieve success in preventing the continuation of FC, it is important to identify the driving forces underlying this practice, such as the policies in place, current practices, and community beliefs (Berg, Denison, 2013). Rights-based health interventions are important to promote alternatives that can minimize or stop FC. Transmitting the message through educational programs such as leaflets and booklets, as well as training manuals for healthcare professionals, helps to create awareness rather than behaviour change, which results in short-term outcomes. Government action is necessary to create a political and legal environment that diverts people from allowing women to undergo the procedure willingly. Religious and community leaders must play a significant role in sharing religious perspectives through media campaigns, training, and outreach programs that bring about desirable behaviour change (Williams-Breault, 2018).

Female Circumcision in the Maldives

To date, the only existing formal publication on FC is in the Maldives Demographic Health Survey (DHS) in 2016-17, which showed that 13 % of women aged 15-49 and 1 % of girls aged 0-14 were circumcised (Ministry of Health..., 2018). It was reported in the CEDAW Shadow Report (Hope for Women, 2012) that the most prevalent type of FC in the Maldives is Type IV, with pricking, piercing, incising, and cauterizing the area (see Table 1). "Female circumcision" is the term most commonly used in Maldives. Thus, FC is used in this study.

It was said that FC was "widely known to have occurred in The Maldives," although it has been reported that the practice had stopped during the 1980s and 1990s (Hope for Women, 2012). In December 2009, a newspaper article in The Maldives reported that the then Attorney General had concerns that FC was being practiced in one of the islands of Maldives, Addu Atoll (Minivan News, 2009). The Attorney General's statement was reported in the CEDAW Shadow Report: "...religious scholars are going around to midwives giving fatwas (fatwa is a term used for ruling on the point of Islamic law given by a recognized authority) that girls have to be circumcised. They're giving fatwas, saying it is religiously compulsory. According to my information, the circumcision of girls has started and is going on ..." (Hope for Women, 2012). In October 2011, the same newspaper (Minivan News, 2011) reported on this issue, quoting the then Vice President of Maldives, as "we are beginning to hear reports of this occurring. I have heard people justify the practice on the radio and television. It is quite disheartening."

The United Nations and other international agencies (ARROW, Orchid Project, 2020; UNFPA, 2020; UNICEF, 2020) also reported their concerns about Maldivian religious scholars promoting FC, and linking the practice with Islam, even though FC is not an obligation of any religion. These concerns brought the threat of FC into the open and onto the policy table (Hope for Women, 2012; Maldives: CEDAW Report, 2019). Among circumcised women aged 15-49, over 80 % were circumcised before age 5, which showed that FC is commonly performed between birth and early childhood. Although the data on circumcised girls aged 0-14 is at 1 %, indicating a decrease in FC practice, this practice still exists in The Maldives. Among women who had heard of FC, 10 % believed that their religion required the practice, and 8 % believed that the practice should be continued (MOH..., 2018). These data and Maldivian religious scholars' recent promotion of FC (Hope for Women, 2012) suggest that FC will continue in Maldives. However, to date, there are no known efforts to investigate the persistence of this issue, nor have any actions been taken to ratify specific national legislation, national policies, or initiatives that criminalize FC in Maldives. Therefore, this study aims to create awareness of the persistence of FC in Maldives and provide information on the practice of FC that can serve as basis for policies, programs, and recommendations for legislation and intervention programs needed to combat FC practice Maldives.

Theories and Concepts

Understanding the factors that perpetuate FC and how these factors interact with social change processes are critical to understanding why and how communities continue the practice. There are two approaches relevant in the literature on FC: the social convention model and the norm internalization theory. Cultural traditions that have persisted over time represent the values and convictions that have permeated a community for a number of generations (UNICEF, 2009). It was reported in the UNICEF report that the most important argument for the continuation of FC is the claim that it is custom and tradition, one of around six pre-coded responses in DHS surveys (UNICEF, 2009). The survey respondents' appeal to tradition is consistent with the social

convention model, which asserts that when sufficient numbers of people support and perform FC, the practice becomes locked in place (Mackie, 1996; UNICEF, 2009).

The marriageability and health interests have been prioritized in the application of the Social Convention Theory to FC up until this point, with little explicit discussion of normative considerations (UNICEF, 2009). The continuation of FC entails legal (social acceptance and disapproval) and religious conventions (moral judgments of right and wrong) (UNICEF, 2009). Social norms are beliefs about what other people do and find acceptable. When people internalize social norms—accepting a set of norms and values that others have established—they become more motivated to follow them (Cislaghi, Heise, 2018). Thus, by internalizing norms, people are conditioned to conform to society’s expectations.

From that theoretical perspective, FC practices can generally be recognized to exist and continue due to various factors that include demographic, economic, and social factors. The customized conceptual framework (Figure 1) builds on existing literature to analyze the demographic, economic, and social factors associated with the occurrence of FC among women aged 15-49 in Maldives.

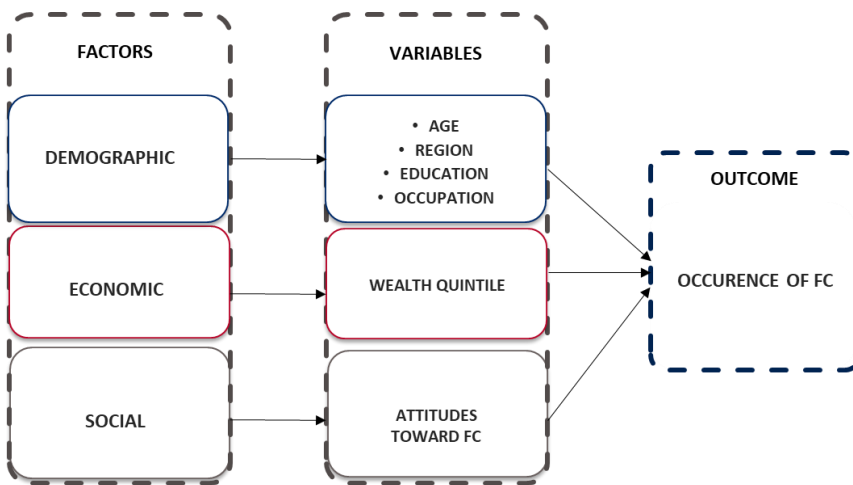


Fig. 1. Conceptual Framework

The above conceptual framework shows the expected linkages between the occurrence of FC and demographic, economic, and social factors. As the framework indicates, there are direct links between demographic and economic factors and FC occurrence. These links are evident in the findings of Ahinkorah (2021) and Inungu and Tou (2013), that found age, religion, wealth, maternal education, and women’s occupation to be significantly related to the occurrence of FC among women aged 15-49. Ahinkorah’s (2021) study was based on the 2014-2015 Chad DHS, which sought to learn more about a population and health issues related to FC, whereas Inungu and Tou (2013) focused on determining the factors that contribute to the practice of FC among women (age 15-49) and their daughters in Burkina Faso.

In countries where FC is practiced, most girls are circumcised before age 5 (Shell-Duncan et al., 2016). According to Gebremariam et al. (2016), the most common ages for FC are between ages 5 to 10. *Other researchers reported a similar age range* (Elduma, 2018; Gudeta et al., 2022; Kandala et al., 2019). In these studies, religion, residence, maternal education, and occupational status were significantly associated with FC. For example, in the United Arab Emirates, FC was highest among housewives (58 %) and unemployed (57 %) women (Gudeta et al., 2022). In Keffa Zone, Southwest Ethiopia, women from rural residences were seven times more likely to be circumcised (Elduma, 2018). Also, in Sudan, women aged between 14-49 years with a low level of education were more likely to be circumcised than women with a high level of education (Al Awar et al., 2020).

It has also been reported that FC has been adopted by new religious scholars and communities that have been influenced to adopt the practice. Grose et al. (2019) stated that what others do and expect a woman to do in a shared community matters for her ability to reject a harmful social norm like FC. There is no connection between FC and religion, despite the belief in

many cultures that religion, particularly Islam, is one of the underlying reasons FC is practiced (Shell-Duncan et al., 2016). Shell-Duncan et al. (2016) also reported that those with less education, who live in rural areas, and who come from low-income families seem to be more supportive of FC.

Research Problem

Although recent research shows that the Maldives are experiencing a decrease in FC (MOH..., 2018), the practice still exists (Hope for Women, 2012). Nevertheless, little rigorous research has been conducted to understand the prevalence and practice of FC in the Maldives. The central research question centers on the roles demographic, economic, and social factors play in the occurrence of FC in Maldives. Legislation and other policy initiatives are among the most effective strategies for violence prevention. According to the WHO (2018), a whole government approach is required to create a culture of zero tolerance for FC. Studying the factors associated with the occurrence of FC can promote a collaborative spirit where relevant stakeholders unite in a shared vision to end this practice in Maldives. The results of this study aim to inform decisions on the development of specific national legislation that criminalizes FC and specific national policies and initiatives focused on eliminating FC in Maldives. The study results also emphasize the immediate need for research that can fully capture and understand the prevalence and practice of FC in Maldives.

2. Methods

Study Setting

The Maldives has 22 geographical atolls, including about 1,200 islands spread across 21 Administrative Regions (20 administrative Atolls and the Malé area), grouped into six geographical regions: Malé, North, North Central, Central, South Central, and South. The total residential population of 402,071 residents (338,434 Maldivians and 63,637 international migrants) is dispersed across 188 inhabited islands. Around one-third (38 %) of the population resides in the capital Malé. All Maldivians share the same culture and speak *Dhivehi*, the Maldivian language. Sunni Islam is the state religion, and all permanent residents must be Muslim. This means that those who want to be a resident of Maldives must convert to Islam (United Nations Maldives, 2020).

Data Source

The 2016-17 Maldives DHS survey collected data from a nationally representative random sample of households and women of reproductive age in sampled houses. Data were derived from the 2016-17 Maldives Demographic and Health Survey co-conducted by ICF Macro International and the Ministry of Health in the Maldives. The information used in the study was about FC from all women of reproductive age who indicated that they had heard about FC. A three-stage cluster sampling was employed in the survey, and data analysis was carried out using descriptive statistics, proportional tests, and logistic regression. The analysis was weighted to obtain national estimates of FC prevalence and associated differentials.

Study Sample

Outcome variable

The primary variable of interest (dependent variable) was the occurrence of FC, which is binary in nature (yes or no). In addition, only women aged 15-49 who have heard of FC were included in the analysis. This resulted in a sample size of 5,943 individuals after applying sample weights. Figure 2 shows how the survey derived this subsample. The denominator includes those women who have heard of FC.

Independent variables

The choice of independent variables was based on the data from the literature and was defined at the cluster, household, and individual levels. The individual level variables are women's current age, age circumcised (<5, 5-9, 10-14, 15+), highest education level (none, primary, secondary, and higher), occupation, and women's reported attitudes towards FC. The occupation variable was recoded into five main categories: 1. Not working, 2. Professional, which includes technical and managerial, 3. Administrative and clerical, which includes sales, and services, 4. Household, domestic and agriculture combined unskilled manual, agricultural, and household and domestic work, and 5. Skilled, which combined skilled manual with armed forces and others. Two questions were used to measure attitude towards FC. One asked if the women thought FC is required by their religion, and the second asked if they thought FC should continue. The remaining variables in the analysis include other cluster-level variables of the region (Malé, North, North

Central, Central, South Central, and South region). The household variable includes wealth quintiles (lowest, second, middle, fourth, and highest).

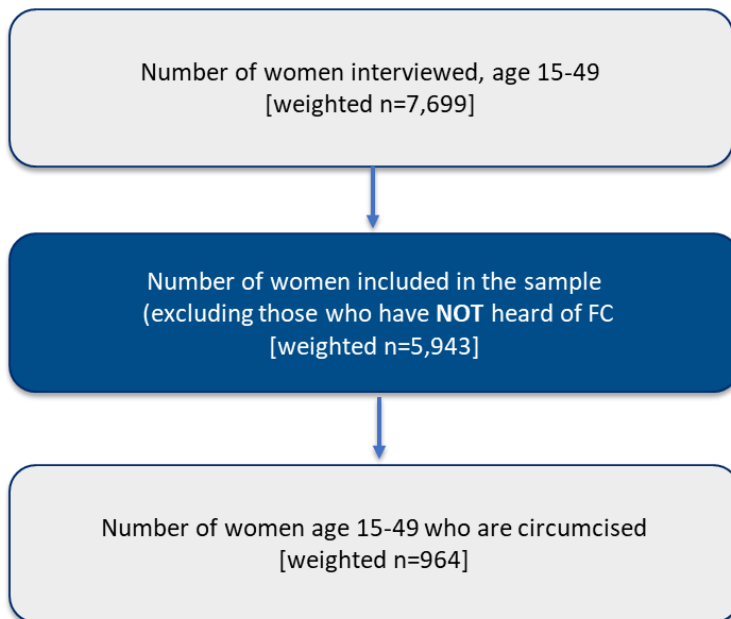


Fig. 2. Study sample

Statistical Analysis

In the analyses, the occurrence of FC was the dependent variable, and the other variables were independent variables. Descriptive statistics and percentages were computed to describe the variation of the percentages of the women aged 15-49 who were circumcised and the age at which they were circumcised. Chi-square tests of association were performed between the independent variables and the outcome. Logistic regression analyses were used to identify the variables' associations with the occurrence of FC. For further analysis of the attitude variable, women's current age was recoded into 3 groups (15-24, 25-39 and 40 and above), and regions were recoded into 4 categories (Malé, North, Central [which included Central, North Central, and South Central regions], and South).

The analyses were conducted with STATA 17 software. To ensure representativeness across the country and to correct for non-response, the data were weighted, and we considered the complex survey design in the analyses, using the SVY command in Stata. Statistical significance was determined at $p < 0.05$.

3. Results

Characteristics of the Study Population

The data from the 2017 Maldives DHS were analyzed with a subset of 5,943 women aged 15-49 who have heard about FC. [Table 2](#) presents the percentage distribution of the sample. A majority of women were aged 25-39 (51 %), had secondary or higher education (72 %), were not working (50 %), and were residing in Malé (48 %) at the time of the survey. The distribution of wealth quintile ranged between 16 % to 24 % in each category. Overall, 17 % of the women who have heard about FC reported being circumcised ([Figure 3](#)). Approximately 83 % of circumcised women were circumcised before age 5, and around 15 % were unable to report an age ([Table 2](#)).

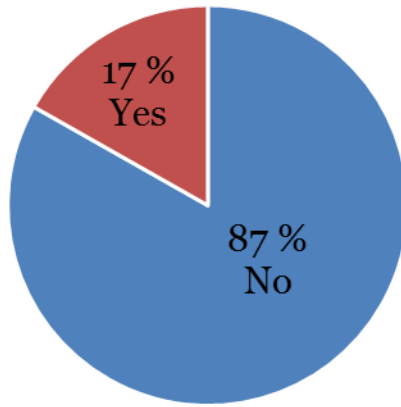


Fig. 3. Circumcision status among women aged 15-49 who have heard of FC

Table 2. Background characteristics

| Background characteristics | % | Frequency |
|---|------|-----------|
| Circumcised among women aged 15-49 | | |
| No | 83.2 | 4947 |
| Yes | 16.8 | 996 |
| Age in 5-year groups | | |
| 15-19 | 11 | 655 |
| 20-24 | 15.3 | 908 |
| 25-29 | 17.5 | 1038 |
| 30-34 | 18.3 | 1090 |
| 35-39 | 14.8 | 880 |
| 40-44 | 11.9 | 709 |
| 45-49 | 11.1 | 662 |
| Highest educational level | | |
| no education | 4.5 | 267 |
| primary | 23.1 | 1375 |
| secondary | 48.6 | 2890 |
| higher | 23.8 | 1412 |
| Wealth index combined | | |
| lowest | 16.3 | 969 |
| second | 17.4 | 1035 |
| middle | 19.7 | 1169 |
| fourth | 22.6 | 1342 |
| highest | 24 | 1429 |
| Region | | |
| Malé | 47.6 | 2826 |
| North | 11.9 | 709 |
| North Central | 10.2 | 608 |
| Central | 6.6 | 391 |
| South Central | 10.5 | 622 |
| South | 13.3 | 788 |
| Women's occupation | | |
| Not Working | 49.5 | 2944 |
| Professional | 23.8 | 1412 |
| Admin and Clerical | 9 | 532 |
| Household, domestic and agriculture | 5.1 | 302 |
| Skilled | 12.7 | 753 |

| Background characteristics | % | Frequency |
|---|------------|------------|
| Opinion on whether female circumcision is required by their religion | | |
| No | 89.8 | 5339 |
| Yes | 10.2 | 604 |
| Opinion on whether female circumcision should continue | | |
| No | 91.7 | 5449 |
| Yes | 8.3 | 495 |
| Age at circumcision | | |
| <5 | 83.1 | 827 |
| 5-9 | 1.6 | 16 |
| 10-14 | 0.4 | 4 |
| 15+ | 0.4 | 4 |
| Don't know/missing | 14.5 | 144 |
| Total | 100 | 996 |

Associations of Demographic, Economic, and Social Factors

Table 3 describes the associations between FC and the independent variables. All variables were significantly associated with FC except for the wealth quintile and region. The percentage of circumcised women increases with age. Approximately 42 % of the oldest age group (women aged 40-49) have been circumcised. Women's educational level is negatively associated with the occurrence of FC. For example, the higher the education level, the lower the proportion of circumcised women. However, slightly more women with higher education were circumcised than those with secondary education (13 % and 10 %, respectively).

With occupation, the proportion of circumcised women is the highest among the group who is engaged in household, domestic, and agricultural work (26 %) or skilled work (24 %) compared to those who worked in other professions (professional 13 %), and in administration or clerical positions (13%). Approximately 16% of women who were circumcised were not working. Finally, the prevalence of circumcision is greater among women who believe that FC is required by their religion and that FC should continue than those who don't believe these statements. Approximately 43 % of women who reported that FC is required by their religion were circumcised, compared to 14 % of women who reported that FC was not required by their religion. Similarly, 45 % of women who reported FC should continue were circumcised, compared to 14 % of women who reported that FC should not continue.

Table 3. Cross tabulation of female circumcision among women aged 15-49 and background variables

| Variable | % | 95% CI | p-value |
|----------------------------------|------|-------------|---------|
| Age in 5-year groups | | | |
| 15-19 | 1.7 | [0.7,4.1] | <0.001 |
| 20-24 | 7.5 | [4.7,12.0] | |
| 25-29 | 8.2 | [6.0,11.0] | |
| 30-34 | 14.7 | [11.8,18.2] | |
| 35-39 | 22.2 | [18.2,26.8] | |
| 40-44 | 28.0 | [23.3,33.2] | |
| 45-49 | 41.8 | [36.1,47.7] | |
| Highest educational level | | | |
| none | 37.3 | [29.1,46.3] | <0.001 |
| primary | 30.4 | [26.7,34.4] | |
| secondary | 10.1 | [8.6,11.8] | |

| Variable | % | 95% CI | p-value |
|---|----------|---------------|----------------|
| higher | 13.3 | [10.7,16.4] | |
| Wealth Quintile | | | |
| lowest | 20.0 | [17.1,23.3] | 0.084 |
| second | 17.1 | [14.6,20.1] | |
| middle | 16.0 | [13.7,18.5] | |
| fourth | 17.8 | [14.1,22.2] | |
| highest | 13.9 | [11.3,17.0] | |
| Women's occupation | | | |
| Not Working | 16.4 | [14.7,18.3] | <0.001 |
| Professional | 13.3 | [10.7,16.3] | |
| Admin and Clerical | 12.9 | [8.4,19.4] | |
| Household, domestic and agriculture | 25.8 | [19.7,33.1] | |
| Skilled | 23.7 | [19.9,27.9] | |
| Region | | | |
| Malé | 16.7 | [14.3,19.3] | 0.286 |
| North | 18.4 | [15.1,22.2] | |
| North Central | 14.6 | [11.1,18.9] | |
| Central | 13.8 | [10.8,17.4] | |
| South Central | 15.5 | [11.7,20.1] | |
| South | 19.7 | [16.0,24.1] | |
| Opinion on whether female circumcision is required by their religion | | | |
| No | 13.8 | [12.3,15.4] | <0.001 |
| Yes | 43.1 | [37.6,48.8] | |
| Opinion on whether female circumcision should continue | | | |
| No | 14.2 | [12.8,15.7] | <0.001 |
| Yes | 44.7 | [38.6,50.9] | |

Based on the findings, the variables that show significant variation in the percentage of women reporting to have been circumcised are age (higher in the older age groups), education (higher in lower levels), occupation (higher among those doing household, domestic and agriculture work, skilled labour), and attitudes toward FC (higher among those who believe their religion requires FC and who believe that FC should continue).

Regression Results of Female Circumcision

Table 4 presents the adjusted odds ratios of the association between the occurrence of FC and demographic, economic, and social characteristics. Age was significantly and positively associated with FC, which indicated the increasing likelihood of FC with increasing age. The OR of 1.1 indicates that for every year of increase between ages 15-49, the odds of circumcision increased by approximately 10 %, on average. While the wealth quintile and region were not found to be significantly associated with FC in the bivariate analysis (Table 3), there were significant findings for these variables in the regression analysis after controlling for other variables. Women in the highest quintile have approximately 40 % lower odds of being circumcised compared to women in the lowest wealth quintile (OR = 0.4, $p < 0.01$). In addition, women who currently reside in the Malé (OR = 2.1, $p < 0.01$), North Region (OR = 1.5, $p < 0.05$), and South Region (OR = 1.6, $p < 0.05$), have significantly higher odds of being circumcised compared to women in the Central Region.

The opinion variables have the greatest magnitude of association with FC. Women who thought that FC is required by their religion (OR = 2.2, $p < 0.001$) or thought that FC should continue (OR = 2.7, $p < 0.001$), had more than twice the odds of being circumcised compared to

women who did not have these opinions. Further analysis of these two variables was conducted to assess the association between opinion variables, age, and region. While the bivariate analysis detected a significant association between occupation and FC, and education and FC, these variables were not significant in the logistic regression after controlling for other variables.

Table 4. Logistic regression of female circumcision among women aged 15-49 and background variables

| Variable | OR | 95 % CI |
|---|-----------|----------------|
| Respondents current age | | |
| age in single years | 1.1*** | 1.06–1.11 |
| Highest educational level | | |
| no education (reference) | 1.0 | |
| primary | 1.1 | 0.71–1.68 |
| secondary | 0.7 | 0.45–1.14 |
| higher | 0.9 | 0.59–1.63 |
| Wealth quintile | | |
| lowest (reference) | 1.0 | |
| secondary | 0.8 | 0.62–1.10 |
| middle | 0.8 | 0.64–1.09 |
| fourth | 0.7 | 0.48–1.12 |
| highest | 0.4** | 0.28–0.76 |
| Women's occupation | | |
| not working (reference) | 1.0 | |
| professional | 0.9 | 0.71–1.38 |
| admin and Clerical | 1.4 | 0.84–2.33 |
| household, domestic and agriculture skilled | 1.2 | 0.84–1.86 |
| | 1.1 | 0.89–1.46 |
| Region | | |
| Malé | 2.1** | 1.30–3.49 |
| North | 1.5* | 1.02–2.34 |
| North Central | 1.1 | 0.67–1.66 |
| Central (reference) | 1.0 | |
| South Central | 1.2 | 0.75–1.95 |
| South | 1.6* | 1.05–2.47 |
| Opinion on whether female circumcision is required by their religion | | |
| No (reference) | | |
| Yes | 2.2*** | 1.46–3.44 |
| Opinion on whether female circumcision should continue | | |
| No (reference) | | |
| Yes | 2.7*** | 1.72–4.09 |

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Associations of Opinion Factors

Table 5 shows the cross-tabulation of the opinion variables with age and region. We observe that among women who believe FC is required by religion, 47 % were aged 25-39, and among women who believed FC should continue, 44 % were aged 25-39. The proportion of women who thought that FC is required by religion is highest in Malé (50 %) and the South Region (22 %). The same trend is found among women who thought FC should continue, with the highest in Malé (48 %) followed by the South Region (23 %).

Table 5. Cross-tabulation of opinion variables and background variables

| Variable | % | 95 % CI | p-value | % | 95 % CI | p-value |
|----------------------------------|---|-------------|---------|---------------------------------------|-------------|---------|
| Age (5-year gaps) | Opinion-FC is required by their religion | | | Opinion-FC should continue | | |
| 15-24 | 15 | [11.2,19.7] | <0.001 | 20.2 | [15.7,25.6] | <0.001 |
| 25-39 | 46.7 | [41.1,52.4] | | 43.6 | [37.8,49.6] | |
| 40 and above | 38.3 | [32.4,44.5] | | 36.2 | [30.2,42.7] | |
| Regions | Opinion-FC is required by their religion | | | Opinion-FC should continue | | |
| Malé | 49.8 | [43.2,56.5] | <0.001 | 48.1 | [40.5,55.7] | <0.001 |
| North | 20.8 | [16.9,25.4] | | 20.7 | [16.7,25.4] | |
| Central | 6.4 | [4.8,8.6] | | 7.8 | [5.9,10.4] | |
| South | 22.9 | [19.1,27.3] | | 23.4 | [19.0,28.4] | |

4. Discussion

This study aimed to assess the demographic, economic, and social factors associated with the occurrence of FC among women aged 15-49 in Maldives. The characteristics found to be positively associated with the occurrence of FC were age, wealth quintile, region, and attitudes towards FC.

The results show that being circumcised is generally reported among older women. Age was a significant and positive predictor of female circumcision in the logistic regression model. Our study also found that most women were circumcised when they were younger than age 5. This corroborates previous research that reported that the occurrence of FC is primarily seen in young girls ranging from birth to age 10 (Elduma, 2018; Gebremariam et al., 2016; Shell-Duncan et al., 2016). Furthermore, in a study in Egypt, Refaat et al. (2001) found that increasing age was a significant predictor of FGM prevalence. Similar findings are reported by Sakeah et al. (2018) and Karmaker et al. (2011), where it was found that increasing age was associated with a higher likelihood of having undergone FC. These studies also suggest that age plays a role in FC prevalence, with older women being more likely to have undergone the practice. However, it is important to note that the reasons for this association may vary across different cultural and geographic contexts.

The literature highlights that greater availability of and exposure to information in urban versus rural settings creates awareness among the communities and reduces the practice of FC. Yet, the higher odds found in Malé (entirely urban) compared to the Central Region (entirely rural) could be a result of increased rural-to-urban migration. Many Maldivians from the rural islands chose to relocate to Malé rather than the nearby regional centres (United Nations Maldives, 2020). Malé is now home to nearly half of the women in our sample, with many who may have relocated there in the past few decades (1980-2020) (United Nations Maldives, 2020).

At the household level, the wealth quintile was significantly associated with the occurrence of FC. Women in the highest wealth quintile had significantly lower odds of being circumcised than those from the lowest. However, the other wealth quintiles did not significantly differ compared to the lowest. This aligns with previous studies that found the main reason for the prevalence of FC is the family's economic status (Ahinkorah, 2021; Al Awar et al., 2020; Inungu, Tou, 2013).

When examining attitudes towards FC, among women who heard about circumcision, approximately 10 % believed that their religion requires FC, and 8% supported the continuance of FC in Maldives. The model shows that women who thought that FC was required by their religion or thought that FC should continue had more than twice the odds of being circumcised compared to women who did not hold these opinions. Cross-tabulations of these opinions by age have shown that nearly half of women aged 25 to 39 had these opinions. Since we have seen that circumcision usually occurs at a young age, these women in their reproductive prime may favour FC for their newborn daughters. Several studies have corroborated this finding, indicating that religious beliefs and cultural traditions play a significant role in perpetuating the practice of FC. For example,

a study conducted in Ethiopia found that religious beliefs and traditional attitudes towards female sexuality were the primary reasons for the continuation of FGM practice in the country (Alemu et al., 2021). Similarly, a study in Mali found that the majority of women believed that FGM was required by their religion, and those who held this belief were more likely to have been circumcised (Gudeta et al., 2022). However, some studies have contradicted this finding, suggesting that the relationship between religious beliefs and FC practice is complex and nuanced. For example, a study conducted in Kenya found that although religious beliefs were important in determining FC practice, the influence of religion varied depending on the type of religion and the cultural context. In some communities, FGM was practiced among both Christians and Muslims, while in others, it was only practiced by Muslims (Hughes, 2018). Overall, while there is evidence to suggest that religious beliefs and cultural traditions play a significant role in perpetuating the practice of FGM, the relationship between religion and FGM practice is complex and varies depending on the cultural context.

While this study only explored the association between age and region and the likelihood of holding these opinions, additional factors, such as educational attainment among women and women's empowerment, may affect these opinions. Various factors have been shown to have significantly contributed to the levels of opposition to FC, such as higher educational attainment among women, legislation prohibiting the practice, and awareness-raising programs (ARROW, Orchid Project, 2020; Dawson et al., 2020; WHO, 2008).

5. Conclusion

Based on the nationally representative 2016-17 Maldives DHS, this study identified factors associated with the occurrence of FC in The Maldives. The study shows high FC occurrence among older women, those from low economic backgrounds, and those residing in specific regions (Malé, North and South Regions). In addition, attitudes toward FC were found to be major determinants of FC occurrence. However, it should be noted here that the survey measured the current attitude, where FC had already happened in the past. This could also imply that the women had these views because they were circumcised.

6. Limitation

The study had both its limitations and its strengths. The study's strengths include using nationally representative data to investigate a significant public health issue of international concern and using a multi-stage sampling strategy to obtain a sizable sample size that allowed for the generalization of the results to the entire population. However, because the study used cross-sectional survey data, it was challenging to determine causality as opposed to associations. Additionally, there is a chance of recall bias because data on the primary independent and dependent variables were collected retrospectively.

7. Recommendations

This study demonstrates that further research is crucial to assess the prevalence and practice of FC in The Maldives. Research continues to be needed on aspects that can contribute to eliminating and preventing FC. In this study, we did not find a clear relationship between education or occupation and the occurrence of FC. More research is needed to understand how education and occupation affect FC in Maldives. Additional topics that require further study include the current prevalence and practice of FC in Maldives, girls' and women's experiences of the practice, psychological consequences of FC, and the impact of legal measures to prevent the practice.

The study also shows that policies and legislation focused on eliminating FC are essential because a percentage of women still believe FC is required by their religion and should be continued (10 % and 8 %, respectively). Bringing an end to FC requires a broad, long-term commitment. Our study found that diverse factors, including age, socio-economic status, region, and attitudes, were all associated with FC occurrence. Therefore, actions and interventions that eliminate FC must be multisectoral, sustained, and community-led. Sectors such as education, finance, justice, and the health sector should cooperate to take concerted action.

8. Declarations

Ethics approval and consent to participate

This article utilizes secondary datasets that were collected after requisite ethical approval.

Consent for publication

All authors read and approved the final version of the manuscript for publication and agree to be accountable for all aspects of the work, ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Availability of data and materials

The DHS Program datasets are publicly available and can be downloaded free of charge for research purposes. Researchers first have to register to gain access to the dataset. <https://dhsprogram.com/data/new-user-registration.cfm>.

Conflict of interest statement

The author reports no conflicts of interest.

Funding

Not applicable.

Authors' contributions

F.I. devised the project, the main conceptual ideas and the interpretation of data for the article. A.I.S. edited the article and revised it critically for important intellectual content. A.A. worked out almost all the technical details and performed the statistical analysis.


9. Acknowledgements


This study was conducted with support from the United States Agency for International Development (USAID) through The DHS Program (#720-OAA-18C-00083). The views expressed are those of the authors and do not necessarily reflect the views of USAID or the United States Government.

The DHS Program assists countries worldwide in the collection and use of data to monitor and evaluate population, health, and nutrition programs. For additional information about the DHS Program, contact: DHS Program, ICF, 530 Gaither Road, Suite 500, Rockville, MD 20850, USA; phone: +01 301-572-0950; fax: +01 301-572-0999; fax: +01 301-407-6501; email: reports@dhsprogram.com; Internet: www.dhsprogram.com.

Authors' ORCID

Fazeela Ibrahim  <https://orcid.org/0000-0002-0442-1860>

Asma Ibrahim Sulaiman  <https://orcid.org/0000-0001-7149-9409>

Amzath Ahmed  <https://orcid.org/0000-0003-1360-3831>

References

Ahinkorah, 2021 – Ahinkorah, B.O. (2021). Factors associated with female genital mutilation among women of reproductive age and girls aged 0–14 in Chad: A mixed-effects multilevel analysis of the 2014–2015 Chad demographic and health survey data. *BMC Public Health*. 21(1): 286. DOI: <https://doi.org/10.1186/s12889-021-10293-y>

Ainslie, 2015 – Ainslie, M.J. (2015). The 2009 Malaysian Female Circumcision Fatwa: State ownership of Islam and the current impasse. *Women's Studies International Forum*. 52: 1-9. DOI: <https://doi.org/10.1016/j.wsif.2015.06.015>.

Alemu et al., 2021 – Alemu, D.G., Haile, Z.T., Conserve, D.F. (2021). Attitude towards female circumcision among women in Ethiopia. *Sexual & Reproductive Healthcare*. 29: 100647.

ARROW, Orchid Project, 2020 – ARROW, Orchid Project. Asia Network to End Female Genital Mutilation/Cutting (FGM/C) Consultation Report. 2020. [Electronic resource]. URL: <https://arrow.org.my/publication/asia-network-to-end-female-genital-mutilation-cutting-fgm-c-consultation-report/> (date of access: 16.05.2022).

Berg, Denison, 2013 – Berg, R.C., Denison, E. (2013). A tradition in transition: Factors perpetuating and hindering the continuance of female genital mutilation/cutting (FGM/C) Summarized in a Systematic Review. *Health Care for Women International*. 34(10): 837-859. DOI: <https://doi.org/10.1080/07399332.2012.721417>.

- Cappa et al., 2019 – Cappa, C., Van Baelen, L., Leye, E. (2019). The practice of female genital mutilation across the world: Data availability and approaches to measurement. *Global Public Health*. 14(8): 1139-1152. DOI: <https://doi.org/10.1080/17441692.2019.1571091>.
- Cislaghi, Heise, 2018 – Cislaghi, B., Heise, L. (2018). Theory and practice of social norms interventions: Eight common pitfalls. *Globalization and Health*. 14(1): 83. DOI: <https://doi.org/10.1186/s12992-018-0398-x>
- Dawson et al., 2024 – Dawson, A., Rashid, A., Shuib, R., Wickramage, K., Budiharsana, M., Hidayana, I.M., Marranci, G. (2024). Addressing female genital mutilation in the Asia Pacific: the neglected sustainable development target. *Australian and New Zealand Journal of Public Health*. 44(1): 8-10. DOI: <https://doi.org/10.1111/1753-6405.12956>
- Elduma, 2018 – Elduma, A.H. (2018). Female Genital Mutilation in Sudan. *Open Access Macedonian Journal of Medical Sciences*. 6(2): 430-434. DOI: <https://doi.org/10.3889/oamjms.2018.099>
- Gebremariam et al., 2016 – Gebremariam, K., Assefa, D., Weldegebreal, F. (2016). Prevalence and associated factors of female genital cutting among young adult females in Jigjiga district, Eastern Ethiopia: A cross-sectional mixed study. *International Journal of Women's Health*. 8: 357-365. DOI: <https://doi.org/10.2147/IJWH.S111091>.
- Grose et al., 2019 – Grose, R.G., Hayford, S.R., Cheong, Y.F., Garver, S., Kandala, N.B., Yount, K.M. (2019). Community influences on female genital mutilation/cutting in Kenya: norms, opportunities, and ethnic diversity. *Journal of Health and Social Behaviour*. 60(1): 84-100.
- Gudeta et al., 2022 – Gudeta, T.A., Regassa, T.M., Gamtessa, L.C. (2022). Female genital mutilation: Prevalence, associated factors and health consequences among reproductive age group women in Keffa Zone, Southwest, Ethiopia. *Reproductive Health*. 19(1): 60. DOI: <https://doi.org/10.1186/s12978-022-01364-3>
- Hope for Women, 2012 – Hope for Women. Maldives NGO Shadow Report to the Committee on the Elimination of Discrimination against Women, 2012. Hope for Women Malé, Maldives.
- Hughes, L., 20 – Hughes, L. (2018). Alternative rites of passage: Faith, rights, and performance in FGM/C abandonment campaigns in Kenya. *African Studies*. 77(2): 274-292.
- Inungu, Tou, 2013 – Inungu, J., Tou, Y. (2013). Factors associated with female genital mutilation in Burkina Faso. *Journal of Public Health and Epidemiology*. 5(1): 20-28.
- Karmaker et al., 2011 – Karmaker, B., Kandala, N.B., Chung, D., Clarke, A. (2011). Factors associated with female genital mutilation in Burkina Faso and its policy implications. *International Journal for Equity in Health*. 10(1): 1-9.
- Kandala et al., 2019 – Kandala, N.B., Nnanatu, C.C., Atilola, G., Komba, P., Mavatikua, L., Moore, Z., ... , Shell-Duncan, B. (2019). A spatial analysis of the prevalence of female genital mutilation/cutting among 0–14-year-old girls in Kenya. *International Journal of Environmental Research and Public Health*. 16(21): 4155. DOI: <https://doi.org/10.3390/ijerph16214155>
- Koski, Heymann, 2019 – Koski, A., Heymann, J. (2019). Changes in support for the continuation of female genital mutilation/cutting and religious views on the practice in 19 countries. *Global Public Health*. 14(5): 696-708.
- Klein et al., 2018 – Klein, E., Helzner, E., Shayowitz, M., Kohlhoff, S., Smith-Norowitz, T.A. (2018). Female Genital Mutilation: Health Consequences and Complications—A Short Literature Review. *Obstetrics and Gynecology International*. 2018: 7365715. DOI: <https://doi.org/10.1155/2018/7365715>
- Mackie, 1996 – Mackie, G. (1996). Ending footbinding and infibulation: A convention Account. *American Sociological Review*. 61(6): 999–1017. DOI: <https://doi.org/10.2307/2096305>.
- Maldives: CEDAW Report, 2019 – Maldives: CEDAW Report. 6th periodic report submitted by Maldives under article 18 of the Convention, due in 2019: UN. [Electronic resource]. URL: <https://digitallibrary.un.org/record/3838548> (date of access: 19.05.2022).
- Ministry of Health..., ICF, 2018 – Ministry of Health [Maldives], ICF. Maldives Demographic and Health Survey 2016–17. Malé, Maldives, and Rockville, Maryland, USA: MOH and ICF, 2018.
- Minivan News, 2009 – Minivan News. Female circumcision occurring in Addu atoll, reveals AG. 10 December. 2009. [Electronic resource]. URL: <https://minivannewsarchive.com/politics/female-circumcision-occurring-in-addu-atoll-reveals-ag-1101> (date of access: 19.05.2022).

Minivan News, 2011 – Minivan News. Reported increase in practice of female circumcision raises alarm. 30 October, 2011. [Electronic resource]. URL: <https://minivannewsarchive.com/politics/reported-increase-in-practice-of-female-circumcision-raises-alarm-27670> (date of access: 19.05.2022).

Patel, Roy, 2016 – Patel, R., Roy, K. (2016). Female genital cutting in Indonesia; A field study. *Islamic Relief*, 1-28.

Refaat et al., 2001 – Refaat, A., Dandash, K.F., Defrawi, M.H.E., Eyada, M. (2001). Female Genital Mutilation and Domestic Violence among Egyptian Women. *Journal of Sex & Marital Therapy*. 27(5): 593-598. DOI: <https://doi.org/10.1080/713846819>.

Sakeah et al., 2018 – Sakeah, E., Debpuur, C., Oduro, A.R., Welaga, P., Aborigo, R., Sakeah, J.K., Moyer, C.A. (2018). Prevalence and factors associated with female genital mutilation among women of reproductive age in the Bawku municipality and Pusiga District of northern Ghana. *BMC Women's Health*. 18(1): 1-10.

Shell-Duncan et al., 2016 – Shell-Duncan, B., Naik, R., Feldman-Jacobs, C. (2016). A state-of-the-art synthesis on female genital mutilation/cutting: What do we know now? *Reproductive Health [Preprint]*. DOI: <https://doi.org/10.31899/rh8.1002>.

United Nations..., 2020 – United Nations Fund for Population Activities. Against human decency, against my will: Ending child marriage and female genital mutilation is a responsibility all of Maldives society must share, UNFPA Maldives. 2020. [Electronic resource]. URL: <https://maldives.unfpa.org/en/news/against-human-decency-against-my-will-ending-child-marriage-and-female-genital-mutilation> (date of access: 19.05.2022).

United Nations..., 2009 – United Nations International Children's Emergency Fund. Social dynamics of abandonment of harmful practices: A new look at the theory. 2009. DOI: <https://doi.org/10.18356/9813d82b-en>.

United Nations..., 2009a – United Nations International Children's Emergency Fund. Towards Zero Female Genital Mutilation. 2020. [Electronic resource]. URL: <https://www.unicef.org/maldives/press-releases/towards-zero-female-genital-mutilation> (date of access: 19.05.2022).

United Nations, 2022 – United Nations. United Nations: Gender equality and women's empowerment. United Nations Sustainable Development, 22 July, 2022. [Electronic resource]. URL: <https://www.un.org/sustainabledevelopment/gender-equality/> (date of access: 22.07.2022).

United Nations Maldives, 2020 – United Nations Maldives. Maldives common country analysis. United Nations in Maldives. 2020. [Electronic resource]. URL: <https://maldives.un.org/en/102363-maldives-common-country-analysis>, <https://maldives.un.org/en/102363-maldives-common-country-analysis> (date of access: 03.06. 2022).

World Health Organization, 2008 – World Health Organization. Eliminating female genital mutilation: An interagency statement - OHCHR, UNAIDS, UNDP, UNECA, UNESCO, UNFPA, UNHCR, UNICEF, UNIFEM, WHO. Geneva [Preprint]. 2008. [Electronic resource]. URL: <https://apps.who.int/iris/handle/10665/43839> (date of access: 16.05.2022).

World Health Organization, 2018 – World Health Organization. Care of girls and women living with female genital mutilation: A clinical handbook. World Health Organization, 2018.

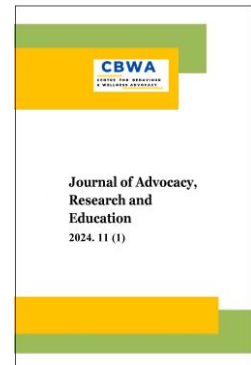
Williams-Breault, 2018 – Williams-Breault, B.D. (2018). Eradicating female genital mutilation/cutting. *Health and Human Rights*. 20(2): 223-233.



Publisher: Centre for Behaviour and Wellness
Advocacy, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
ISSN 2410-4981. E-ISSN 2508-1055
2024. 11(1): 38-46

DOI: 10.13187/jare.2024.1.38

Journal homepage:
<http://kadint.net/our-journal.html>



Financial Behavior and Knowledge Regarding Debt Payment and Its Relationship with Sociodemographic Variables

Arturo García-Santillán  ^{a, *}

^aTecnológico Nacional de México – Sede ITSM, Veracruz, Mexico

Abstract

The study aimed to determine the relationship between financial behavior and knowledge. We analysed the financial behavior of workers regarding the payment of credit card debt and its relationship with financial knowledge and sociodemographic variables. A non-probabilistic self-determination sample of workers from a corporation with nationwide coverage in Mexico was selected for the study. Three hundred fifty-seven cases were obtained, of which only 188 cases of workers who indicated having a credit card were selected. For the analysis of the data, to verify the relationship between the individual's decision with the independent variables, as well as the probability that an individual i belongs to the category $j = 1, 2, \dots, J$, was used in the Multinomial Logit Model. The sample was made up of 61 % men ($n = 230$) and 32.9 % women ($n=124$), with 6.1 % ($n = 23$) missing cases. The main findings showed that financial behavior was related to workers' knowledge about the financial conditions of credit and the variables of age and monthly income. Knowing the payment dates was significant in making the necessary payment to avoid generating interest and paying the total debt amount. In addition, it is more likely that the person will make the payment needed for not generating interest if they are over 40 years old, and it is more likely that the person will pay the full amount of the debt if they receive three minimum monthly salaries.

Keywords: debt, financial behavior, financial knowledge, Mexico, sociodemographic variables, workers.

1. Introduction

Financial knowledge and behavior play essential roles in global economic development. Financial knowledge is not necessarily related to the financial behavior of the individual. That is, people can know about various financial topics, for example, those related to using credit cards and credits in their different modalities, but they may not necessarily have good financial behavior. A large percentage of people usually finance themselves with credit cards and do so to cover the minimum required for each payment period. This brings with it the payment of interest on interest, and the debt accumulates, generating more interest because the entire debt is not covered. If only a part is paid, then it generates the interest payment on interest, which is charged to the cardholder for the next period.

* Corresponding author

E-mail addresses: agarcias@itsm.edu.mx (A. García-Santillán)

Received: 09 April 2024 Revised: 16 April 2024 Accepted: 21 April 2024 Published: 31 April 2024

Financial behavior is related to financial knowledge and undoubtedly affects the payment of debt individuals acquire. In this regard, Kaiser and Menkhoff (2017) conducted a meta-analysis of 126 studies evaluating financial education's impact on financial behavior. In their findings, they pointed out differences concerning financial education. These differences complicate the impact it may have on specific financial behaviors, such as debt management, so implementing education on financial topics is crucial when the time is right in this learning process. Financial behavior can be different between working people, housewives, students, and businessmen, most likely due to the type of education that each one has. However, it is evident that financial knowledge plays a very important role in people's financial behavior, such as having better savings habits, preparing personal budgets, and having better debt control.

About debt behavior, what happens when we have an emergency? Some traits or characteristics within the family, such as the life they usually have, specifically the hedonic lifestyle, can be a determining element in behavior towards debt. About this, Yulianah and Muflikhati (2023) carried out a study in the Jabodetabek region (Jakarta metropolitan area) whose sample was young married women. The study focused on analyzing the influence of family characteristics, the level of financial education and the hedonic lifestyle on debt management behavior in young families. In their findings, they did not find a tendency towards a hedonic lifestyle. Similarly, the behavior towards debt was classified as low. Furthermore, they verified that the age of the participants has an inverse relationship with debt behavior. Financial attitude influences behavior in debt management, so the better the attitude, the more reasoned the behaviour towards debt. An informed and reasoned financial attitude generates ideal behavior, translating into adequate money management and, consequently, controlled debt.

Concerning the issue of credit card debt, there is a peculiar behavior related to the payments usually made monthly. These payments can be for the entire debt or only partially, even the minimum payment. In this regard, we can say that the situations that have arisen worldwide, such as the COVID-19 pandemic, undoubtedly brought significant changes in the population. A report published by Marshal (2023) shows that credit card payments decreased considerably, derived from increased rates that reached historical highs, all within the American context. Before the pandemic, 43.5 % of cardholders paid the full balance. From May 2020 to April 2021, it increased to 51.4 % due to the stimuli the government granted due to the pandemic event. Subsequently, the percentage of cardholders who pay the total balance on their card has decreased to 46.3 %. With the emergence of credit cards as a payment instrument, it has become an essential tool that benefits card users with short-term credit and gives them financial access without having to carry money in addition to taking advantage of offers of installment purchases and deferred payments (Önder, 2018). The problem arises when there is a late payment or when it is not paid in total, even if only the minimum payment required is covered. This brings with it a credit that generates interest upon interest and becomes a debt, sometimes unpayable. The need brings with it the purchase, and the credit card is the means to solve an immediate need; hence the user's behavior can stop presenting rational behaviors and thus fall into debt.

In the Mexican context, *La Procuraduría Federal del Consumidor* (Federal Consumer Prosecutor's Office) and the *Comisión Nacional para la Defensa de los Usuarios de Servicios Financieros* (National Commission for the Defense of Users of Financial Services), make a recommendation to credit card users. The suggestion is to avoid paying only the minimum, extending the debt, and paying too much interest (Profeco, Condusef, 2021). Based on the previous arguments, the following questions arise: What is the behavior of users when it comes to the payment of credit cards? What is the relationship between financial knowledge and the sociodemographic variables of cardholders for their credit card payment? These questions emerge, considering that the credit granted by a credit card makes it easy to pay minimum amounts without necessarily having to pay the full balance.

2. Literature review

Several factors have been reported to be associated with debt behavior. For example, in the works of Jones et al. (2015), Moulton et al. (2013), and Reniers et al. (2017), who studied behavior towards debt, their results concluded that pragmatic debtors were older people with ample economic power, which means that they received incomes higher than the population average. Likewise, the existence of some sociodemographic variables associated with debt behavior has been

demonstrated, such as marital status, gender, household dimensions, and employment status (Bricker et al., 2012; Bruine de Bruin et al., 2010; Letkiewicz, Heckman, 2018). However, aversion to debt has been demonstrated in other populations, as is the case of black and minority ethnic groups (Ekanem, 2013).

From the literature, the behavior or level of debt is often associated with interest rates; when they fall or remain stable, the debtor tends to acquire more debt (Bofinger et al. 2016). Income level, gender, and education converge in types of pragmatic debtors (Loibl et al., 2021). Furthermore, debt pragmatists are generally credit users (Webley, Nyhus, 2001) and are users of online purchases, compared to those who do not like to get into debt or simply assume debt as something emergent. For their part, Gagarina and Shantseva (2017) analyze the differences between financial education and the socio-psychological characteristics of non-borrowers, borrowers and debtors. Their findings reported that debtors do not differ from borrowers who pay their debts on time, nor in social and demographic aspects; they only differ in their psychological traits. Furthermore, they point out that debtors have greater tolerance for debt. In the case of mortgages, there is evidence that suggests that as interest rates fall, the level of debt increases (Öchsner, 2018).

Likewise, debt can arise from the facilities provided by financial institutions to place their resources, even with the inclusion of digital tools that gave way to the emergence of digital finance. For example, Yue et al.'s (2022) data showed that such easy access to the credit market led to the inherent risk in debt. They pointed out that, as a risk determinant, digital finance impacted the granting of credit in households, which can lead to debt, which translates into poor management of family finances. It is essential to consider that financial management must go hand in hand with financial education and, to be more specific, with people's financial knowledge. Abdullah et al. (2022) conducted a study on analyzing debt, behavior towards debt, and money management skills. Their findings reported a significant relationship between debt management and the financing people obtain based on individuals' financial capacity. In this idea, some works examine the determinants of debt behavior in the millennial or Generation Y population, where technology is part of their life because they do everything through technology.

In this regard, Jamilakhon et al. (2020) examined the determinants of debt behavior in the Y population in Uzbekistan. In their results, they point out that, despite several studies that have been carried out that address the issue of savings and debt behavior, the relationship between financial education, attitude towards debt, the influence of peers and power prestige toward debt behavior among Generation Y, it is still not clear. This fact supported the need to implement more financial education programs since the greater people's knowledge of financial education issues, the better decisions about financing will be made (Abdullah et al., 2022; Michaud, 2017; Mukesh-Kumar, 2019). This brings sustainable debt management through proper money management and by making more reasoned decisions.

The evidence has shown that the benefits of financial education bring about better management of retirement savings and better debt management (Mukesh-Kumar, 2019). However, acquiring financial knowledge requires investing time and money. Likewise, it is important to prepare a financial budget to manage personal finances and identify events that may affect personal finances in relation to decisions and money management. Kurowski (2021) carried out a study whose result shows that people with a higher level of financial knowledge and debt are less affected by over-indebtedness. Even in times of crisis, people with a higher level of debt are better prepared to manage their debts.

3. Method

This work is carried out from the hypothetical deductive approach, whose econometric analysis explains the financial behavior of the participants with respect to the payment of credit card debt and its relationship with financial knowledge and sociodemographic variables. From the 377 cases, only workers who indicated having a credit card were selected, resulting in a sample of 188 cases. The dependent variable is obtained from the questionnaire question: What payment type do you make most frequently to cover your credit card debt? Whose response options are: a) pay a little more than the minimum or make the minimum payment, b) make the necessary payment not to generate interest, and c) pay the full amount. There are three mutually exclusive categories.

The categorical multinomial Logit model is used for the statistical analysis, according to the methodology used by Lusardi and Tufano (2015). The answer in a gives the base category. The Multinomial Logit model relates the individual’s decision to the independent variables (Greene, Mauleón Torres, 1999). The probability that an individual i belongs to category $j=1, 2, \dots, J$ is specified as follows:

$$Prob(Y_i = j) = \frac{e^{B'_j x_i}}{\sum_{k=0}^J e^{B'_k x_i}} \quad j = 0, \dots, J$$

The decision for any of the options depends on the independent variables X_i . Considering that in this research, there are three categories, then the following equations are defined:

$$Prob(Y = 1/x) = 1 - Prob(Y = 2/x) - Prob(Y = 3/x)$$

$$Prob(Y = 2/x) = \frac{e^{B'_2 x_i}}{1 + e^{B'_2 x_i} + e^{B'_3 x_i}}$$

$$Prob(Y = 3/x) = \frac{e^{B'_3 x_i}}{1 + e^{B'_2 x_i} + e^{B'_3 x_i}}$$

From the above, the parameter vectors B'_1 and B'_2 of size k are estimated by the Maximum Likelihood method. To determine the variables related to the payment decision, the t-test statistic is used. Under the null hypothesis $H_0: \beta_i = 0$ and $\alpha = 5\%$ (test significance level), the null hypothesis is rejected when p value $\leq \alpha$.

The independent variables are financial knowledge indicated by the person’s knowledge of the conditions and obligations regarding the credit card (knowledge of the Total Annual Cost and payment dates of the card), and the sociodemographic variables (sex, age, marital status, employment status and income). The results of the estimation allow us to identify the determinants of the payment decision.

3. Results

To verify the reliability and internal consistency of the instrument, Cronbach’s alpha test for the internal consistency of items yielded a value $\alpha = 0.716$. The sample was made up of 61 % men ($n = 230$) and 32.9 % women ($n = 124$), with 6.1 % ($n = 23$) of missing cases. The age range of most participants (35.3 %, $n = 133$) was more than 40 years old. Also, 37.1 % ($n = 140$) reported that no one had influenced their financial knowledge. The majority (32.4 %, $n = 122$) of participants in the study still lived with their families. In relation to the marital status, 40.3 % ($n = 152$) of the participants were single while employment status is more concentrated in people who only work (70 %, $n = 264$). The main percentages in terms of the income they receive for their work, activity or business they carry out, 38.7 % ($n = 146$) receive income between \$3,000.00 to \$4,999.00 Mexican pesos (approximately 176 to 294 dls. at the exchange rate of the dollar). Finally, of the total cases (377), only 188 indicated that they use a credit card, so this data is used to estimate the model. See Table 1 for the sociodemographic profile of the participants.

Table 1. Descriptive sociodemographic profile

| PIFK: Person influencing financial knowledge. | | Frequency | % |
|--|-----------------|-----------|------|
| Valid | Mother | 102 | 27.1 |
| | Father | 74 | 19.6 |
| | Brothers | 12 | 3.2 |
| | Friends | 26 | 6.9 |
| | Nobody | 140 | 37.1 |
| | Total | 354 | 93.9 |
| Lost System | 23 | 6.1 | |
| PLW: People living with participants | | Frequency | % |
| Valid | Alone | 74 | 19.6 |
| | Parents | 61 | 16.2 |
| | Friends | 8 | 2.1 |
| | Boy/girl friend | 75 | 19.9 |

| PIFK: Person influencing financial knowledge. | | Frequency | % |
|---|------------------------|-----------|------|
| | Family | 122 | 32.4 |
| | Other | 14 | 3.7 |
| | Total | 354 | 93.9 |
| Lost | System | 23 | 6.1 |
| CS: Civil status | | Frequency | % |
| Valid | Single | 152 | 40.3 |
| | Married | 107 | 28.4 |
| | Free Union | 61 | 16.2 |
| | Separate | 18 | 4.8 |
| | Divorced | 13 | 3.4 |
| | Widower | 3 | 0.8 |
| | Total | 354 | 93.9 |
| Lost | System | 23 | 6.1 |
| CES: Current employment status | | Frequency | % |
| Valid | Only work | 264 | 70.0 |
| | Work and study | 52 | 13.8 |
| | Work and seek to study | 38 | 10.1 |
| | Total | 354 | 93.9 |
| Lost | System | 23 | 6.1 |
| S-C: Seniority in the company | | Frequency | % |
| Valid | 1 year | 270 | 71.6 |
| | > 5 - 10 years | 21 | 5.6 |
| | >1 - 3 years | 36 | 9.5 |
| | > 10 years | 10 | 2.7 |
| | >3 -to 5 years | 17 | 4.5 |
| | Total | 354 | 93.9 |
| Lost | System | 23 | 6.1 |
| HMEW: How much you earn or receive for your work, activity or business | | Frequency | % |
| Valid | No aplicable | 19 | 5.0 |
| | Less than \$3,000 | 22 | 5.8 |
| | \$3,000 - \$4,999 | 146 | 38.7 |
| | \$5,000 - \$7,999 | 59 | 15.6 |
| | \$8,000 – 12,999 | 84 | 22.3 |
| | \$13,000 - \$20,000 | 13 | 3.4 |
| | More than \$20,000 | 11 | 2.9 |
| | Total | 354 | 93.9 |
| Lost | System | 23 | 6.1 |

Table 2 shows the result of the multinomial Logit econometric model estimation, which seeks to demonstrate whether the behavior and financial knowledge of the participants in the study are related to the sociodemographic variables.

Table 2. Estimation of the Logit multinomial model

| | Coefficient | St. Dev. | z | Value - p | |
|---|-------------|----------|--------|-----------|---|
| Category =2 (just payment of the necessary amount, not generate interest on charge) | | | | | |
| Constant | -1.07772 | 0.614159 | -1.755 | 0.0793 | * |
| Knowledge of Total Annual Cost | 0.706201 | 0.468023 | 1.509 | 0.1313 | |
| Knowledge of card payment dates | 1.1774 | 0.472779 | 2.49 | 0.0128 | * |

| | | | | | |
|---|------------|--------------|-------------|--------|---|
| Gender (Male) | -0.636380 | 0.48640 7 | -1.308 | 0.1908 | |
| Age: 18 to 25 years (category of reference) | | | | | |
| 26 to 30 años | 0.877904 | 0.67082 8 | 1.309 | 0.1906 | |
| 30 to 40 años | 1.04589 | 0.652128 | 1.604 | 0.1088 | |
| More than 40 years | 1.16822 | 0.6471 | 1.805 | 0.071 | * |
| Civil status (married) | -0.129612 | 0.466176 | -0.278 0 | 0.781 | |
| Labor status (only work) | 0.508737 | 0.46940 2 | 1.084 | 0.2785 | |
| Income: 1 monthly minimum salary (category of reference) | | | | | |
| 2 monthly minimum salary | 0.138774 | 0.442155 | 0.3139 | 0.7536 | |
| 3 monthly minimum salary | 1.6307 | 1.15306 | 1.414 | 0.1573 | |
| Category = 3 (payment of the total amount of debt) | | | | | |
| Constant | -1.81050 | 0.70965 5 | -2.551 | 0.0107 | * |
| Knowledge of Total Annual Cost | 0.624874 | 0.503713 | 1.241 | 0.2148 | * |
| Knowledge of card payment dates | 1.50197 | 0.55292 4 | 2.716 | 0.0066 | * |
| Gender (Male) | -0.156523 | 0.532961 | -0.293 7 | 0.769 | * |
| Ages: 18 to 25 years (category of reference) | | | | | |
| 26 to 30 years | -0.0180427 | 0.74986 8 | -0.024 0 | 0.9808 | |
| 30 to 40 years | 0.43932 | 0.703017 | 0.6249 | 0.532 | |
| More than 40 years | 0.636628 | 0.70814 8 | 0.899 | 0.3687 | |
| Civil status (married) | -0.144245 | 0.51321 | -0.281 1 | 0.7787 | |
| Labor status (only work) | 0.765342 | 0.523917 | 1.461 | 0.1441 | |
| Income: 1 monthly minimum salary (category of reference) | | | | | |
| 2 monthly minimum salary | 0.0171287 | 0.487194 | 0.0351 6 | 0.972 | |
| 3 monthly minimum salary | 2.22378 | 1.17657 | 1.89 | 0.0588 | * |
| Mean of the dependent variable = 2.074468 | | | | | |
| Standard deviation of the dependent variable = 0.712597 | | | | | |
| Number of 'correctly predicted' cases = 103 (54.8%) | | | | | |
| Likelihood ratio test: Chi-square(20) = 37.4208 [0.01404] | | | | | |
| Notes: *, **, ***: statistical significance (p-value) at 10 %, 5 %, 1 % respectively. | | | | | |

4. Discussion

Our study suggested that financial behavior is related to participants' knowledge about the financial conditions of the credit, participants' age, and monthly income. This result does not agree with the study by Yulianah and Muflikhati (2023), who analyzed whether the level of financial education influenced behavior in debt management, whose results showed that behavior towards debt was low. Showing a financial attitude based on well-founded arguments translated into appropriate behavior, favouring debt management and undoubtedly results in good debt control. The variable knowledge of payment dates is significant when participants made the necessary payment to avoid generating interest), as well as when they paid the total amount of the debt: 5 % and 1 %, respectively. The positive coefficient of the variable indicates that the person is more likely

to make a payment that covers what is required not to generate interest or, more likely if he is aware of the payment dates.

From the results, it is more likely that a person will make the necessary payment not to generate interest if they are over 40 years old (p-value = 10 %). The person is more likely to pay the full amount of the debt if they receive three minimum monthly salaries (p-value = 10 %). This result partially confirms the findings reported by Marshal (2023), who pointed out that 43.5 % of cardholders paid the total balance before the pandemic, which increased to 51.4 %. Besides, it has been identified that a more tolerant attitude is observed at early ages (Brennan et al., 2011; McManus, Schafer, 2014; Schooley, Worden, 2010). For their part, Loiblet al. (2021) conducted a study in German populations and identified a type of debtor, at least one in five reports being a pragmatic debtor.

5. Conclusion

Undoubtedly, credit cards have become an excellent financial tool for purchasing in a varied global market. They provide pre-established credit by the financial institution with its client, which can be used continuously; the available balance is the difference between the total authorized credit and the amount used. As the credit used is paid, the credit available will be greater to continue using it. However, it is important to emphasize that adequate credit card payment management will reduce the financial cost for the card user. It is essential to note that financial behavior is associated with knowledge about the financial conditions of the credit, participants' age, and monthly income.

In the theoretical arguments, some users only make the minimum payments, which causes the rest of the balance to generate interest on interest since, by not covering the total amount, the difference between the payment and the balance is again financed for the next period. Thus, it is advisable to remember that proper debt management will prevent credit card users from falling into a state of over-indebtedness, which would generate a high financial cost for them. The proper use of credit cards offers benefits such as monthly purchases without interest, punctuality in payment, and payment of the amount due will help people avoid generating interest in the future.

6. Implications for future research

A limitation in empirical studies is the size of the samples that can be obtained. Although the number of participants (377) is considered a good sample, it had to be reduced (since it was necessary to use the cases of those who responded that they do use credit cards). Therefore, it is suggested that future studies continue exploring the greatest possible number of cases and contexts of users who use credit cards as part of their daily financial tools. A recommendable sector of the population should include housewives, who usually manage family expenses and make purchases inherent to the family, such as groceries, education, health and recreation.

7. Declarations

Ethics approval and consent to participate

This study is carried out in accordance with the recommendations of the Code of Ethics of the National Technology of Mexico. The Research Ethics Committee of the Division of Graduate Studies and Research approved the protocol. In accordance with the Declaration of Helsinki, all workers gave their consent for participation in the study.

Consent for publication

Not applicable.

Availability of data and materials

Data and materials associated with this study are available upon request.

Conflict of interest statement

The author declares no conflict of interest.

Funding

This research received no external funding.


Author contributions

This document is the work of the author, as an intellectual contribution of his academic work, which he approved for publication.

8. Acknowledgements

My gratitude goes to Prof. Sergio Hernández Mejía, Ph.D. for his contributions and recommendation in this manuscript.

Authors' ORCID

Arturo García-Santillán  <https://orcid.org/0000-0001-7284-5959>

References

- Abdullah et al., 2022** – Abdullah, A.H., Tuan Zainal Abidin, T.A.Z., Ahmad Nizam, N.N., Azizan, W.W., Misiran, M., Md Yusof, Z., Supadi, S.S. (2022). Determining the correlation between behavior, debt and money management among young adults. *Journal of Computational Innovation and Analytics*. 1(2): 111-127. DOI: <https://doi.org/10.32890/jcia2022.1.2.6>
- Bofinger et al., 2016** – Bofinger, P., Schnabel, I., Feld, L.P., Schmidt, C.M., Wieland, V. (2016). Niedrig-zinsen weder für den Euro-Raum noch für Deutschland Angemessen [Low interest rates are not appropriate for the euro area or Germany]. In *Jahresgutachten 2016/17* (November 2), Chapter 5. Wiesbaden:Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung, Statistisches Bundesamt. [in German]
- Brennan et al., 2011** – Brennan, L., Zevallos, Z., Binney, W. (2011). Vulnerable consumers and debt: Can social marketing assist? *Australasian Marketing Journal*. 19 (3): 203-211.
- Bricker et al., 2012** – Bricker, J., Bucks, B., Kennickell, A., Mach, T., Moore, K. (2012). The financial crisis from the family's perspective: Evidence from the 2007–2009 SCF panel. *Journal of Consumer Affairs*. 46(3): 537-555.
- De Bruin et al., 2010** – De Bruin, W.B., Van der Klaauw, W., Topa, G., Downs, J.S., Fischhoff, B., Armantier, O. (2010). Expectations of Inflation: The Role of Financial Literacy and Demographic Variables. *Journal of Consumer Affairs*. 44(2): 381-402.
- Ekanem, 2022** – Ekanem, I. (2013). Influences on the behaviour of black and minority ethnic (BME) communities towards debt and bankruptcy. *International Journal of Consumer Studies*. 37(2): 199-205.
- Gagarina, Shantseva, 2022** – Gagarina, M.A., Shantseva, A.A. (2017). Socio-psychological peculiarities and level of financial literacy of Russian debtors. *Review of Business and Economics Studies*. 5(2): 5-22.
- Greene, Mauleón Torres, 1999** – Greene, W.H., Mauleón Torres, I. (1999). Análisis econométrico [Econometric analysis]. 3ra. Edición. Editorial Prentice Hall. [in French]
- Jamilakhon et al., 2022** – Jamilakhon, K., Singh, J. S. K., Subramaniam, A., Supramaniam, S. (2022). Determinants of debt behavior. A quantitative study among Generation Y individuals in Tashkent, Uzbekistan. *Tests Engineering & Management*. 82(1-2): 891-904.
- Jones et al., 2015** – Jones, L.E., Loibl, C., Tennyson, S. (2015). Effects of informational nudges on consumer debt repayment behaviors. *Journal of Economic Psychology*. 51: 16-33.
- Kaiser, Menkhoff, 2017** – Kaiser, T., Menkhoff, L. (2017). Does financial education impact financial literacy and financial behavior, and if so, when? *The World Bank Economic Review*. 31(3): 611-630.
- Kurowski, 2021** – Kurowski, Ł. (2021). Household's overindebtedness during the COVID-19 crisis: The role of debt and financial literacy. *Risks*. 9(4): 62. DOI: <https://doi.org/10.3390/risks9040062>
- Landaberry, 2017** – Landaberry, M.V. (2017). Factores determinantes de la probabilidad de no pago de deuda de los hogares uruguayos [Determinants of the probability of non-payment of debt by Uruguayan households]. Banco Central de Uruguay, Working paper. [Electronic resource]. URL: <https://shorturl.at/itHIV> [in Spanish]
- Letkiewicz, Stuart, 2018** – Letkiewicz, J.C., Stuart J.H. (2018). Homeownership among Young Americans: A Look at Student Loan Debt and Behavioral Factors. *Journal of Consumer Affairs*. 52(1): 88-114.
- Loibl et al., 2021** – Loibl, C., Letkiewicz, J., McNair, S., Summers, B., Bruine de Bruin, W. (2021). On the association of debt attitudes with socioeconomic characteristics and financial behaviors. *Journal of Consumer Affairs*. 55(3): 939-966. DOI: <https://doi.org/10.1111/joca.12384>
- Lusardi, Tufano, 2015** – Lusardi, A., Tufano, P. (2015). Debt literacy, financial experiences, and over indebtedness. *Journal of Pension Economics and Finance*. 14: 332-328.

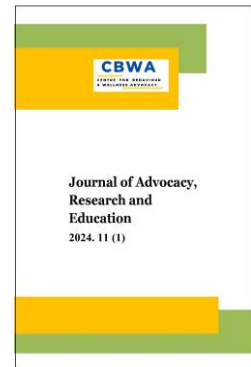
- McManus, Schafer, 2014 – McManus, R., Schafer, C. (2014). Final arrangements: Examining debt and distress. *Mortality*. 19(4): 379-397.
- Michaud, 2017 – Michaud, P. (2017). The value of financial literacy and financial education for workers. *IZA World of Labor* 2017: 400. DOI: 10.15185/izawol.400
- Mukesh-Kumar, 2019 – Mukesh-Kumar, M. (2019). Financial Literacy and Education for Improving Financial Skills. November 17. DOI: <http://dx.doi.org/10.2139/ssrn.3488670>
- Moulton et al., 2013 – Moulton, S., Loibl, C., Samak, A., Michael Collins, J. (2013). Borrowing capacity and financial decisions of low-to-moderate income first-time homebuyers. *Journal of Consumer Affairs*. 47(3): 375-403.
- Öchsner, 2018 – Öchsner, T. (2018). Die zeit der mini-bauzinsen endet, *Süddeutsche Zeitung* [The time of mini-construction interest rates is ending, *Süddeutsche Zeitung*]. (March 5). Munich: Süddeutsche Zeitung Digitale Medien GmbH, Süddeutsche Zeitung GmbH. [in German]
- Önder, 2018 – Önder, K. (2018). The effect of credit card usage on consumer behavior. *International Journal of Eurasia Social Sciences*. 9: 1099-1120.
- Reniers et al., 2017 – Reniers, R.L., Beavan, A., Keogan, L., Furneaux, A., Mayhew, S., Wood, S.J. (2017). Is it all in the reward? Peers influence risk-taking behaviour in young adulthood. *British Journal of Psychology*. 108(2): 276-295.
- Schooley, Worden, 2010 – Schooley, D.K., Worden, D.D. (2010). Fueling the credit crisis: Who uses consumer credit and what drives debt burden? *Business Economics*. 45(4): 266-276.
- Yue et al., 2022 – Yue, P., Korkmaz, A.G., Yin, Z., Zhou, H. (2022). The rise of digital finance: Financial inclusion or debt trap? *Finance Research Letters*. 47: 102604. DOI: <https://doi.org/10.1016/j.frl.2022.103563>
- Yulianah, Muflikhati, 2022 – Yulianah, Muflikhati, I. (2023). The Influence of Financial Literacy and Lifestyle on Debt Management Behavior in Young Married Families. *Journal of Child, Family, and Consumer Studies*. *Journal of Child, Family, and Consumer Studies*. 2(1): 69-78. DOI: <https://doi.org/10.29244/jcfcs.2.1.69-7>



Publisher: Centre for Behaviour and Wellness
Advocacy, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
ISSN 2410-4981. E-ISSN 2508-1055
2024. 11(1): 47-60

DOI: 10.13187/jare.2024.1.47

Journal homepage:
<http://kadint.net/our-journal.html>



Technostress and Determinants of Academic Success among University Students: Mediation Role of Technological Literacy

Prince Addai ^a, Michelle Afrifah ^a, Isaac Okyere ^a, Gloria Tachie-Donkor ^{b, c},
Jacob Owusu Sarfo ^{b, *}

^a Ghana Communication Technology University, Accra, Ghana

^b University of Cape Coast, Cape Coast, Ghana

^c University of South Africa, Pretoria, South Africa

Abstract

Technology integration has become pervasive in the constantly evolving domain of education, presenting diverse avenues for learning and engagement among university students. However, amidst these benefits, technology's widespread use also brings challenges, with technostress emerging as a prominent concern. This research aims to assess the impact of technostress on students' academic motivation and psychological well-being while concurrently exploring the mediating influence of technological literacy. Using a time-lagged cross-sectional design, data on technostress, academic motivation, psychological well-being and technological literacy were gathered from 349 university students. Data analysis was conducted using JASP software with Bootstrap resampling of 5,000 replications. Findings from the study revealed a negative impact of technostress on determinants of academic success (academic motivation and psychological well-being) among students. Technological literacy was also identified as a partial mediator of the adverse effects of technostress on the determinants of academic success (academic motivation and psychological well-being). These findings have implications beyond academia, offering valuable insights for educators, policymakers, and mental health professionals. Recognising the crucial role of technological literacy in mitigating the adverse effects of technostress enables the development of effective interventions aimed at empowering students to enhance their academic motivation and psychological well-being.

Keywords: Academic Motivation, Academic Success, Psychological Well-being, Technological literacy, Technostress, University students.

1. Introduction

Scholarly attention has increasingly shifted towards identifying the factors predicting university students' academic success (Whelan et al., 2022). These determinants are instrumental in shaping the future achievements of students. Vallone et al. (2023) emphasised that elucidating these determinants is crucial for enhancing student success within the higher educational context. Academic motivation and psychological well-being have emerged as significant determinants of students' academic success (Consiglio et al., 2023; Peng, 2021). Focusing on these factors is

*Corresponding author

E-mail address: jacob.sarfo@ucc.edu.gh (J.O. Sarfo)

Received: 04 February 2024 Revised: 20 April 2024 Accepted: 23 April 2024 Published: 31 April 2024

significant for developing comprehensive strategies to promote student success and well-being in academic settings.

Academic motivation is a fundamental predictor of student success (Hu, Luo, 2021). This multifaceted construct encapsulates both internal cognitive processes and external environmental factors that drive, guide, and maintain students' actions toward academic objectives. Interest in understanding the dynamics of student academic motivation has surged, drawing considerable attention from intellectuals and researchers alike (Asad et al., 2023; Rey-Merchán, López-Arquillos, 2022). This heightened interest can be attributed to the profound impact of academic motivation on students' levels of engagement, perseverance, and academic accomplishments (Consiglio et al., 2023).

Similarly, psychological well-being is critical in shaping students' academic success (Peng, 2021). Psychological well-being encompasses various mental and emotional health dimensions, including life satisfaction, sense of purpose, resilience, and quality of interpersonal relationships (Addai et al., 2023; Peng, 2021). Recognizing the interconnectedness of academic motivation and psychological well-being is essential for cultivating a supportive learning environment conducive to students' holistic development and academic achievement (Hu, Luo, 2021). Since the emergence of academic motivation and psychological well-being as prominent research areas, scholars have diligently sought to identify the predictors of these crucial determinants of student performance (Upadhyaya, Vrinda, 2021). However, researchers studying factors affecting academic motivation and psychological well-being, especially in Ghana, have largely overlooked technostress despite its significance as a pressing concern among students.

This oversight is particularly significant given the limited empirical research addressing how technostress impacts academic motivation and psychological well-being (Peng, 2021; Rey-Merchán, López-Arquillos, 2022). Consequently, scholars have highlighted the imperative need to investigate the influence of technostress on these pivotal determinants of academic success. This study thus represents a modest endeavour to bridge this research gap and address this critical lacuna in the existing literature. Moreover, existing empirical investigations on technostress among students have predominantly adopted a main effects approach to examine the impact of technostress on academic success determinants (Rey-Merchán, López-Arquillos, 2022; Tinmaz, 2022). However, these studies have tended to overlook the potential influence of various personal and contextual factors that may mitigate the relationship between technostress and determinants of academic success.

Recent studies (Asad et al., 2023; Upadhyaya, Vrinda, 2021) in the domain of technostress and determinants of students' performance have ventured beyond the main effect relationship. They have begun to explore alternative explanatory mechanisms underlying this relationship. Remarkably, these studies have highlighted the importance of considering additional personal and contextual variables that may mediate the relationship between technostress and academic success determinants (Tinmaz, 2022; Whelan et al., 2022). Thus, there is a growing recognition of the need to investigate further diverse factors that may elucidate the relationship between technostress and students' performance determinants.

In light of this, the present research adopts a novel approach by introducing technology literacy as a mediating variable. This innovative perspective aims to enhance our understanding of the association between technostress and determinants of student success. By examining the role of technology literacy in mediating the effect of technostress on academic motivation and psychological well-being, this study aims to reveal detailed insights into the complex interplay of technostress within the academic context. Through this exploration, we aim to contribute to the existing body of knowledge by offering fresh perspectives and shedding light on previously unexplored avenues through which technostress influences students' academic experiences and outcomes.

2. Literature review and hypothesised predictions

Technostress

In an era defined by rapid technological advancements, the integration of technology into educational environments has become ubiquitous, with promises of enhanced learning experiences and improved academic outcomes (Peng, 2021). However, alongside these advancements comes a growing concern regarding the negative impact of technology use, particularly among university students who are increasingly reliant on technology for their academic pursuits. This growing

concern has given rise to the concept of technostress (Upadhyaya, Vrinda, 2021). Technostress refers to the negative psychological and physiological reactions that individuals experience as a result of their interaction with technology (Asad et al., 2023). It encompasses feelings of frustration, anxiety, and overwhelm stemming from constant exposure to digital devices (Tinmaz, 2022).

There are numerous sources of technostress among students in higher institutions. One primary source of technostress is overwhelmed exposure to emails, notifications, and online information to manage daily (Whelan et al., 2022). This perpetual bombardment of digital stimuli can lead to feelings of anxiety, distraction, and cognitive overload, ultimately hindering students' ability to concentrate effectively on their academic tasks (Masluk et al., 2023). Additionally, the rapid pace of technological innovation and frequent updates to software and hardware can contribute to technostress among students (Hu, Luo, 2021). Many students struggle to keep up with the latest technological advancements and adapt to new digital tools and platforms introduced in academia. This constant need to learn and master new technologies can create frustration, inadequacy, and apprehension, particularly for students with little knowledge of technology (Hu, Luo, 2021).

Determinants of Academic Success

Academic motivation

Academic motivation refers to individuals' drive, desire, and commitment towards engaging in academic tasks (Mahapatra et al., 2023). It encompasses the internal processes and external factors that energise, direct, and sustain students' behaviour towards learning and academic endeavours (Whelan et al., 2022). Academic motivation can be categorised into intrinsic and extrinsic motivation (Mahapatra et al., 2023). Intrinsic motivation is characterised by students' internal desire for learning and personal growth, while extrinsic motivation involves external rewards or consequences influencing students' behaviour (Boyer-Davis et al., 2023). Various factors contribute to academic motivation, including students' self-efficacy beliefs, goal orientation, perceived autonomy, and the perceived value of academic tasks. Academic motivation is essential for student success and achievement because it influences students' engagement in learning activities and persistence in facing challenges (Saleem et al., 2024). It also fosters a strong internal desire in students to engage in academic tasks and achieve academic success (Upadhyaya, Vrinda, 2021).

Psychological well-being

Psychological well-being among students encompasses their overall satisfaction with life, sense of purpose, ability to handle challenges, and the quality of their relationships (Dragano, Lunau, 2020). It is a multidimensional construct involving both subjective experiences and objective indicators of mental health and well-being (Ioannou et al., 2024). This well-being is crucial for students' overall quality of life, academic success, and achievement (Galvin et al., 2022). They are better equipped to manage stress, cope with academic challenges, and maintain a positive attitude towards learning (Masluk et al., 2023). Students with high levels of psychological well-being can more effectively engage in their studies, develop meaningful relationships, and thrive academically and personally (Schauffel et al., 2022). Educators, parents, and institutions play a crucial role in promoting psychological well-being among students by providing support, fostering positive relationships, and offering resources for mental health and wellness (Sommovigo et al., 2023).

Technostress and determinants of academic success

Existing research has demonstrated a strong negative correlation between technostress and students' academic performance (Mahapatra et al., 2023; Schettino et al., 2022). Technostress can significantly impact the determinants of academic success, namely psychological well-being and academic motivation, in two main ways. Firstly, technostress often arises from factors such as information overload, constant interruptions, and the rapid evolution of technology (Dragano, Lunau, 2020). This can overwhelm students, leading to feelings of anxiety, frustration, and cognitive exhaustion, thereby undermining their psychological well-being and diminishing their academic motivation (Asad et al., 2023; Schettino et al., 2022). Secondly, technical glitches, software errors, and connectivity issues are commonplace when using digital tools and online platforms for academic purposes (Masluk et al., 2023). Dealing with such technological malfunctions can be frustrating and time-consuming, resulting in increased stress levels and decreased motivation to engage in academic activities (Ioannou et al., 2024). Moreover, the unpredictability of technology and the uncertainty surrounding the successful completion of

academic tasks using technology may further exacerbate students' anxiety and undermine their confidence in their ability to achieve academic success.

According to Saleem et al. (2024), technostress is a determining factor in students' motivation levels in higher education institutions. Technostress has been found to significantly impact academic motivation, influencing students' drive, enthusiasm, and commitment to engage in academic tasks and pursue their educational goals (Boyer-Davis et al., 2023). Researchers who support this view argue that technostress-induced information overload may diminish students' motivation to seek out additional resources, conduct research, or explore new topics, as they may perceive such tasks as daunting and mentally exhausting (Upadhyaya, Vrinda, 2021; Vallone et al., 2023). Supporting this perspective, a study by Saleem et al. (2024) indicated a significant negative association between technostress and academic motivation.

Prior research has established a positive correlation between psychological well-being and academic performance, underscoring its significance in determining student academic success (Galvin et al., 2022). Technostress can lead to information overload, characterised by an excessive influx of digital information that surpasses students' cognitive capacity to process and absorb academic activities (Masluk et al., 2023; Schaufel et al., 2022). This overload can result in cognitive strain, hindering students' ability to concentrate, retain information, and make effective decisions. Consequently, students may experience heightened mental fatigue, frustration, and difficulty managing academic tasks, ultimately compromising their psychological well-being (Mondo et al., 2023; Sommovigo et al., 2023). A study conducted by Ioannou et al. (2024) unveiled a significant negative relationship between technostress and psychological health. Similarly, Dragano and Lunau (2020) identified a significant negative correlation between technostress and students' psychological well-being. These findings highlight the detrimental impact of technostress on students' mental health and overall psychological well-being.

Examining the consequences of technostress, it becomes apparent that the persistent presence of information overload and the intricate nature of technology align with diminished academic success, encompassing both academic motivation and psychological well-being among students. Consequently, we propose the following predictions (Figure 1):

H1. Technostress will exert a negative and statistically significant impact on academic motivation among students.

H2. Technostress will exert a negative and statistically significant impact on the psychological well-being of students.

Technological literacy as a mediator

According to Ozkan Hidiroglu et al. (2021), technological literacy refers to the capability to understand, evaluate, and utilise various technologies proficiently and knowledgeably. It encompasses various skills and competencies for navigating digital tools, platforms, and systems (Tatli et al., 2023). Technological literacy requires not only practical proficiency in using technology but also critical thinking skills to assess the impact, reliability, and ethical considerations associated with technological applications (Erdem et al., 2022). Within an educational setting, technological literacy is crucial for students to excel in a technology-driven world and actively engage in contemporary society (Yeşilyurt, Vezne, 2023). It empowers individuals to adapt to rapidly changing technological landscapes, critically analyse digital information, and leverage technology to improve learning, communication, and productivity (Yeşilyurt, Vezne, 2023).

Technological literacy is recognised as a significant contributor to the modern workplace, playing a crucial role in enhancing the determinants of academic success (Ozkan Hidiroglu et al., 2021). A proficient and optimistic grasp of technological literacy instils a sense of inspiration among employees, thereby improving leadership ideals in predicting determinants of academic success (Yeşilyurt, Vezne, 2023). Research conducted by Sousa and Rocha (2019) highlighted that technological literacy mediates the relationship between technostress and academic achievement. Similarly, Yeşilyurt and Vezne (2023) found that technological literacy influences the relationship between technostress and psychological well-being. Technological literacy equips individuals with various digital coping resources and strategies to mitigate technostress. For example, technologically literate students may utilise digital tools such as stress management websites to alleviate stress and promote well-being (Erdem et al., 2022; Tatli et al., 2023).

In this study, technological literacy is a mediator facilitating the connections between technostress and the determinants of academic success, namely academic motivation and psychological well-being. It can be contended that technological literacy plays a crucial role in understanding how technostress impacts academic motivation and psychological well-being among students. As suggested by Sousa and Rocha (2019), one effective approach to assess technological literacy in academic settings is to view it as a facilitator (or mediator) in the relationship between technology-related factors and academic success. Therefore, perceived technological literacy serves as a framework for elucidating the interplay between technological factors and the determinants of academic success among students. Building upon this premise, we propose the following hypotheses (Figure 1):

H3. Technological literacy will mediate the relationship between technostress and academic motivation among students.

H4. Technological literacy will mediate the relationship between technostress and psychological well-being.

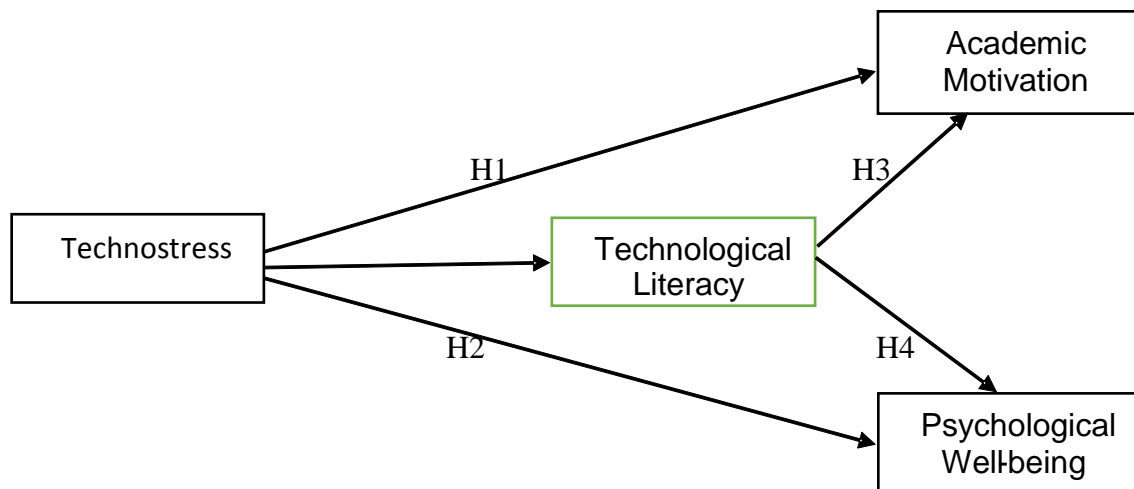


Fig. 1. Conceptual Framework

3. Methods

Research design

The study utilised a quantitative survey delving into the role of technological literacy as a mediator in the relationship between technostress and students' determinants of academic success, namely academic motivation and psychological well-being. Adopting a time-lagged survey approach, data on the determinants of academic success (T1) were gathered three weeks prior to collecting data on technostress and technological literacy (T2). The time-lagged design was chosen to mitigate common method bias and control for temporal confounds, as data were collected at different time points from the same participants (Fan et al., 2024).

Purposive sampling was employed to select university students in Accra, Ghana. Participants who met the criteria of regularly engaging with digital technologies in their academic pursuits were included in the study after securing informed consent. Also, the determination of the sample size was facilitated by the Raosoft online calculator, which considered various factors, including population size, confidence interval, margin of error, and response distribution.

A link to the Google Form questionnaire was dispatched to the participants' email addresses, with each email assigned a unique response code to enable efficient tracking for the time-lagged study. Initially, 370 questionnaires assessing the determinants of academic success (academic motivation and psychological well-being) were disseminated (T1), garnering 364 responses. Two weeks later, questionnaires on technostress and technological literacy were distributed (T2) to the 364 participants who responded to the initial set of questionnaires (T1) using their designated tracked emails. This follow-up effort yielded 349 responses. As a result, the achieved response rate was 94.3 %.

Demographically, among the valid respondents, 62.2 % were male, while 37.8 % were female, with an average age of 29.5 years. Regarding educational level, 28.4 % were in level 400, 27.2 % in

level 200, 24.9 % in level 300, and 19.5 % in level 100. Regarding faculty distribution, 53.9 % were in information technology, 30.3 % in business, and 15.8 % in engineering. Further details on demographic characteristics are presented in [Table 1](#).

Table 1. Demographic characteristics (n = 349)

| Demographic Characteristics | Frequency | Valid Percent |
|-----------------------------|-----------|---------------|
| Gender | | |
| Males | 217 | 62.2 |
| Females | 132 | 37.8 |
| Age | | |
| Not more than 20 years | 49 | 14.0 |
| 21–25 years | 126 | 36.1 |
| 26–30 years | 107 | 30.7 |
| More than 30 years | 67 | 19.2 |
| Educational Level | | |
| Level 100 | 68 | 19.5 |
| Level 200 | 95 | 27.2 |
| Level 300 | 87 | 24.9 |
| Level 400 | 99 | 28.4 |
| Faculty | | |
| Business | 106 | 30.3 |
| Information Technology | 188 | 53.9 |
| Engineering | 55 | 15.8 |

Measures

All variables were evaluated using a four-point Likert scale, ranging from “strongly agree” to “strongly disagree.”

Academic motivation of students was assessed using the 14-item Academic Motivation Scale developed by Kotera et al. (2022), which demonstrated high reliability ($\alpha = 0.97$). An example item from the scale is: “I am motivated to achieve academic success to secure future career opportunities.” Higher scores on this scale signify a more robust academic drive among participants.

Psychological well-being was gauged via the 6-item Psychological Well-being Scale (Díaz et al., 2006), revealing a robust Cronbach’s alpha coefficient of 0.92. Participants indicated their level of agreement with statements such as, “In general, I feel confident and positive about myself” and “I feel good when I think of what I have done in the past and what I hope to do in the future.” Higher scores on this scale indicated a greater level of psychological well-being among respondents.

To measure technostress, participants completed the 20-item Students Technostress Questionnaire (Porcari et al., 2023), which exhibited strong internal consistency ($\alpha = 0.89$). This scale encapsulated various facets of technostress, including loss of control, stress and emotional reactions, and causal attribution. Participants responded to statements like, “The prolonged use of multiple technological devices for school activities reduces my level of concentration and makes me more easily distracted.” Higher scores denoted heightened levels of technostress.

Technological literacy was evaluated using the Technological Literacy Questionnaire developed by Gu et al. (2019). The twelve-item questionnaire exhibited strong reliability, boasting a Cronbach’s alpha coefficient of 0.91. The scale aimed to assess participants’ proficiency in utilizing technology. Participants were asked to indicate their level of agreement with statements such as, “I am proficient in using various software programs and applications to accomplish specific tasks.” Higher scores on this scale indicated a greater understanding, usage, and interaction with technology among respondents.

Analysis

The data analysis proceeded in three stages. First, data entry was conducted, which included validity and reliability checks, as well as an examination of data distribution. Second, the adequacy

of the model was evaluated through various indices such as the root-mean-square error of approximation and the Parsimony Normed Fit Index. Lastly, the hypotheses were tested using the JASP software, employing Bootstrap resampling with 5,000 replications.

The following syntax was generated and used for the mediation model:

```
# dependent regression
AMotivation ~ b11*TechLiteracy + c11*Technostress
PsycWell ~ b21*TechLiteracy + c21*Technostress

# mediator regression
TechLiteracy ~ a11*Technostress

# dependent residual covariance
AMotivation ~~ PsycWell

# effect decomposition
# y1 ~ x1
ind_x1_m1_y1 := a11*b11
ind_x1_y1 := ind_x1_m1_y1
tot_x1_y1 := ind_x1_y1 + c11

# y2 ~ x1
ind_x1_m1_y2 := a11*b21
ind_x1_y2 := ind_x1_m1_y2
tot_x1_y2 := ind_x1_y2 + c21
```

Reliability Assessment of Measures

Item analysis was conducted to detect and eliminate items that did not contribute to the internal consistency of the constructs (technostress, technological literacy, academic motivation, and psychological well-being). During the evaluation of inter-item reliability, it was noted that each item produced a total-item coefficient surpassing 0.3 except item 5 of the technostress scale (Griffiths et al., 2022). Consequently, item 5 of the technostress scale was excluded from further analysis. Moreover, all variables demonstrated a satisfactory level of internal consistency, with reliability values surpassing 0.70 (Table 2).

Table 2. Item analysis and reliability of the constructs

| Measures | Number of items | Items retained | Item deleted | Cronbach Alpha |
|--------------------------|-----------------|----------------|--------------|----------------|
| Technostress | 20 | 19 | 1 | .85 |
| Technological literacy | 12 | 12 | 0 | .91 |
| Academic motivation | 14 | 14 | 0 | .94 |
| Psychological well-being | 6 | 6 | 0 | .82 |

Confirmatory factor analysis (CFA)

CFA was utilised to assess the validity of the constructs, as presented in Table 3.

The analysis presented in Table 3 explores the construct validity of the scales through confirmatory factor analysis (CFA). Following the criteria outlined by Goyal and Aleem (2023), the scales underwent evaluation for both discriminant and convergent validity using JASP software. To confirm the discriminant validity of the predicted variables, the hypothesised five-factor model was compared with alternative models, ensuring that the measurement tools used in the research accurately captured the intended constructs (Griffiths et al., 2022).

Table 3. CFA showing the uniqueness of the variables

| Model | | χ^2 | Df | P | RMSEA | PNFI | RNI | TLI |
|-------|--------------------|----------|-----|-------|-------|------|------|------|
| (1) | Four-factor model | 994.27 | 659 | <.001 | 0.63 | 0.83 | 0.95 | 0.95 |
| (2) | Three-factor model | 1408.43 | 662 | <.001 | 0.56 | 0.78 | 0.90 | 0.89 |
| (a) | Technostress | 179.31 | 77 | <.001 | 0.72 | 0.78 | 0.95 | 0.94 |
| (b) | Tech Literacy | 51.35 | 27 | .003 | 0.55 | 0.73 | 0.97 | 0.96 |
| (c) | Acad Motivation | 52.83 | 20 | <.001 | 0.67 | 0.67 | 0.96 | 0.95 |
| (d) | Psyc Well-being | 50.47 | 14 | <.001 | 0.69 | 0.62 | 0.94 | 0.92 |
| (2) | One factor model | 660.74 | 665 | .011 | 0.05 | 0.52 | 0.60 | 0.58 |

Notes: RMSEA, root-mean-square error of approximation; PNFI, Parsimony Normed Fit Index; RNI, Relative Noncentrality Index, TLI, Tucker-Lewis Index

In line with the findings in Table 3, the hypothesised four-factor model (comprising technostress, technological literacy, academic motivation, and psychological well-being) displayed a favourable fit with the dataset ($\chi^2 = 994.27$, RMSEA = 0.63, PNFI = 0.83, RNI = 0.95, TLI = 0.95, $p < 0.001$). This proposed model remained distinct from the three-factor alternative ($\chi^2 = 1408.43$, RMSEA = 0.56, PNFI = 0.78, RNI = 0.90, TLI = 0.89, $p < 0.001$). Additionally, the hypothesised model demonstrated a robust fit compared to alternative models.

Furthermore, each item significantly loaded onto its respective construct, reaffirming the convergence of validity within these constructs. To evaluate the potential impact of common method variance, a single-factor assessment was conducted. The results revealed an inadequate fit for the single-factor model ($\chi^2 = 660.74$, RMSEA = 0.05, PNFI = 0.52, RNI = 0.60, TLI = 0.58, $p < 0.001$), thereby emphasizing the distinctiveness of the constructs and emphasizing their robust discriminant validity.

4. Results

Descriptive Statistics and Construct Correlations

As illustrated in Table 4, age did not exhibit significant relationships with any of the main variables (technostress, technological literacy, academic motivation, and psychological well-being). Concerning the main variable, technostress demonstrated significant correlations with technological literacy ($r = -0.39$), academic motivation ($r = -0.36$), and psychological well-being ($r = -0.37$). Additionally, technological literacy displayed significant correlations with academic motivation ($r = 0.51$) and psychological well-being ($r = 0.55$). Academic motivation also correlated significantly with psychological well-being ($r = 0.44$). The skewness and kurtosis values of the constructs fell within the range of -1 to +1, indicating a normal distribution of the data.

Table 4. Descriptive statistics of the variables

| Variable | 1 | 3 | 4 | 5 | 6 |
|-----------------------------|-------|--------|-------|-------|-------|
| 1. Age | - | | | | |
| 2. Technostress | .03 | - | | | |
| 3. Technological Literacy | .01 | -.39** | - | | |
| 4. Academic Motivation | -.02 | -.36** | .51** | - | |
| 5. Psychological Well-being | .07 | -.37** | .55** | .44** | - |
| Mean | 29.42 | 51.63 | 31.81 | 17.79 | 17.66 |
| SD | 7.54 | 11.01 | 9.146 | 5.79 | 5.33 |
| Skewness | 0.07 | 0.02 | -0.19 | 0.29 | -0.03 |
| Kurtosis | -0.05 | -0.20 | -0.59 | -0.95 | -0.05 |

Test of Hypotheses

Table 5 illustrates a significant negative direct impact of technostress on academic motivation, with technostress accounting for -10 % of the variance in academic motivation ($b = -0.100$, $z = 3.88$, $p < 0.001$). To further validate this outcome, the bootstrap method with 5000 replications indicated negative lower and upper confidence levels (L95 % CI = -0.15, U95 %

CI = -0.04), supporting the statistical significance of the direct effect of technostress on academic motivation and thereby supporting H1.

Moreover, there is a negative direct effect of technostress on psychological well-being, with technostress explaining -9 % of the variance in psychological well-being ($b = -0.09$, $z = 3.82$, $p < 0.001$). The bootstrap method with 5000 replications also corroborated this finding, with the confidence intervals not including a positive value (L95 % CI = -0.13, U95 % CI = -0.04), confirming the support for the second hypothesis.

Table 5. Direct effects of technostress on determinants of academic success

| | Estimate | Std. Error | z-value | P | 95 % Confidence Interval | |
|---------|----------|------------|---------|--------|--------------------------|-------|
| | | | | | Lower | Upper |
| TS → AM | -0.10 | 0.03 | -3.88 | < .001 | -0.15 | -0.05 |
| TS → PW | -0.09 | 0.02 | -3.82 | < .001 | -0.13 | -0.04 |

Notes: TS, Technostress; AM, Academic motivation; PW, Psychological Well-being

Table 6. Indirect effect of technological literacy

| | Estimate | Std. Error | z-value | p | 95% Confidence Interval | |
|--------------|----------|------------|---------|--------|-------------------------|-------|
| | | | | | Lower | Upper |
| TS → TL → AM | -0.02 | 0.01 | -5.91 | < .001 | -0.02 | -0.01 |
| TS → TL → PW | -0.03 | 0.01 | -6.27 | < .001 | -0.03 | -0.02 |

Notes: TS, Technostress; AM, Academic motivation; TL, Technological literacy; PW, Psychological Well-being

From [Table 6](#), the observed indirect effect of the impacts of technostress on academic motivation ($z = -5.91$, $p < 0.001$) and psychological well-being ($z = -6.27$, $p < 0.001$) is significant. The amount of variance accounted for in the indirect effect of technostress on academic motivation ($b = -0.02$) and psychological well-being ($b = -0.03$) when technological literacy was included as a mediator remained significant, indicating partial mediation. Further assessment of the significance of these findings using the bootstrap method with 5000 replications revealed confidence intervals that did not include a positive value for the effect of technostress on academic motivation (L95 % CI = -0.02, U95 % CI = -0.01) and psychological well-being (L95 % CI = -0.03, U95% CI = -0.02), providing support for H3 and H4.

Table 7. Path estimates of technostress

| | Estimate | Std. Error | z-value | p | 95 % Confidence Interval | |
|---------|----------|------------|---------|--------|--------------------------|-------|
| | | | | | Lower | Upper |
| TL → AM | 0.43 | 0.05 | 8.81 | < .001 | 0.33 | 0.54 |
| TS → AM | -0.02 | 0.01 | -3.88 | < .001 | -0.03 | -0.01 |
| TL → PW | 0.48 | 0.05 | 10.19 | < .001 | 0.38 | 0.58 |
| TS → PW | -0.02 | 0.01 | -3.82 | < .001 | -0.03 | -0.01 |
| TS → TL | -0.04 | 0.01 | -7.96 | < .001 | -0.05 | -0.03 |

Notes: TS, Technostress; AM, Academic motivation; TL, Technological literacy; PW, Psychological Well-being

[Figure 1](#) provides a visual representation of the path estimates described in [Table 7](#).

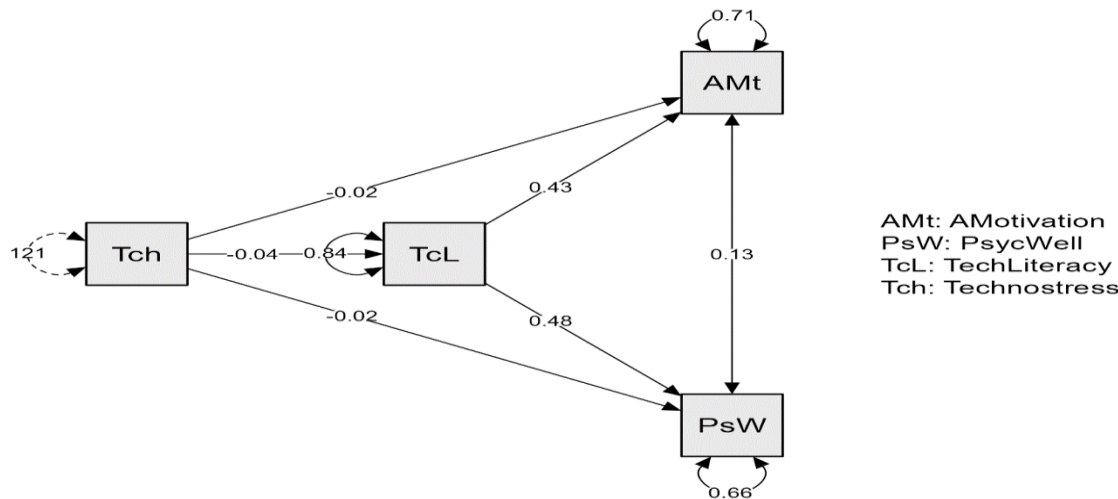


Fig. 1. Path plot showing the mediation effect

5. Discussion

The study aimed to achieve two objectives: firstly, to examine the relationship between technostress and determinants of academic success, namely academic motivation and psychological well-being; secondly, to explore technological literacy as a potential mediator in the association between technostress and these determinants of academic success.

Regarding the first objective, the findings supported the hypothesis that technostress significantly correlates with academic motivation and psychological well-being. This suggests that technostress plays a crucial role in influencing students' academic motivation and psychological well-being, highlighting its importance as a factor contributing to reduced motivation and well-being among students. These results align with prior research indicating negative associations between technostress and academic motivation (Den Hartog, De Hoogh, 2009) and psychological well-being (Lu, 2014; Quenson, 2013). One plausible explanation for this association is that continuous exposure to digital technologies and information overload can overwhelm students, resulting in cognitive overload and difficulty maintaining motivation (Brown, Mitchell, 2010). Additionally, feelings of being overwhelmed by technology and a perceived loss of control can undermine students' confidence in their academic abilities, further diminishing motivation and well-being (Dinc, Nurovic, 2016).

Regarding the second objective, the results revealed that technological literacy mediates the relationship between technostress and determinants of academic success, including academic motivation and psychological well-being. These findings suggest that students' perception of technological literacy significantly influences the association between technostress and academic success determinants. Thus, the ability to effectively navigate and utilise technology appears to be crucial in alleviating the adverse impacts of technostress on academic motivation and psychological well-being. These findings are consistent with previous studies highlighting the role of perceived technological literacy in elucidating the relationship between technological factors, such as technostress, and academic success determinants among students (Eshet-Alkalai, 2012; Sousa, Rocha, 2019). It stands to reason that higher levels of technological literacy enhance students' self-efficacy beliefs in using technology, thereby buffering against the adverse effects of technostress and promoting psychological well-being and academic motivation.

6. Limitations and suggestions for future research

Although the present study made concerted efforts to address potential limitations, it is important to acknowledge certain constraints that warrant consideration. One limitation pertains to the research design employed. This study exclusively utilised a quantitative design, which may have restricted the depth of understanding regarding the relationships among the variables under investigation. Future research endeavours would benefit from adopting a mixed-methods approach, allowing for a more comprehensive exploration of the associations identified in the study.

Additionally, the present study focused solely on one mediating variable, namely technological literacy, in elucidating the relationship between technostress and determinants of academic success. Future investigations could adopt a more integrative approach by considering multiple personal and contextual factors as potential mediators. This would provide a more nuanced understanding of the complex interplay between technostress and academic success determinants.

Another limitation concerns the research context. The study was conducted exclusively among university students in the Capital City of Ghana, potentially limiting the generalisability of the results to other populations, such as employees who may experience higher levels of technostress in workplace settings. Therefore, there is a need for future research to replicate the study using samples comprising working professionals, thereby expanding the scope and applicability of the findings.

7. Conclusion and implications

The determinants of academic success among students contribute significantly to their overall growth, development, and fulfilment in their educational journey. Factors such as academic motivation and psychological well-being are key contributors to improved student learning outcomes. The findings of this study have established that academic success determinants, including academic motivation and psychological well-being, are influenced by technostress. Moreover, the predictive effect of technostress on students' academic success (academic motivation and psychological well-being) depends on the mediating mechanism of technological literacy.

The results revealed that the relationship between technostress and students' academic success is facilitated by the knowledge, skills, and competencies required to effectively and responsibly engage with technology in academic contexts. The practical and theoretical implications of the research suggest several important considerations. Based on the study results, which indicated a negative and significant relationship between technostress and academic success determinants, it can be inferred that heightened levels of technostress can hinder students' academic success. Therefore, students can take proactive steps to manage their technology use, such as setting boundaries on screen time, practising digital detoxes, and seeking support if they experience mental health issues related to technology use.

Moreover, the findings revealed that technological literacy mediates the relationship between technostress and academic success determinants among students. This implies that technological literacy reduces the negative impact of technostress on academic success. Educational institutions can incorporate technological literacy programmes into their curriculum to equip students with the necessary skills to effectively navigate digital environments and manage technostress. Institutions can empower students to develop competencies in using technology productively and healthily by offering courses or workshops focused on enhancing technological literacy. Theoretically, the study will address the lack of research on the topic and enhance understanding of the determinants of academic success from the perspective of technostress.

8. Declarations

Ethics approval and consent to participate

Institutional approvals and participants' consent were obtained before the commencement of the study. The authors ensured that the study conformed with the requirements per the Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects, developed by the World Medical Association in 1964.

Consent for publication

All authors read and approved the final version of the manuscript for publication and agree to be accountable for all aspects of the work, ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Availability of data and materials

Available upon formal request to the corresponding author.

Conflict of interest statement

The authors report no conflicts of interest.

Funding

This study was partly funded by the Directorate of Research, Innovation and Consultancy of the University of Cape Coast, Ghana (Research Support Grant Identification. Number for the

Project: DRIC-RSG-INT-23-007). The research grant support of the first author provided additional funding support.


Authors' contributions


All authors contributed equally to this work. They collaboratively developed the concept and design of the study, collected data, and contributed to the analysis and interpretation of the collected data. Additionally, all authors were involved in drafting, revising, and finalising the manuscript.


9. Acknowledgements


We appreciate all participants for their support.


Authors' ORCID

Prince Addai  <https://orcid.org/0000-0001-5803-0761>

Michelle Afrifa  <https://orcid.org/0000-0003-2700-0951>

Isaac Okyere  <https://orcid.org/0000-0002-1190-4959>

Gloria Tachie-Donkor  <https://orcid.org/0000-0002-3647-4078>

Jacob Owusu Sarfo  <https://orcid.org/0000-0003-2859-7278>

References

Addai et al., 2023 – Addai, P., Sarfo, J. O., Okyere, I., Kumordzie, B. (2023). Student satisfaction and session of study as predictors of loyalty among university students. *European Journal of Contemporary Education*. 12(2): 332-341.

Asad et al., 2023 – Asad, M.M., Erum, D., Churi, P., Guerrero, A.J.M. (2023). Effect of technostress on psychological well-being of post-graduate students: A perspective and correlational study of Higher Education Management. *International Journal of Information Management Data Insights*. 3(1): 100149.

Boyer-Davis et al., 2023 – Boyer-Davis, S., Berry, K., Cooper, A. (2023). The effect of technostress on the motivation to teach online in higher education before and during the COVID-19 Pandemic: Perceptions of Business Faculty. *International Journal for Business Education*. 165(1). DOI: <https://doi.org/10.30707/IJBE165.1.1690384197.882912>

Consiglio et al., 2023 – Consiglio, C., Massa, N., Sommovigo, V., Fusco, L. (2023). Techno-Stress Creators, Burnout and Psychological Health among Remote Workers during the Pandemic: The Moderating Role of E-Work Self-Efficacy. *International Journal of Environmental Research and Public Health*. 20(22): 7051. DOI: <https://doi.org/10.3390/ijerph20227051>

Diaz et al., 2006 – Diaz, D., Rodríguez-Carvajal, R., Blanco, A., Moreno-Jiménez, B., Gallardo, I., Valle, C., Van Dierendonck, D. (2006). Spanish adaptation of Ryff's Psychological Well-being Scales. *Psicothema*. 18: 572-577.

Dragano, Lunau, 2020 – Dragano, N., Lunau, T. (2020). Technostress at work and mental health: Concepts and research results. *Current Opinion in Psychiatry*. 33(4): 407-413.

Erdem et al., 2022 – Erdem, C., Oruç, E., Atar, C., Bağcı, H. (2022). The mediating effect of digital literacy in the relationship between media literacy and digital citizenship. *Education and Information Technologies*. 28(3). DOI: <https://doi.org/10.1007/s10639-022-11354-4>

Eshet-Alkalai, 2012 – Eshet-Alkalai, Y. (2012). Thinking in the digital era: A revised model for digital literacy. *Issues in Informing Science and Information Technology*. 9(2): 267-276.

Fan et al., 2024 – Fan, P., Ye, L., Yang, S., Song, K., Zhang, H., Guo, M. (2024). High conflict, high performance? A time-lagged study on work-family conflict and family support congruence and safety performance. *Safety Science*. 172: 106.403

Galvin et al., 2022 – Galvin, J., Evans, M.S., Nelson, K., Richards, G., Mavrtsaki, E., Giovazolias, T., ... Vallone, F. (2022). *Europe's Journal of Psychology*. 18(3): 302-318. DOI: <https://doi.org/10.5964/ejop.4725>

Goyal, Aleem, 2023 – Goyal, H., Aleem, S. (2023). Confirmatory Factor Analysis (CFA) and Psychometric Validation of Healthy Lifestyle and Personal Control Questionnaire (HLPCQ) in India. *Indian Journal of Community Medicine*. 48(3): 430-435. DOI: https://doi.org/10.4103/ijcm.ijcm_394_22

- Griffiths et al., 2022 – Griffiths, P., Terluin, B., Trigg, A., Schuller, W., Bjorner, J.B. (2022). A confirmatory factor analysis approach was found to accurately estimate the reliability of transition ratings. *Journal of Clinical Epidemiology*. 141: 36-45
- Gu et al., 2019 – Gu, J., Xu, M., Hong, J.C. (2019). Development and validation of a technological literacy survey. *International Journal of Science and Mathematics Education*. 17(1): 1-16. DOI: <https://doi.org/10.1007/s10763-019-09971-6>
- Hu, Luo, 2021 – Hu, H., Luo, H. (2021). Academic motivation among senior students majoring in rehabilitation-related professions in China. *BMC Medical Education*. 21: 582. DOI: <https://doi.org/10.1186/s12909-021-03016-9>
- Ioannou et al., 2024 – Ioannou, A., Lycett, M., Marshan, A. (2024). The Role of Mindfulness in Mitigating the Negative Consequences of Technostress. *Information Systems Frontiers*. 26: 523-549. DOI: <https://doi.org/10.1007/s10796-021-10239-0>
- Kotera et al., 2023 – Kotera, Y., Conway, E., Green, P. (2023). Construction And factorial validation of a short version of the Academic Motivation Scale. *British Journal of Guidance & Counselling*. 51(2): 274-283. DOI: <https://doi.org/10.1080/03069885.2021.1903387>
- Mahapatra et al., 2023 – Mahapatra, H., Bankira, S., Sahoo, N.K., Bhuyan, S. (2023). Relationship between techno stress and academic performance of university students. *Journal of Education Society and Behavioural Science*. 36(10): 45-55. DOI: <https://doi.org/10.9734/JESBS/2023/v36i101266>
- Masluk et al., 2024 – Masluk, B., Asensio-Martínez, A., Lopes, S., Vega-Muñoz, A. (2024). Technostress, mental health and well-being. *Frontiers in Psychology*. 14: 1356844. DOI: <https://doi.org/10.3389/fpsyg.2023.1356844>
- Mondo et al., 2023 – Mondo, M., Pileri, J., Barbieri, B., Bellini, D., De Simone, S. (2023). The role of techno-stress and psychological detachment in the relationship between workload and well-being in a sample of Italian smart workers: A moderated mediated model. *Social Sciences*. 12(10): 530. DOI: <https://doi.org/10.3390/socsci12100530>
- Ozkan Hidiroglu et al., 2021 – Ozkan Hidiroglu, Y., Hidiroglu, C.N., Tanriogen, A. (2021). The relationship between technology literacies and proactive personalities of secondary school mathematics teachers. *International Journal of Technology in Education and Science*. 5(4): 648-672. DOI: <https://doi.org/10.46328/ijtes.255>
- Peng, 2021 – Peng, C. (2021). The academic motivation and engagement of students in English as a foreign language classes: Does teacher praise matter? *Frontiers in Psychology*. 12. DOI: <https://doi.org/10.3389/fpsyg.2021.778174>
- Porcari et al., 2023 – Porcari, D.E., Ricciardi, E., Orfei, M.D. (2023). A new scale to assess technostress levels in an Italian banking context: The Work-Related Technostress Questionnaire. *Frontiers in Psychology*. 14. DOI: <https://doi.org/10.3389/fpsyg.2023.1253960>
- Rey-Merchán, López-Arquillos, 2022 – Rey-Merchán, M.D.C., López-Arquillos, A. (2022). Occupational risk of technostress related to the use of ICT among teachers in Spain. *Sustainability*. 14(14): 8746. DOI: <https://doi.org/10.3390/su14148746>
- Saleem et al., 2024 – Saleem, F., Chikhaoui, E., Malik, M.I. (2024). Technostress in students and quality of online learning: role of instructor and university support. *Frontiers in Education*. 9. DOI: <https://doi.org/10.3389/feduc.2024.1309642>
- Schauffel et al., 2022 – Schauffel, N., Kaufmann, L.M., Rynek, M., Ellwart, T. (2022). Technostress during COVID-19: Action Regulation hindrances and the mediating role of basic human needs among psychology students. *Psychology Learning & Teaching*. 21(3): 235-253. DOI: <https://doi.org/10.1177/14757257221102563>
- Schettino et al., 2022 – Schettino, G., Marino, L., Capone, V. (2022). Technology-enhanced learning and well-being: A contribution to the validation of a measure to assess university students' technostress in the Italian context. *International Journal of Mental Health and Addiction*. 1-15. DOI: <https://doi.org/10.1007/s11469-022-00940-9>
- Sommovigo et al., 2023 – Sommovigo, V., Bernuzzi, C., Finstad, G. L., Setti, I., Gabanelli, P., Giorgi, G., Fiabane, E. (2023). How and when may technostress impact workers' psycho-physical health and work-family interface? A Study during the COVID-19 pandemic in Italy. *International Journal of Environmental Research and Public Health*. 20(2): 1266. DOI: <https://doi.org/10.3390/ijerph20021266>

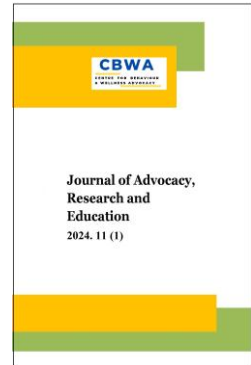
- Sousa, Rocha, 2019 – Sousa, M.J., Rocha, A. (2019). Skills for disruptive digital business. *Journal of Business Research*. 94: 257-263. DOI: <https://doi.org/10.1016/j.jbusres.2017.12.051>
- Tatli et al., 2023 – Tatli, H.S., Yavuz, M.S., Ongel, G. (2023). The mediator role of task performance in the effect of digital literacy on firm performance. *Marketing and Management of Innovations*. 2(75): 2218-4511.
- Tinmaz et al., 2022 – Tinmaz, H., Lee, Y.T., Fanea-Ivanovici, M., Baber, H. (2022). A systematic review on digital literacy. *Smart Learning Environments*. s(1): 21. DOI: <https://doi.org/10.1186/s40561-022-00204-y>
- Upadhyaya, Vrinda, 2021 – Upadhyaya, P., Vrinda. (2021). Impact of technostress on academic productivity of university students. *Education and Information Technologies*. 26: 1647-1664.
- Vallone et al., 2023 – Vallone, F., Galvin, J., Cattaneo Della Volta, M. F., Akhtar, A., Chua, S., Ghio, E., ... Zurlo, M.C. (2023). Technostress and academic motivation: direct and indirect effects on university students' psychological health. *Frontiers in Psychology*. 14: 1211134.
- Whelan et al., 2022 – Whelan, E., Golden, W., Tarafdar, M. (2022). How technostress and self-control of social networking sites affect academic achievement and well-being. *Internet Research*, 32(7), 280-306. DOI: <https://doi.org/10.1108/INTR-06-2021-0394>
- Yeşilyurt, Vezne, 2023 – Yeşilyurt, E., Vezne, R. (2023). Digital literacy, technological literacy, and internet literacy as predictors of attitude toward applying computer-supported education. *Education and Information Technologies*. 28: 9885-9911. DOI: <https://doi.org/10.1007/s10639-022-11311-1>



Publisher: Centre for Behaviour and Wellness Advocacy, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
ISSN 2410-4981. E-ISSN 2508-1055
2024. 11(1): 61-65

DOI: 10.13187/jare.2024.1.61

Journal homepage:
<http://kadint.net/our-journal.html>



Integrating Neurocognitive Support into HIV/AIDS Management in Ghana: A Position Statement

Newton Isaac Gbordzoe  a, b, *

^a Centre for Behaviour and Wellness Advocacy, Koforidua, Ghana

^b School of Nursing and Midwifery, Family Health University, Accra, Ghana

Abstract

Despite significant progress in HIV/AIDS management in Ghana, some critical gaps remain in the diagnosis and treatment of HIV-related neurocognitive problems. As Ghana strives to provide comprehensive care for HIV clients, it is critical to look beyond viral suppression and address the disease's neurological implications. This position statement aims to provide a general overview of HIV-Associated Neurocognitive Disorders, gaps in its management, and the role of integrating neurocognitive screening and neurorehabilitation in existing HIV care services in Ghana. It is imperative that integrating neurocognitive support into HIV management in Ghana is not only a matter of improving quality of life but also a critical step toward providing comprehensive HIV/AIDS care services.

Keywords: Ghana Health Service, Ghana, HIV/AIDS, HIV-Associated Neurocognitive Disorder, Ministry of Health, position statement.

1. Overview of HIV-Associated Neurocognitive Disorders

Historically, systemic symptoms of AIDS were the main focus of early research (Greene, 2007). However, as the HIV epidemic spread, there were increased concerns about the virus' effects on the central nervous system, resulting in neurological symptoms. A few studies began to document cognitive and motor deficits among people living with HIV, and in the late 1980s and early 1990s, further studies expanded the scope of understanding by providing evidence on the direct impact of HIV on the cortex and subcortical regions of the brain (Berger, 2007; Brew et al., 1988; Gendelman et al., 1994; Navia et al., 1986). These observations led to the coining of the term "AIDS Dementia Complex (ADC)", which describes dementia-like manifestations with severe cognitive features (Brew et al., 1988; Navia et al., 1986; Price et al., 1988).

As efforts intensified and knowledge expanded about the impact of HIV on the brain, researchers and clinicians began to consider a diagnostic criterion that differentiates milder forms of neurological symptoms from severe ones. Later, in 2007, a consensus panel of experts coined the term "HIV-Associated Neurocognitive Disorders (HAND)" in replacement of ADC (Antinori et al., 2007). The HAND criteria, also known as the Frascati criteria, characterised HAND as "Asymptomatic Neurocognitive Impairment (ANI), Mild Neurocognitive Disorder (MND), and HIV-Associated Dementia (HAD)" (Antinori et al., 2007). Given this classification, the diagnosis of

* Corresponding author

E-mail addresses: jubeysenam8@gmail.com (N.I. Gbordzoe)

Received: 02 February 2024 Revised: 22 March 2024 Accepted: 22 March 2024 Published: 31 April 2024

HAND is based on an individual's performance in the cognitive domains of "verbal/language, attention/working memory, abstraction/executive, memory (learning; recall), the speed of information processing, sensory-perceptual, motor skills" in addition to their daily functioning ability (Antinori et al., 2007).

Currently, there are advancements in research on HAND with varying scopes of study. Studies have hypothesised that the advent of combination antiretroviral therapy (cART) would have positively impacted HAND. Nonetheless, empirical evidence suggests that the severe form of HAND has declined in the era of cART, but the milder forms of HAND still persist (Smail, Brew, 2018). It is important to present this overview to clarify the ambiguities regarding the use of the term HAND and other related terms while also providing clarity on the term, its definition, and criteria for diagnosis to inform clinical and research decisions.

2. Epidemiology of HAND in Ghana

To the best of my knowledge, coupled with evidence from the literature review, only two published studies have been conducted in Ghana in the area of HAND. First, Asiedu et al. (2020) examined the neurocognitive performances of a Ghanaian sample of 104 people on ART using the Trail Making Test Part A (TMT A), Stroop Colour-Word (SCW) and International HIV Dementia Scale. The study found 48 % of people living with HIV to have met the criteria for risk of neurocognitive impairment. Also, Sarfo et al. (2021) conducted a secondary analysis of the dataset from a case-control study involving 256 people on cART, 244 people living with HIV not initially on cART, and 246 HIV-negative individuals who served as controls for neurocognitive assessments. Using the Frascati criteria, findings revealed the overall prevalence of HAND to be 25 %, with the prevalence of ANI, MND, and HAD found to be 21.5 %, 3.5 % and 0.0 %, respectively. Factors such as age (Asiedu et al., 2020), educational level (Asiedu et al., 2020; Sarfo et al., 2021), stage 4 disease (Sarfo et al., 2021), hypertension and the use of nevirapine (Sarfo et al., 2021) were found to be associated with HAND. Clearly, epidemiological studies in the area of HAND within the Ghanaian domain are insufficient.

3. Current Landscape of HIV Management in Ghana

Ghana has made significant strides in the provision of HIV/AIDS care, particularly to those living with HIV, their partners, unborn children of HIV-pregnant women and the general population. For instance, Ghana embraced the 90-90-90 initiative, aligning with UNAIDS's directive aiming to ensure that 90% of individuals are aware of their HIV status, 90% of them receive cART, and that viral load reduction of 90% is achieved among people living with HIV by 2020. However, by the end of 2018, Ghana fell short of this target, registering a performance of 66-37-64 across the three categories. Various factors, including suboptimal HIV health-seeking behaviours, challenges in ART adherence, limited ART accessibility, and a 60% unmet demand for ART, contributed to this shortfall (Ghana Health Service [GHS], 2019; Ogunbajo et al., 2018; Sefah et al., 2022).

Furthermore, in 2019, a collaborative effort between the GHS and the National AIDS/STI Control Programme resulted in the publication of the Consolidated Guidelines for HIV Care in Ghana. This guideline is an adaptation of the World Health Organization's Consolidated Guidance, tailored specifically for reviewing and enhancing HIV care and ART protocols in Ghana. The document's main purpose was to "provide guidelines for use by care providers within the continuum of HIV prevention, treatment and care for all age groups and populations in Ghana." These guidelines touched on critical issues such as HIV testing and counselling services; linkage to care and other services; initiation into HIV care; antiretroviral therapy; elimination of mother-to-child transmission; monitoring of clients on ART; changing interrupting therapy; opportunistic infection management and prophylaxis for HIV-related infections among adults, adolescents and children; pre-and post-exposure prophylaxis; supply chain management and rational use of HIV commodities; and HIV data management. To date, these guidelines are being rolled out despite challenges to their achievement. Nevertheless, Ghana remains optimistic about achieving the 95-95-95 objective by 2030.

4. Gaps in Management of HAND in Ghana

HAND remains a 'hidden endemic' in HIV care in Ghana, partly due to insufficient empirical evidence on the topic, limited surveillance, and asymptomatic cases. Furthermore, the management of HAND as an integrated component of care for people living with HIV/AIDS remains a major challenge, partly due to undiagnosed cases. Without establishing a diagnosis of HAND, it is inevitable that management of HAND is virtually impossible. Although diagnosing HAND is essential, the absence of standardised diagnostic criteria and the limited availability of neuropsychological testing and biomarkers pose significant challenges in Ghana. Various diagnostic criteria, including the Frascati criteria and the global deficit score, rely on neuropsychological testing to evaluate cognitive impairment.

Additionally, criteria like the Memorial Sloan Kettering (MSK) criteria incorporate biomarkers such as cerebrospinal fluid and neuroimaging findings alongside neuropsychological testing. However, the implementation of these criteria in Ghana is hindered by the shortage of trained professionals and resources, particularly in remote areas. Neuropsychological testing may be unavailable or culturally inappropriate, and biomarkers such as cerebrospinal fluid biomarkers and neuroimaging face challenges due to limited equipment and expertise access. These challenges expand beyond the scope of Ghana to other countries within the Sub-Saharan African Region (Aderinto, 2023).

5. The Role of Neurocognitive Screening and Neurorehabilitation in Ghana's HIV Care

In light of the numerous setbacks to the diagnosis and management of HAND, conscious efforts are required to integrate neurocognitive support into existing care services for people living with HIV in Ghana. The integration of neurocognitive screening and neurorehabilitation holds immense significance in addressing the multifaceted challenges faced by individuals living with HAND in Ghana. As Sarfo (2014) indicated, the Ghanaian health system needs to build stronger neurocognitive care structures to enhance healthcare delivery.

There is an urgent need to develop and validate culturally appropriate diagnostic criteria and techniques for HAND in Ghana, considering the population's diversity and the resource constraints. Achieving this entails cooperation among researchers, healthcare practitioners, and policymakers to bridge knowledge and resource gaps, enhancing the diagnosis and treatment of HAND across Ghana. Standardised screening protocols can be integrated into routine HIV care visits in Ghanaian ART centres to enable healthcare providers to assess cognitive function, identify impairments, and initiate timely interventions. Furthermore, creating distinct channels for referring patients with neurocognitive impairments to mental health professionals and neuropsychologists will facilitate thorough assessments and individualized interventions to improve their cognitive function and general well-being.

Also, neurorehabilitation is essential to Ghana's HIV care continuum because it will provide focused interventions to boost functional independence, improve cognitive function, and lessen the impact of neurocognitive impairments on day-to-day activities. Using a variety of multidisciplinary techniques such as social support, psychoeducation, and cognitive rehabilitation programs, people with HAND can get comprehensive care that is customised for their needs. By utilising technology-assisted interventions, neurorehabilitation services can be provided to underserved and remote areas, increasing treatment outcomes and improving access to care. Examples of these interventions include telemedicine and mobile health applications.

Furthermore, the role of neuropsychologists in conducting neurocognitive screening and neurorehabilitation in ensuring the provision of effective neurocognitive support for people living with HIV cannot be understated. Legislation and policy reforms are necessary to mandate the acknowledgement, assessment, and oversight of neuropsychologists or clinically trained psychologists with sufficient expertise in HIV neuropsychology within Ghana's healthcare system (Sarfo, 2014).

6. Conclusion

Neurocognitive support remains an unexplored and under-utilised component of care for people living with HIV in Ghana. It is morally required, not just an option, for HIV management in Ghana to incorporate neurocognitive support. Ghana can improve treatment outcomes, raise the

standard of living for all HIV-positive people, and achieve the goal of comprehensive healthcare by acknowledging and addressing the neurological aspects of HIV/AIDS. While Ghana continues the fight against HIV/AIDS, it is time to look beyond the virus and adopt a holistic strategy that treats the body and the mind.

7. Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Availability of data and materials

Not applicable.

Conflict of interest statement

The author reports no conflicts of interest.


Funding

Not applicable.

8. Acknowledgements

We are grateful to the Centre for Behaviour and Wellness Advocacy's editorial staff for their free editing support.

Authors' ORCID

Newton Isaac Gbordzoe  <https://orcid.org/0000-0002-6984-2754>

References

- Aderinto, 2023 – Aderinto, N. (2023). HIV-associated neurocognitive disorders in Africa: an emerging challenge: a correspondence. *International Journal of Surgery: Global Health*. 6(3): e0146. DOI: <https://doi.org/10.1097/GH9.0000000000000146>
- Antinor et al., 2007 – Antinori, A., Arendt, G., Becker, J.T., Brew, B.J., Byrd, D. A., Cherner, M., ... , Wojna, V.E. (2007). Updated research nosology for HIV-associated neurocognitive disorders. *Neurology*. 69(18): 1789–1799. DOI: <https://doi.org/10.1212/01.WNL.0000287431.88658.8B>
- Asiedu et al., 2020 – Asiedu, N., Kretchy, I., Asampong, E. (2020). Psycho-behavioral factors associated with neurocognitive performance among people living with HIV on antiretroviral therapy in Accra, Ghana. *African Health Sciences*. 20(2): 487. DOI: <https://doi.org/10.4314/AHS.V20I2.6>
- Berger, (2019 – Berger, J.R. (2007). AIDS and the Nervous System. *Neurology and General Medicine: Expert Consult*. 851-871. DOI: <https://doi.org/10.1016/B978-044306707-5.50048-1>
- Brew et al., 1988 – Brew, B.J., Rosenblum, M., Price, R.W. (1988). AIDS dementia complex and primary HIV brain infection. *Journal of Neuroimmunology*. 20(2–3): 133-140. DOI: [https://doi.org/10.1016/0165-5728\(88\)90144-0](https://doi.org/10.1016/0165-5728(88)90144-0)
- Gendelman et al., 1994 – Gendelman, H.E., Lipton, S.A., Tardieu, M., Bukrinsky, M.I., Nottet, H.S.L.M. (1994). The neuropathogenesis of HIV-1 infection. *Journal of Leukocyte Biology*. 56(3): 389-398. DOI: <https://doi.org/10.1002/JLB.56.3.389>
- Ghana Health Service, 2019 – Ghana Health Service. Guideline for Antiretroviral Therapy in Ghana: National AIDS Control Programme (NACP). 2019. [Electronic resource]. URL: https://scholar.google.com/scholar_lookup?title=Guideline+for+Antiretroviral+Therapy+in+Ghana&publication_year=2019&
- Greene, 2007 – Greene, W.C. (2007). A history of AIDS: Looking back to see ahead. *European Journal of Immunology*. 37(S1): S94–S102. DOI: <https://doi.org/10.1002/EJL.200737441>
- Navia et al., 1986 – Navia, B.A., Jordan, B.D., Price, R.W. (1986). The AIDS dementia complex: I. Clinical features. *Annals of Neurology*. 19(6): 517-524. DOI: <https://doi.org/10.1002/ANA.410190602>
- Ogunbajo et al., 2018 – Ogunbajo, A., Kershaw, T., Kushwaha, S., Boakye, F., Wallace-Atiapah, N.D., Nelson, L.R.E. (2018). Barriers, motivators, and facilitators to engagement in HIV care among HIV-Infected Ghanaian men who have sex with men (MSM). *AIDS and Behavior*. 22(3): 829-839. DOI: <https://doi.org/10.1007/S10461-017-1806-6/TABLES/2>

Price 019 – Price, R.W., Brew, B., Sidtis, J., Rosenblum, M., Scheck, A.C., Cleary, P. (1988). The brain in AIDS: Central nervous system HIV-1 infection and AIDS dementia complex. *Science*. 239(4840): 586-592. DOI: <https://doi.org/10.1126/SCIENCE.3277272>

Sarfo et al., 2021 – Sarfo, F.S., Kyem, G., Asibey, S. O., Tagge, R., Oubiagele, B. (2021). Contemporary trends in HIV-associated neurocognitive disorders in Ghana. *Clinical Neurology and Neurosurgery*. 210. DOI: <https://doi.org/10.1016/J.CLINEURO.2021.107003>

Sarfo, 2014 – Sarfo, J.O. (2014). Role of Clinical Neuropsychologists in the evaluation and management of diabetes mellitus in Ghana: A position statement. *Journal of Advocacy, Research and Education*. 1(1): 37-40.

Sefah et al., 2022 – Sefah, I.A., Mensah, F., Kurdi, A., Godman, B. (2022). Barriers and facilitators of adherence to antiretroviral treatment at a public health facility in Ghana: a mixed method study. *Hospital Practice* (1995). 50(2): 110-117. DOI: <https://doi.org/10.1080/21548331.2022.2045132>

Smail, Brew, 2018 – Smail, R.C., Brew, B.J. (2018). HIV-associated neurocognitive disorder. *Handbook of Clinical Neurology*. 152: 75-97. DOI: <https://doi.org/10.1016/B978-0-444-63849-6.00007-4>



Publisher: Centre for Behaviour and Wellness
Advocacy, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
ISSN 2410-4981. E-ISSN 2508-1055
2024. 11(1): 66-76

DOI: 10.13187/jare.2024.1.66

Journal homepage:
<http://kadint.net/our-journal.html>



Perinatal Mental Health in Africa: A Mini-Review of Screening, Prevalence, and Impact

Timothy Pritchard Debrah  ^{a, *}

^aSchool of Nursing and Midwifery, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Abstract

Perinatal mental health challenges are prevalent in Africa, with estimates exceeding those observed in high-income countries. Significant obstacles in screening and care provision complicate interventions to address these challenges. This mini-review synthesises findings from relevant literature on perinatal mental health screening interventions in Africa. The review included studies on the prevalence of perinatal mental disorders, associated risk factors, existing care models, screening tool effectiveness, and the roles of healthcare providers and policymakers. As part of the methodology, academic databases such as EBSCOhost, Pubmed, PsycINFO, and CINAHL were searched using specific keywords and MeSH terms related to perinatal mental health, screening, and interventions in Africa. Boolean operators were employed to refine search results. Studies published in English within the past 15 years were included, focusing on African populations. The studies were critically appraised for methodological quality and relevance. Key findings were extracted and synthesised to provide a comprehensive overview of perinatal mental health screening in Africa. Results showed that the challenges to effective screening and care include a high burden of mental health issues, limited screening resources, and a shortage of mental health specialists and medications. Additionally, the lack of training for health workers, poorly coordinated referral systems, and stigma surrounding mental health further hinder effective screening. One in four pregnant women and one in five postpartum women in Africa experience mental health problems. To address these challenges, increasing awareness of perinatal mental health issues, training healthcare staff, developing context-specific solutions, and utilising telehealth and mobile health services are essential. These strategies could provide timely support and reduce the incidence of perinatal mental health challenges in Africa.

Keywords: a mini-review, Africa, challenges, perinatal mental health, screening, synthesis.

1. Introduction

The impact of perinatal mental health on both maternal and foetal outcome is significant globally. This review looks at perinatal mental health and screening issues in Africa.

The prevalence of perinatal mental health challenges in Africa is noteworthy, with studies indicating high rates of common mental disorders among women during the perinatal period. In sub-Saharan Africa, recent systematic reviews (Woodhead et al., 2023) found that

* Corresponding author

E-mail addresses: tp.debrah@knust.edu.gh (T.P. Debrah)

Received: 04 March 2024 Revised: 19 April 2024 Accepted: 19 April 2024 Published: 31 April 2024

interventions to address these mental health issues are limited, despite the high rates of perinatal mental disorders. Lee et al. (2023) further supported this by highlighting the high risk for mental health conditions such as depression and anxiety among women in sub-Saharan Africa, influenced by factors like poverty, gender violence, and HIV.

Whereas the prevalence is known to be high, specific rates are not provided in the context of the papers reviewed. However, Buhagiar et al. (2024) did offer a specific prevalence rate for Malta, which is outside of Africa, reporting that 21.4 % of postpartum women experienced perinatal mental health disorders, according to diagnostic interviews. This figure underscores the global nature of the challenge, suggesting that African rates may be similarly high or even higher given the additional socioeconomic challenges present in many African contexts. However, the exact prevalence rates of perinatal mental health challenges in Africa are not detailed in the literature reviewed. Research consistently acknowledges that these challenges are a significant public health issue in the region. The limited evidence on effective interventions and the high-risk factors associated with mental health conditions in sub-Saharan Africa highlight the need for increased support and research in this area (Lee et al., 2023; Woodhead et al., 2023). Thus, the perinatal period represents a critical window of opportunity for identifying and addressing mental health concerns among African women. Despite the implied high prevalence of perinatal mental disorders in the region, screening initiatives for diagnosing perinatal mental health challenges in Africa appear to be limited, leading to underdiagnosis and inadequate support for the affected individuals.

The systematic review covering 32 low- and lower-middle-income countries across sub-Saharan Africa found that most interventions took a psychotherapeutic approach, with only two including a pharmaceutical component, and effectiveness was generally limited (Woodhead et al., 2023). Additionally, a pilot study in rural Kenya revealed that healthcare workers had some knowledge of perinatal depression, but there was little research on their views, indicating a potential gap in screening initiatives (Goyal et al., 2023). Furthermore, despite the significant impact of perinatal mental health issues, there is a severe shortage of mental health specialists in the region, and healthcare workers often lack specialised training in screening and managing these conditions (Nakidde et al., 2023).

Besides the high prevalence of perinatal mental health problems in South Africa, most women do not receive any care, suggesting a lack of screening and intervention programmes (Bauer et al., 2022). Moreover, less than 15 % of pregnant and postpartum women seek timely help for their mental health care, indicating possible deficiencies in screening and knowledge (Nwoke et al., 2023). Midwives also perceived barriers to screening, referral, and management of perinatal mental health issues (Bayrampour et al., 2018). However, there is an acknowledgement of the potential for Artificial Intelligence and Machine Learning to aid in diagnosis and prognosis, though their application in Africa is still in its infancy and faces contextual challenges (Ugar, Malele, 2024).

The evidence implies that screening initiatives for perinatal mental health challenges in Africa are indeed limited. There is a need for more effective screening and intervention programmes, as well as specialised training for healthcare workers to manage these conditions. The limited effectiveness of current interventions and the lack of all-inclusive care for perinatal mental health issues highlight the need for increased investment and innovation in this area (Bauer et al., 2022; Bayrampour et al., 2018; Nakidde et al., 2023; Nwoke et al., 2023; Ugar, Malele, 2024; Woodhead et al., 2023). As advocates for maternal and child health, it is imperative that healthcare providers prioritise the implementation of culturally sensitive and accessible perinatal mental health screening programmes to ensure the well-being of mothers and their infants.

2. Methods

This mini-review was informed by a review of relevant academic literature on perinatal mental health screening interventions in Africa. This review included studies that explored:

- The prevalence of perinatal common mental disorders (e.g., depression, anxiety) in Africa.
- Risk factors associated with perinatal mental disorders in Africa.
- Existing models of care for perinatal mental health screening in Africa.
- The effectiveness of screening tools for perinatal mental health in Africa.
- The role of healthcare providers, policymakers, and community stakeholders in advocating for perinatal mental health screening integration.

–Successful collaborative efforts and innovative strategies in perinatal mental health care in Africa.

Search Strategy

– Academic databases like EBSCOhost, Pubmed, PsycINFO, and CINAHL were used for the search.

– Specific keywords and MeSH terms related to perinatal mental health, screening, interventions, Africa, and cultural sensitivity were used.

– In-built search engine Boolean operators (AND, OR, NOT) were employed to refine the search and identify relevant studies.

Inclusion/Exclusion Criteria

– Studies published within the past 15 years were included to ensure a good overview of information.

– Studies focusing on specific populations within Africa (e.g., Ghana, Kenya, Nigeria, and South Africa) were considered.

– Studies published in English were the primary focus.

Data Analysis

The studies were critically appraised to assess their methodological quality and relevance to the topic. Key findings from the studies were extracted and synthesised to present a full overview of the current state of perinatal mental health screening in Africa.

3. Results

Screening of perinatal mental challenges

The current landscape of perinatal mental health screening in Africa is characterised by a high prevalence of perinatal mental disorders and a significant gap in the implementation of effective screening and intervention strategies. In sub-Saharan Africa, perinatal depression was a major concern, with a severe shortage of mental health specialists, leading to more needed healthcare workers to be trained to deliver mental health services (Goyal et al., 2023). A systematic review covering low- and lower-middle-income countries in the region revealed that most interventions took a psychotherapeutic approach, with some including pharmaceutical components, and that task-shifting was a common strategy, although effectiveness was limited (Woodhead et al., 2023).

There were contradictions and interesting facts within the context provided. For instance, while the Edinburgh Postnatal Depression Scale (EPDS) and Patient Health Questionnaire-9 (PHQ-9) were cited as having the most evidence for use in sub-Saharan Africa, there was no evidence that the EPDS is effective or culturally safe among Aboriginal women in Kimberley (Kotz et al., 2016; Larsen et al., 2021). This evidence suggests that cultural adaptation is crucial for screening tools to be effective (Kotz et al., 2016; Larsen et al., 2021). Additionally, despite the high rates of perinatal mental disorders, there is a lack of research examining healthcare workers' views on maternal mental health in some African regions (Goyal et al., 2023).

Perinatal mental health screening in Africa faces several challenges, including a severe shortage of mental health specialists, limited research on healthcare workers' views on maternal mental health, and barriers to help-seeking in rural communities (Goyal et al., 2023). Additionally, evidence on the effectiveness of interventions is limited, with task-shifting approaches being common, yet services are often delivered at health facility levels rather than in communities (Woodhead et al., 2023). Although efforts to train healthcare workers and implement task-shifting approaches to address the shortage of specialists exist, there is a critical need for further research and development of culturally sensitive programmes to improve the effectiveness of perinatal mental health care (Goyal et al., 2023; Larsen et al., 2021; Woodhead et al., 2023). Despite these challenges, there are opportunities for improvement. Studies suggested that culturally adapted approaches and psychotherapeutic interventions could significantly impact outcomes, though more evidence is needed to scale up these holistic approaches effectively (Woodhead et al., 2023).

Moreover, the available literature indicated that stigma, limited resources, and a shortage of trained mental health professionals were indeed barriers to perinatal mental health screening in Africa. Goyal et al. (2023) highlight that healthcare workers in rural Kenya face barriers and stigma associated with perinatal depression, which can impede the development of mental health programmes. Similarly, Muzik et al. (2022) discussed the challenge of ensuring adequate perinatal

mental health care services globally, particularly in resource-constrained countries like those in Africa, where multiple risk factors such as poverty and violence exacerbate the situation.

Incongruities were not evident in the provided context; rather, there is a consensus that these barriers are significant. For instance, Brown and Sprague (2021) identify structural, socio-cultural, organisational, and individual factors as barriers to early identification and treatment of mental illness in the perinatal period in South Africa. Nakidde and colleagues (2023) also emphasised the lack of specialised training in maternal mental health as a major challenge for healthcare professionals in Uganda. Obviously, the literature consistently identified mental illness stigma, limited resources, and a shortage of trained mental health professionals as barriers to perinatal mental health screening in Africa (Brown, Sprague, 2021; Goyal et al., 2023; Muzik et al., 2022; Nakidde et al., 2023). Addressing these barriers is crucial for the early identification and treatment of perinatal mental disorders, which are highly treatable when detected early. The integration of mental health services into maternal care, as well as culturally sensitive training and programmes, are recommended to overcome these challenges.

Interestingly, while the challenges are pronounced, there is an acknowledgment of the need for task-shifting and the potential for healthcare workers to be trained to deliver mental health services (Goyal et al., 2023). This aligns with the common approach in sub-Saharan Africa, where task-shifting to non-specialist health workers has been employed due to the scarcity of specialists (Woodhead et al., 2023). Moreover, the hierarchical approach to managing perinatal depressive symptoms, starting with clinical resources and escalating to psychiatric referrals as needed, indicated a structured, albeit resource-limited, system in place (Goyal et al., 2023; Woodhead et al., 2023). Thus, the challenges to improving access to perinatal mental health screening in Africa include a lack of specialists, limited research, and barriers to help-seeking, with task-shifting being a common but not fully effective approach (Goya et al., 2023; Woodhead et al., 2023). However, opportunities exist to train healthcare workers and develop culturally sensitive and evidence-based interventions to enhance the effectiveness of perinatal mental health programmes (Goyal et al., 2023; Woodhead et al., 2023).

Cultural considerations in perinatal mental health screening tools

Cultural beliefs and practices significantly influenced health-seeking behaviours and perceptions among African women during the perinatal period. The literature indicated traditional beliefs, practices, and the definitions of pregnancy and motherhood shaped attitudes toward seeking antenatal and postnatal care (Atekyereza, Mubiru, 2014; Raman et al., 2016). For instance, pregnancy is often seen as a natural state that does not necessarily require medical intervention, and this perception can lead to reluctance to seek professional healthcare (Raman et al., 2016). Additionally, the role of women as mothers is culturally constructed to emphasise endurance of pain and suffering, which may discourage them from seeking help for perinatal mental health issues (Raman et al., 2016).

Contradictions arose when considering the impact of these cultural norms on health-seeking behaviour. Even though some women view pregnancy positively, associating it with joy and social status, others perceive it as a source of misery and suffering, which can deter them from accessing antenatal care (Atekyereza, Mubiru, 2014). Moreover, the stigma associated with mental health problems and the lack of culturally sensitive healthcare services further complicates the willingness of African women to seek care during the perinatal period (Leis et al., 2011).

So, cultural beliefs and practices among African women play a crucial role in shaping their health-seeking behaviours during the perinatal period. These include perceptions of pregnancy as a natural condition, cultural constructions of motherhood, and the stigma surrounding mental health issues. To improve maternal and child health outcomes, it is essential to develop culturally responsive healthcare interventions that acknowledge and address these beliefs and practices (Atekyereza, Mubiru, 2014; Raman et al., 2016).

Prevalence and risk factors of perinatal mental challenges

The prevalence of mental health disorders in the postpartum period among African populations varies across different studies (Sawyer et al., 2010) reported a weighted mean prevalence of 18.3 % for depression after birth, with anxiety rates at 14.0 % postnatally. Silverman et al. (2022) indicated an increase in poor mental health symptoms at seven months postpartum compared to shortly after birth in rural South Africa. Groves et al. (2015) highlighted that nearly one-quarter of South African women experienced intimate partner violence (IPV), which can be associated with mental health disorders,

in the first nine months postpartum. These findings suggest a significant burden of mental health issues during the postpartum period within African populations.

However, there are inconsistencies and interesting facts to consider. For instance, Sawyer et al. (2010) noted that the evidence relating sociodemographic and obstetric variables to mental health was inconclusive, indicating that the risk factors for these disorders are not fully understood. Silverman et al. (2022) also associated worsening mental health with socioeconomic factors such as food insecurity. Groves et al. (2015) emphasised the prevalence of psychological IPV, which may have distinct negative consequences on mental health.

Given this evidence, the prevalence of postpartum mental health disorders in African populations was considerable, with depression and anxiety being the most reported conditions (Sawyer et al., 2010; Silverman et al., 2022). The evidence suggested that these disorders were influenced by various factors, including socioeconomic conditions and IPV (Silverman et al., 2022; Groves et al., 2015). These findings underscored the importance of integrating mental health care into maternal and infant health policies in African countries (Sawyer et al., 2010).

The risk factors associated with perinatal mental disorders in Africa included intimate partner violence, food insecurity, physical illness, poverty, gender violence, living with HIV, psychological and psychiatric risk factors, obstetric risk factors, and social risk factors such as trauma (Le et al., 2023; Ng'oma et al., 2020; Varma et al., 2022). Additionally, socio-cultural factors, lack of social support, and a tendency towards pessimism are also identified as contributing to the risk of perinatal mental disorders (Brown, Sprague, 2021; Kaźmierczak et al., 2020). Though these risk factors were prevalent, there was a discrepancy in the impact of maternal mental health disorders on child development. One study found no significant differences in neurodevelopmental outcomes between toddlers exposed to persistent maternal mood or psychotic disorders and those without such exposure. In contrast, exposure to comorbid anxiety and mood disorders was associated with higher cognitive, motor, and language development scores (Burger et al., 2023). This suggests that the relationship between maternal mental health and child outcomes may be complex and influenced by various factors, including potential protective elements. Therefore, perinatal mental disorders in Africa are multifaceted and influenced by a combination of individual, socio-cultural, and structural factors. Addressing these risk factors requires a holistic approach that considers the diverse contexts within which African women live. Interventions should be culturally sensitive and integrated across multiple levels of healthcare delivery to effectively mitigate these risks and improve maternal and child health outcomes (Brown, Sprague, 2021; Woodhead et al., 2023).

Impact of perinatal mental disorders on maternal and child outcomes

Perinatal mental disorders, such as depression and anxiety, have significant implications for both maternal and child health in Africa. These disorders are prevalent and are associated with adverse outcomes, including impairment of infant health and development (Ng'oma et al., 2020). The literature indicated that maternal and perinatal mental disorders could lead to developmental and behavioural problems in children, potentially mediated by the programming of the hypothalamic-pituitary-adrenal axis, with increased cortisol concentrations during critical periods having long-term effects (Agapaki et al., 2022).

While the impact of perinatal mental disorders is recognised, there is a discrepancy in the knowledge of prenatal versus postnatal mental health among African mothers, with less awareness of the prenatal period and its influence on child development (Nwoke et al., 2023). Additionally, the COVID-19 pandemic has exacerbated perinatal mental health issues, with an increase in the prevalence of depression, anxiety, and self-harming thoughts among perinatal women (Buhagiar, 2021).

Therefore, perinatal mental disorders in Africa pose a substantial risk to the well-being of mothers and their children. The consequences extend beyond the immediate postpartum period, affecting long-term child development and behaviour. Addressing these disorders is crucial, and there is a need for increased awareness and integration of mental health services into maternal and child healthcare systems (Meintjes et al., 2010; Ng'oma et al., 2020). The evidence underscores the importance of culturally sensitive interventions and the potential benefits of involving extended family support, such as grandparents, in mitigating the impact of these disorders (Riem et al., 2023).

4. Discussion

Current research findings on perinatal mental health screening interventions in Africa indicate that common perinatal mental disorders, such as depression and anxiety, are prevalent and have significant implications for both maternal and infant health (Ng'oma et al., 2020). Key risk factors identified include intimate partner violence, food insecurity, and physical illness, with psychological interventions being integrated into routine maternal and child healthcare. However, the optimal model and intensity of these interventions were unclear (Ng'oma et al., 2020). In rural Kenya, healthcare workers have been found to possess varying levels of knowledge and understanding of perinatal depression, and they employ a hierarchical approach to manage symptoms, utilising clinic resources and psychiatric referrals as needed (Goyal et al., 2023).

The effectiveness of screening tools for perinatal mental health in Africa is a subject of ongoing research and debate. In Mali, West Africa, an adapted version of the Edinburgh Postnatal Depression Scale and Hopkins Symptom Checklist has been validated, indicating that Western screening tools can be adapted for local relevance (Lasater et al., 2017). However, a systematic review covering several sub-Saharan African countries found that while most interventions took a psychotherapeutic approach, the effectiveness was limited, with only three studies showing a significant impact (Woodhead et al., 2023). This suggests that while screening tools are being adapted and used, their effectiveness in improving maternal mental health outcomes may be variable.

Some studies emphasise the adaptation of screening tools to local contexts (Lasater et al., 2017; Woodhead et al., 2023), while others highlight the lack of use of validated tools in certain regions, such as the UK (Terry, 2023), and the debate over the effectiveness of universal routine screening (Laios et al., 2013). Additionally, task-shifting to healthcare workers is a common strategy due to the shortage of mental health specialists, but this often occurs at health facility levels rather than in communities (Cooper et al., 2017; Goyal et al., 2023). Despite the fact there is evidence of the adaptation and use of perinatal mental health screening tools in Africa, their effectiveness varies. The need for culturally sensitive and locally relevant tools is recognised, but the impact on maternal and child health outcomes requires further investigation. The debate over the best approach to screening and the integration of mental health care into routine maternal care continues, with more research needed to determine the most effective strategies (Laios et al., 2013; Lasater et al., 2017; Woodhead et al., 2023).

The effectiveness of models of care for perinatal mental health screening in Africa appears to be varied and somewhat limited. According to a systematic review, interventions in sub-Saharan Africa predominantly adopted a psychotherapeutic approach, with some including pharmaceutical components. However, the effectiveness of these interventions was generally limited, with only three studies showing a significant impact and just one demonstrating a large effect size (Woodhead et al., 2023). This suggests that while some models of care have been beneficial, there is a need for further evidence and support for implementing these interventions across a wider variety of countries and contexts.

Interestingly, despite the limited effectiveness of some interventions, task-shifting was a common approach, and services were often delivered at health facility levels rather than in communities (Woodhead et al., 2023). This further indicated a potential mismatch between the models of care and the accessibility needs of the population. Additionally, the burden of depression and poor maternal mental health in Africa is likely related to multiple risk factors such as poverty, violence, and disease, which may complicate the effectiveness of standard screening models (Muzik et al., 2022). On one hand, there are models of care in place for perinatal mental health screening in Africa. On the other hand, their effectiveness is not uniformly high, and there is a clear need for scaling up holistic approaches that are culturally sensitive and accessible at the community level. The evidence suggests that task-shifting and facility-based services are common, but there may be benefits to expanding community-based services and addressing broader social determinants of mental health to improve outcomes (Muzik et al., 2023; Woodhead et al., 2023).

The effectiveness of perinatal mental health screening integration strategies within healthcare systems in Africa appears to be varied and somewhat limited. Some studies highlighted that while interventions are present in several sub-Saharan African countries, their effectiveness is constrained, with only a few studies showing significant impact and even fewer demonstrating a large effect size (Woodhead et al., 2023). These authors also pointed out the common use of task-

shifting approaches, yet services are often confined to health facility levels rather than community settings, suggesting a potential gap in accessibility size (Woodhead et al., 2023).

Interestingly, Goyal et al. (2023) provided a more focused view on healthcare workers in rural Kenya, revealing that they possessed knowledge of perinatal depression and utilised a hierarchical approach to manage symptoms, which includes clinic resources and psychiatric referrals. This suggests a foundation for integrating mental health screening within healthcare systems, but the extent of its effectiveness is not fully explored in this study (Goyal et al., 2023). While there are strategies in place for the integration of perinatal mental health screening within healthcare systems in Africa, the evidence for their effectiveness is limited. The studies indicate a need for scaling up holistic approaches and improving the generation of evidence across various countries and contexts. The integration of such screening programmes is crucial, but further research and support are needed to enhance their impact and reach within the healthcare systems (Woodhead et al., 2023).

Community-based initiatives, task-shifting approaches, and technology-enabled solutions have been instrumental in expanding access to perinatal mental health care in Africa. These strategies addressed the shortage of specialised mental health professionals by empowering non-specialist health workers and community members to provide care. Task-shifting, in particular, is a common approach where responsibilities are transferred to less specialised health workers, which has been applied in various African countries (Woodhead et al., 2023). Moreover, stakeholders see integrating mental health services into primary care settings as both desirable and feasible, suggesting that such approaches can enhance the reach of mental health care (Nakku et al., 2016). However, there are contradictions and challenges to these approaches. While task-shifting is widely used, its effectiveness has been limited, with only a few studies showing a significant impact (Woodhead et al., 2023). Additionally, services are often delivered at health facility levels rather than in communities, which may limit accessibility (Woodhead et al., 2023). Furthermore, the integration of perinatal mental health care into maternal health care is still not prioritised in funding and policy despite its recognition in global health agendas (Sarkar et al., 2022). However, the effectiveness of these strategies in reducing healthcare disparities is not uniformly established. While some studies have shown significant impacts of interventions on maternal mental health (Woodhead et al., 2023), others indicate that more efforts are needed to expand the capacity and services of Access Programmes to address perinatal mental healthcare inequities (Ramella et al., 2022).

5. Implications for practice, policy and research

Healthcare providers play a crucial role in advocating for the integration of perinatal mental health screening into routine perinatal care in Africa. They are at the forefront of recognising the high prevalence of perinatal depression and anxiety disorders, particularly in sub-Saharan Africa, where there is a severe shortage of mental health specialists (Goyal et al., 2023). Providers can leverage their position to highlight the need for systematic screening and treatment, often hindered by limited resources, lack of training, and cultural barriers (Johnson et al., 2021).

Interestingly, while healthcare providers acknowledge the importance of their role in recognising perinatal depression, there is variability in their perceived responsibility to treat it, and they face significant barriers, including structural, socio-cultural, organisational, and individual factors (Brown, Sprague, 2021). These barriers are compounded in settings with culturally and linguistically diverse populations, such as among women of refugee backgrounds, where stigma and language barriers further complicate access to care (Willey et al., 2020). Notwithstanding, healthcare providers are pivotal in advocating for integrating perinatal mental health screening into routine care. They can use clinical encounters to raise awareness about the importance of mental health during the perinatal period and the need for culturally sensitive screening programmes. By doing so, they can help address the multiple barriers to care and support the development of interventions tailored to the specific needs of African populations (Brown, Sprague, 2021; Goyal et al., 2023; Woodhead et al., 2023). Providers' advocacy efforts are essential to ensure that mental health becomes routine in maternity care, ultimately improving outcomes for African mothers and children (Laios et al., 2013; Blackmore et al., 2022).

Policymakers can also be crucial in advocating for integrating perinatal mental health screening into routine perinatal care in Africa. Policies should address barriers facing mental health service provision, such as low literacy about perinatal depression among health administrators, community awareness, and cultural norms (Dadi et al., 2021). Additionally,

policymakers can influence the prioritisation of mental health services within the healthcare system, which often lacks structural support for such initiatives. Despite the recognition of the importance of mental health screening, there is evidence of insufficient policy support for physical health components in mental health plans, and routine screening for metabolic syndrome risk factors in people with severe mental illness is notably low (Mugisha et al., 2017).

Successful collaborative efforts and innovative strategies in perinatal mental health care have been documented in various settings. For instance, integrating education and primary care sectors has been instrumental in addressing the shortage of mental health services for children and adolescents, with research indicating positive outcomes from such partnerships (Arora, Bohnenkamp, 2016). Additionally, multidisciplinary approaches, which include a range of healthcare professionals, should be targeted as they have been shown to provide wide-ranging care and improve maternal mental health outcomes (Kihara, 2024).

Furthermore, innovative strategies include implementing early intervention programmes (Sarfo, 2014) and effectively improving mental health outcomes for women and infants (Myors et al., 2015). Moreover, integrated care efforts, such as the MC3 Perinatal care programme, have demonstrated success in increasing access to perinatal mental health care and improving maternal mental health outcomes, particularly in reducing anxiety and depression (Quigley, 2021). The establishment of a Perinatal Mental Health Task Force at an urban academic children's hospital has also been a successful example of systems change, leading to expanded screening and improved identification and treatment of perinatal mood and anxiety disorders (Jarvis et al., 2021).

Therefore, collaborative efforts across various sectors and adopting multidisciplinary and integrated care models have successfully overcome systemic challenges and enhanced perinatal mental health outcomes. These strategies have been supported by research and clinical examples that demonstrate their effectiveness in providing high-quality mental health care and addressing barriers to access and engagement (Arora, Bohnenkamp, 2016; Jarvis et al., 2021; Kihara, 2024; Quigley, 2021).

Interestingly, despite the high rates of common perinatal mental disorders in sub-Saharan Africa, research on interventions is limited, with most studies focusing on psychotherapeutic approaches and some including pharmaceutical components. The effectiveness of these interventions has been mixed, with only a few studies showing a significant impact (Woodhead et al., 2023). Additionally, the economic burden of perinatal mental health problems is substantial, with lifetime costs for a cohort of women and children in South Africa estimated at USD 2.8 billion, highlighting the need for investment in perinatal mental health care (Bauer et al., 2023).

Although there is recognition of the burden of perinatal mental health disorders in Africa and some efforts to integrate screening and interventions into healthcare systems, the evidence remains limited. There is a need for further research to support the implementation and scaling up of effective, culturally sensitive, and holistic approaches to maternal mental health and child wellbeing (Bauer et al., 2022; Woodhead et al., 2023). Addressing these challenges is crucial for improving the health outcomes of mothers and children across the continent (Woodhead, 2023).

6. Conclusion

Perinatal mental health challenges are significant in Africa, with prevalence estimates exceeding those in high-income countries. However, addressing these challenges requires overcoming obstacles in screening and care. Challenges to screening and care include high burden, limited screening, and scarce resources. Studies implied that one in four pregnant women and one in five postpartum women in Africa experience mental health problems. However, lack of training for health workers, poorly coordinated referral systems, and stigma surrounding mental health can hinder screening. There is also a shortage of mental health specialists and medication in many African countries. Culturally appropriate interventions and leveraging existing community support systems can be highly effective. Besides, utilising technology for remote consultations and mental health support groups can expand access to care, especially in rural areas. In the future, multi-pronged approaches that address awareness, screening, workforce development, and resource allocation will be essential to improving African perinatal mental healthcare.

7. Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Availability of data and materials

Not applicable.

Conflict of interest statement

The author reports no conflicts of interest.


Funding

Not applicable.

8. Acknowledgements

I would like to thank the editorial staff of the Centre for Behaviour and Wellness Advocacy, Ghana, for their free editing support.

Author's ORCID

Timothy Pritchard Debrah  <https://orcid.org/0000-0002-4503-9211>

References

- [Agapaki et al., 2022](#) – Agapaki, A., Papagianni, F., Metallinou, D., Valavani, E., Mantzou, A., Kanelli, S., ... , Pervanidou, P. (2022). Associations between maternal and offspring hair cortisol concentrations and child behavioral symptoms in mother-child pairs with perinatal mental disorders. *Children*. 9(6): 810.
- [Arora, Bohnenkamp, 2016](#) – Arora, P.G., Bohnenkamp, J.H. (2016). Collaborative practices and partnerships across school mental health and pediatric primary care settings. *Advances in School Mental Health Promotion*. 9(3-4): 141-147.
- [Atekyereza, Mubiru, 2014](#) – Atekyereza, P.R., Mubiru, K. (2014). Influence of pregnancy perceptions on patterns of seeking antenatal care among women in reproductive age of Masaka District, Uganda. *Tanzania Journal of Health Research*. 16(4): 312-321.
- [Bauer et al., 2022](#) – Bauer, A., Garman, E., Besada, D., Field, S., Knapp, M., Honikman, S. (2022). Costs of common perinatal mental health problems in South Africa. *Global Mental Health*. 9: 429-438.
- [Bayrampour et al., 2018](#) – Bayrampour, H., Hapsari, A.P., Pavlovic, J. (2018). Barriers to addressing perinatal mental health issues in midwifery settings. *Midwifery*. 59: 47-58.
- [Blackmore et al., 2022](#) – Blackmore, R., Boyle, J.A., Gray, K.M., Willey, S., Highet, N., Gibson-Helm, M. (2022). Introducing and integrating perinatal mental health screening: Development of an equity-informed evidence-based approach. *Health Expectations*. 25(5): 2287-2298.
- [Brown, Sprague, 2021](#) – Brown, S., Sprague, C. (2021). Health care providers' perceptions of barriers to perinatal mental healthcare in South Africa. *BMC Public Health*. 21: 1-13.
- [Buhagiar et al., 2024](#) – Buhagiar, R., Bettenzana, K., Grant, K.A. (2024). The prevalence of perinatal mental health disorders and psychosocial characteristics of women in Malta: A cross-sectional study. *Birth*. 2(1): 1559.
- [Buhagiar, 2021](#) – Buhagiar, R. (2021). COVID-19 and Maternal Mental Health and Wellbeing. *Journal of Emergency Management and Disaster Communications*. 2(02): 201-210.
- [Burger et al., 2023](#) – Burger, M., Einspieler, C., Jordaan, E.R., Unger, M., Niehaus, D.J. (2023). Persistent maternal mental health disorders and toddler neurodevelopment at 18 months: longitudinal follow-up of a low-income South African cohort. *International Journal of Environmental Research and Public Health*. 20(12): 6192.
- [Cooper et al., 2017](#) – Cooper, S., Honikman, S., Meintjes, I., Tomlinson, M. (2017). Synthesising Global and Local Knowledge for the Development of Maternal Mental Health Care: Two Cases from South Africa. *The Palgrave Handbook of Sociocultural Perspectives on Global Mental Health*. 487-507.
- [Dadi et al., 2021](#) – Dadi, A.F., Miller, E.R., Azale, T., Mwanri, L. (2021). "We do not know how to screen and provide treatment": A qualitative study of barriers and enablers of implementing perinatal depression health services in Ethiopia. *International Journal of Mental Health Systems*. 15(1): 41.

[Dzinamarira et al., 2024](#) – Dzinamarira, T., Iradukunda, P. G., Saramba, E., Gashema, P., Moyo, E., Mangezi, W., Musuka, G. (2024). COVID-19 and mental health services in Sub-Saharan Africa: A critical literature review. *Comprehensive Psychiatry*. 131: 152465.

[Goyal et al., 2023](#) – Goyal, D., Rabemananjara, K.M., Lara-Cinisomo, S., Le, H.N. (2023). Healthcare worker's understanding of perinatal depression and maternal mental health service needs in rural Kenya. *Mental Health & Prevention*. 29. 200260.

[Groves et al., 2015](#) – Groves, A.K., Moodley, D., McNaughton-Reyes, L., Martin, S.L., Foshee, V., Maman, S. (2015). Prevalence, rates and correlates of intimate partner violence among South African women during pregnancy and the postpartum period. *Maternal and Child Health Journal*. 19: 487-495.

[Jarvis et al., 2021](#) – Jarvis, L., Long, M., Theodorou, P., Barclay Hoffman, S., Soghier, L., Beers, L. (2021). Perinatal mental health task force: integrating care across a pediatric hospital setting. *Pediatrics*. 148(6): e2021050300.

[Johnson et al., 2021](#) – Johnson, A., Stevenson, E., Moeller, L., McMillian-Bohler, J. (2021). Systematic screening for perinatal mood and anxiety disorders to promote onsite mental health consultations: A quality improvement report. *Journal of Midwifery & Women's Health*. 66(4): 534-539.

[Kaźmierczak et al., 2020](#) – Kaźmierczak, M., Gebuza, G., Gierszewska, M., Bannach, M., Mieczkowska, E., Dombrowska-Pali, A., Czubkowska, M. (2020). Screening for detection of the risk of perinatal mental disorders among women in Poland. *Issues in Mental Health Nursing*. 41(5): 438-444.

[Kihara, 2024](#) – Kihara, W. (2024). Role of a multidisciplinary approach in maternal health and mental health outcomes. *Journal of Obstetrics and Gynaecology of Eastern and Central Africa*. 36(1). DOI: <https://doi.org/10.59692/jogeca.v36i1.95>.

[Kotz et al., 2016](#) – Kotz, J., Munns, A., Marriott, R., Marley, J.V. (2016). Perinatal depression and screening among Aboriginal Australians in the Kimberley. *Contemporary Nurse*. 52(1): 42-58.

[Laios et al., 2013](#) – Laios, L., Rio, I., Judd, F. (2013). Improving maternal perinatal mental health: integrated care for all women versus screening for depression. *Australasian Psychiatry*. 21(2): 171-175.

[Larsen et al., 2021](#) – Larsen, A., Pintye, J., Bhat, A., Kumar, M., Kinuthia, J., Collins, P.Y., John-Stewart, G. (2021). Is there an optimal screening tool for identifying perinatal depression within clinical settings of sub-Saharan Africa? *SSM-Mental Health*. 1: 100015.

[Lasater et al., 2017](#) – Lasater, M.E., Beebe, M., Blomberg, K., Warren, N., Gresh, A., Hsih, K., Winch, P. (2017). Adaptation of a Screening Tool for Perinatal Depression and Anxiety in Community-Based Maternal Health Services in Mali. *Journal of Midwifery & Women's Health*. 62(5): 632-633.

[Le et al., 2023](#) – Le, H.N., Rabemananjara, K.M., Goyal, D. (2023). Cognitive-behavioral interventions for mental health conditions among women in sub-Saharan Africa. In *Handbook of Cognitive Behavioral Therapy by Disorder* (pp. 395-406). Academic Press.

[Leis et al., 2011](#) – Leis, J.A., Mendelson, T., Perry, D.F., Tandon, S.D. (2011). Perceptions of mental health services among low-income, perinatal African-American women. *Women's Health Issues*. 21(4): 314-319.

[Meintjes et al., 2010](#) – Meintjes, I., Field, S., Sanders, L., van Heyningen, T., Honikman, S. (2010). Improving child outcomes through maternal mental health interventions. *Journal of Child and Adolescent Mental Health*. 22(2): 73-82. 2

[Mugisha et al., 2017](#) – Mugisha, J., De Hert, M., Stubbs, B., Basangwa, D., Vancampfort, D. (2017). Physical health policies and metabolic screening in mental health care systems of sub-Saharan African countries: a systematic review. *International Journal of Mental Health Systems*. 11: 1-7.

[Muzik et al., 2022](#) – Muzik, M., Hamilton, S., Rochat, T. J., Fishe, J. R., Barnett, B., Chandra, P., ... , Haling, M. (2022). Perinatal mental health in primary care: An overview of current models across the globe. In *Companion to Primary Care Mental Health*. 365-384.

Myors et al., 2015 – Myors, K.A., Johnson, M., Cleary, M., Schmied, V. (2015). Engaging women at risk for poor perinatal mental health outcomes: A mixed-methods study. *International Journal of Mental Health Nursing*. 24(3): 241-252.

Nakidde et al., 2023 – Nakidde, G., Kumakech, E., Mugisha, J.F. (2023). Maternal mental health screening and management by health workers in southwestern Uganda: A qualitative analysis of knowledge, practices, and challenges. *BMC Pregnancy and Childbirth*. 23(1): 477.

Nakku et al., 2016 – Nakku, J.E., Okello, E.S., Kizza, D., Honikman, S., Ssebunnya, J., Ndyabangi, S., ... , Kigozi, F. (2016). Perinatal mental health care in a rural African district, Uganda: A qualitative study of barriers, facilitators and needs. *BMC Health Services Research*. 16: 1-12.

Ng'oma et al., 2020 – Ng'oma, M., Bitew, T., Kaiyo-Utete, M., Hanlon, C., Honikman, S., Stewart, R.C. (2020). Perinatal mental health around the world: priorities for research and service development in Africa. *BJPsych International*. 17(3): 56-59.

Nwoke et al., 2023 – Nwoke, C.N., Awosoga, O.A., McDonald, S., Bonifacio, G.T., Leung, B.M. (2023). African immigrant mothers' views of perinatal mental health and acceptability of perinatal mental health screening: Quantitative cross-sectional survey study. *JMIR Formative Research*. 7: e40008.

Quigley, 2021 – Quigley, J. (2021). Michigan Child Collaborative Care Program (MC3): Ten years of growth, adaptation, and learning. *Journal of the American Academy of Child and Adolescent Psychiatry*. S32-S32.

Raman et al., 2016 – Raman, S., Nicholls, R., Ritchie, J., Razee, H., Shafiee, S. (2016). How natural is the supernatural? Synthesis of the qualitative literature from low and middle income countries on cultural practices and traditional beliefs influencing the perinatal period. *Midwifery*. 39: 87-97.

Ramella et al., 2022 – Ramella, L., Schaefer, A.J., Rokicki, S., Adachi, J., Thompson, A.B., Byatt, N., ... , Mackie, T.I. (2022). A national survey on adaptations by perinatal psychiatry access programs to promote perinatal mental healthcare equity. *General Hospital Psychiatry*. 76: 49-54.

Riem et al., 2023 – Riem, M.M., Bakermans-Kranenburg, M.J., Cima, M., van IJzendoorn, M.H. (2023). Grandparental support and maternal postpartum mental health: A review and meta-analysis. *Human Nature*. 34(1): 25-45.

Sarfo, 2014 – Sarfo, J.O. (2014). Role of Clinical Neuropsychologists in the evaluation and management of diabetes mellitus in Ghana: A position statement. *Journal of Advocacy, Research and Education*. 1(1): 37-40.

Sarkar et al., 2022 – Sarkar, N.D., Baingana, F., Criel, B. (2022). Integration of perinatal mental health care into district health services in Uganda: Why is it not happening? The Four Domain Integrated Health (4DIH) explanatory framework. *Social Science & Medicine*. 296: 113464.

Sawyer et al., 2010 – Sawyer, A., Ayers, S., Smith, H. (2010). Pre-and postnatal psychological wellbeing in Africa: a systematic review. *Journal of Affective Disorders*. 123(1-3): 17-29.

Silverman et al., 2022 – Silverman, D.T., Killion, J.P., Evans, D., Coetzee, L., Rockers, P.C., Hamer, D.H. (2022). Postpartum Mental Health in Rural South Africa: Socioeconomic Stressors and Worsening Mental Health. *Maternal and Child Health Journal*. 26: 434-440.

Terry, 2023 – Terry, J. (2023). The Antenatal Risk Questionnaire: Identifying mothers at risk of developing perinatal mental illness. *Journal of Health Visiting*. 11(1): 32-40.

Ugar, Malele, 2024 – Ugar, E.T., Malele, N. (2024). Designing AI for mental health diagnosis: challenges from sub-Saharan African value-laden judgements on mental health disorders. *Journal of Medical Ethics*. DOI: <https://doi.org/10.1136/jme-2023-109711>.

Varma et al., 2022 – Varma, D.S., Kukreti, P., Chandra, P.S. (2022). Social and cultural factors in perinatal mental health. *Oxford Textbook of Social Psychiatry*. 433.

Willey et al., 2020 – Willey, S.M., Blackmore, R.P., Gibson-Helm, M.E., Ali, R., Boyd, L.M., McBride, J., Boyle, J.A. (2020a). "If you don't ask... you don't tell": refugee women's perspectives on perinatal mental health screening. *Women and Birth*. 33(5): e429-e437.

Woodhead et al., 2023 – Woodhead, S., Marley, C., Calia, C., Guerra, C., Reid, C., Burke, J. P., Amos, A. (2023). Maternal mental health in Sub-Saharan Africa: A Systematic review of interventions for common perinatal mental health disorders. *Research Square*. DOI: <https://doi.org/10.21203/rs.3.rs-2769632/v1>

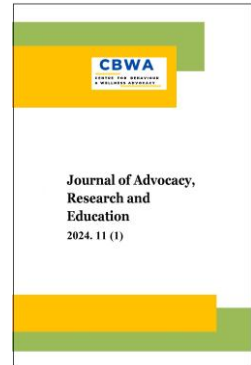


Publisher: Centre for Behaviour and Wellness
Advocacy, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
ISSN 2410-4981. E-ISSN 2508-1055
2024. 11(1): 77-86



DOI: 10.13187/jare.2024.1.77

Journal homepage:

<http://kadint.net/our-journal.html>



Perceived Discrimination and Other Factors Influencing Self-Esteem in Persons with Albinism in North Central Nigeria

Ruth Otelahu Adah ^a, Gabriel Ujah Adah ^b, *

^aJos University Teaching Hospital, Plateau State, Nigeria

^bNational Primary Health Care Development Agency, Abuja, Nigeria

Abstract

The deficiency of the photoprotective pigment in the skin of persons with albinism exposes them to various skin and eye disorders. Myths about persons with albinism have arisen from ignorance of their unique looks, which has also led to stigmatisation and discrimination of persons affected by the condition. These can affect individuals' self-esteem and may have long-term psychological and general well-being implications. A cross-sectional design was used to document the perceived discrimination against persons with albinism in the Plateau State of North Central Nigeria and examine the relationship with self-esteem levels. Participants (N = 42) completed the interviewer-based questionnaire centred on sources of support, avoidance, and abusive behaviour by others towards them. The Rosenberg self-esteem scale was used to estimate self-esteem, and information was analysed using SPSS version 26.0. The result showed more subjects were uncertain of fathers' acceptance than mothers (11.9 % vs 0.4 %), while 16 (38.1 %) were discriminated against by someone in a position of authority, 27 (64.3 %) had been verbally abused and 5 (9.5 %) physically abused on account of albinism. Challenges causing dissatisfaction were mainly financial, exposure to lack of protection from the sun and stigma. Self-esteem level was associated with the level of education, place of residence, the uncertainty of acceptance by the father, avoidance by peers, and being verbally abused. These findings serve as a baseline in advocating for policies to address stigma and discrimination against persons with albinism within communities while developing programs that aid in building their self-esteem.

Keywords: albino, self-confidence, stigma, acceptance, abuse, support, North Central Nigeria.

1. Introduction

Oculocutaneous albinism is an inherited disorder characterised by minimal or no melanin production, the photoprotective pigment that shields the skin from the damaging effects of the sun (Marcon, Maia, 2019). While persons with albinism are found in all races and cultures, the highest numbers are found in Africa, and most of those are believed to be in Nigeria, though no official data exists in regards to that (Ero et al., 2021; Hong et al., 2006; Lund et al., 1997; National Policy on Albinism, 2012). In addition to being noticeably paler than other members of the same race, as observed prominently in African albinos, the underlying melanin deficiency exposes the skin to the

* Corresponding author

E-mail addresses: adahruth@gmail.com (R. Adah)

Received: 23 January 2024 Revised: 20 April 2024 Accepted: 20 April 2024 Published: 31 April 2024

harmful effect of ultraviolet radiation from the sun. This results in an increased risk of developing a variety of solar-related skin disorders, even skin malignancies, from which a significant proportion have lost their lives (Awe, Azeke, 2018; Enitan et al., 2022; Lai et al., 2018). The condition also affects the eyes, resulting in decreased visual acuity, nystagmus, strabismus, and photophobia (Possi, Milinga, 2018).

Despite these physiological challenges, and perhaps because of them, misconceptions and myths have been spun around albinism, resulting in stigma and discrimination against persons with the condition. Many are denied access to social, economic, educational and health resources. Cases of injustice, bullying, physical abuse and being killed have been reported widely in this marginalised group in many developing countries (Ero et al., 2021; Hong et al., 2006; Possi, Milinga, 2018; Ikuomola, 2015; Ojilere, 2018; Aborisade, 2021). Since albinism is a lifelong disorder, these associated physiological, social, and economic challenges typically are ongoing.

Self-esteem is an individual's attitude toward oneself, whether favourable or negative (Rosenberg et al., 1995). The acceptance or rejection of others significantly impacts the development of self-esteem, which in turn impacts an individual's psychological, physical, social, and overall health at different stages of life. Low self-esteem has been shown to be intricately associated with low life satisfaction, antisocial behaviour, health-compromising behaviour, poor school performance and mental health disorders such as suicide ideation and depression (Berber, Odaci, 2020; Tus, 2020; Nguyen, 2019). Some of these have been reported in persons with albinism (Hong et al., 2006; Lund et al., 1997; Aborisade, 2021; Hajinia, Nasirian, 2014; Palmer, 2005; Ezeilo, 1989).

Much of the information on persons living with albinism in Nigeria has been on physical health and morbidity, with little on their psychological health. There is also very little information regarding abuse that individuals with albinism experience, particularly in the northern part of the country. The findings could be useful in advocacy, the development of policies, and interventions to achieve optimal well-being, given the negative effects abuse has on self-esteem. Therefore, this study aimed to assess and identify factors associated with self-esteem in Persons with Albinism in Plateau State, Northcentral Nigeria.

2. Materials and methods

Research design

The correlational research design was employed in this study as we sought to describe the relationship between self-esteem in Persons with Albinism and other variables.

Sampling

We used the convenience sampling strategy to recruit eligible subjects from persons with albinism from the different communities and local government of Plateau State who attended the health outreach organised in collaboration with the Centre for Albinism Right and Empowerment Network (CAREN), Plateau State, in January 2023. Participants under 12 years old and those who could not communicate in the English language or the commonly spoken 'broken English' were excluded.

Participants

Of the 81 persons with albinism who attended the outreach program, 42 of them aged 12 years and above were eligible and consented to be part of the study [N = 42] (male = 40.5 %; female 59.5 %).

Instrument for data collection

A semi-structured interviewer-administered questionnaire was designed to extract information from each respondent on socio-demographics, perceived abuse, source of support and how satisfied they were with the conditions they were currently in. The Rosenberg self-esteem scale developed in 1965 by Morris Rosenberg, designed for individuals ≥ 12 years of age, was another instrument adopted to estimate self-esteem by asking respondents to consider their current feelings in different areas (Berber, Odaci, 2020; Lima, Souza, 2019; García, 2019). The scale has an excellent internal consistency assessment on the Guttman scale coefficient of reproducibility of .92 and correlations as high as .85 and .88 in the test-retest reliability over two weeks. It also demonstrates a high level of validity (Rosenberg, 1979).

The ten statements of the scale had 4 Likert scale responses, which were strongly agree (4), agree (3), disagree (2) and strongly disagree (1) for the five positive worded statements. An example

of the positively worded statements is, “ I feel that I have a number of good qualities.” the five negatively worded ones, such as “At times, I think I am no good at all”, are scored in reverse. Higher total scores indicate higher levels of self-esteem; the range of total values obtainable is 10 to 40. Self-esteem was categorised as Low (10–25), which indicates feelings of incompetence, inadequacy, and difficulty in facing life’s challenges; Medium (26–29) suggests a fluctuation between feelings of approval and rejection; High self-esteem (30–40) indicates the individual is confident that they are valuable and competent (Lipenga, Ngwira,2018).

Data collection

The data collection was guided by the ethical principles for research involving human subjects and complied with the Helsinki Declaration. Ethical approval was obtained from the Plateau State Ministry of Health Research and Ethical Committee [MOH/MIS/202/VOL2/X]. The purpose and methods of the study were explained to the eligible attendees, after which they were informed of the voluntary nature of participation and that refusal had no consequences. Consent was then obtained directly from the adult participants and the parents or guardians of participants under 18. In addition, assent was sought for those below 18 years. Information was collected using the questionnaire. Each questionnaire was checked for completeness and clarity before submission on-site.

Statistical analysis

Data collected were entered into and analysed with the Statistical Package for the Social Sciences (SPSS) version 26.0. Categorical variables such as gender and educational level are presented as frequency and percentages. Continuous variables like self-esteem scores were presented as mean and standard deviation and bivariate analysis was conducted using a t-test. The P value of < 0.05 is considered as significant.

3. Results

Table 1 showed that none of the participants were certain of their parents’ non-acceptance of them; however, a greater proportion were uncertain of fathers’ acceptance than mothers (11.9 % vs 0.4 %). The majority (64.3 %) were verbally abused on account of being persons with albinism, while only less than a tenth reported physical abuse for the same. A greater majority of respondents identified the family as the source of support, with no subject perceiving the government as supportive. Among those dissatisfied with their current state, financial issues were the most frequent reasons.

Table 1. Characteristics and perceptions of Persons with Albinism (N = 42)

| S/N | Variables | Number (percentage) |
|-----|-------------------------------------|----------------------|
| 1. | Age(years) | |
| | Range: 12-45 years | |
| | Mean: 24.57±9.22 | |
| | Adolescents (12-19) | 18(42.9) |
| | Adults (≥20) | 24(47.1) |
| 2. | Gender | |
| | male | 17(40.5) |
| | female | 25(59.5) |
| 3. | Residential setting | |
| | Rural | 14(33.3) |
| | Urban | 28(66.7) |
| 4. | Current level of Educational | |
| | None | 4(9.5) |
| | primary | 1(2.4) |
| | Secondary | 22(52.4) |
| | Post-secondary | 15(35.7) |
| 5. | Family albinism | |
| | Yes | 28(66.7) |
| | No | 14(33.3) |

| S/N | Variables | Number (percentage) |
|-----|---|----------------------|
| 6. | Father accepts me | |
| | Yes | 37(88.1) |
| | Unsure | 5(11.9) |
| 7. | Mother accepts me | |
| | Yes | 41(97.6) |
| | unsure | 1(0.4) |
| 8. | Discriminated against by authority figure (teacher, boss, health worker parent, traditional head) | |
| | Yes | 16(38.1) |
| | No | 26(61.9) |
| 9. | Physical abuse on account of albinism | |
| | Yes | 4(9.5) |
| | No | 38(90.5) |
| 10. | Verbal abuse on account of albinism (insults, name-calling, malicious teasing, jeering, cursing) | |
| | Yes | 27(64.3) |
| | No | 15(35.7) |
| | Verbal abused by Family member (5), known person (13), stranger/passersby (11) -multiple responses | |
| 11. | Source of support (multiple response) | |
| | Family | 38(90.5) |
| | Friends | 9(21.4) |
| | School | 10(23.8) |
| | Religious | 8(19.0) |
| | Community | 1(2.3) |
| | Non-Governmental Organization | 6(14.3) |
| | Government | 0(0.0) |
| | No support | 4(9.5) |
| 12. | Dissatisfied with the current state of life | |
| | Yes | 23(54.8) |
| | No | 19(45.2) |
| 13. | Main reason underlying dissatisfaction | |
| | Financial (13) | |
| | Exposure and lack of protection to sunlight and elements (7) | |
| | Stigma (6) | |
| | Poor working/schooling conditions (4) | |
| | Don't know why (2) | |
| 14. | I need a counsellor to improve my self-esteem | |
| | Yes | 29(69.0) |
| | No | 13(31.0) |

The results in [Table 2](#) showed that two items, 'At times, I think I am no good at all' and 'I wish I could have more respect for myself', weighed below the weighted average (3.07) as large proportions of respondents (38.1 % and 97.6 %) agreed with the negatively worded statements. The range of total self-esteem scores was between 19 and 37, with a mean and standard deviation of 30.69 ± 5.12 . When categorised, 4 of 42 subjects (9.5 %) had low self-esteem, 16(38.1 %) had moderate self-esteem, and 22(52.4) had high self-esteem.

Table 2. Mean responses to Rosenberg Self-Esteem Scale items

| Items | Strongly Agree n(%) | Agree n(%) | Disagree n(%) | Strongly Disagree n(%) | Mean±SD |
|--|------------------------|---------------|------------------|---------------------------|-----------|
| Positively worded items | | | | | |
| 1. On the whole, I am satisfied with myself | 18(42.9) | 20(47.6) | 3(7.1) | 1(2.1) | 3.31±0.72 |
| 2. I have a number of good qualities. | 15(35.7) | 24(57.1) | 3(7.1) | 0(0) | 3.29±0.59 |
| 3. I am able to do things as well as most other people | 20(47.6) | 16(38.1) | 6(14.3) | 0(0) | 3.33±0.72 |
| 4. I'm a person of worth and equal to others. | 19(45.2) | 21(50.0) | 2(4.8) | 0(0) | 3.40±0.59 |
| 5. I take a positive attitude toward myself. | 17(40.5) | 21(50.0) | 4(9.5) | 0(0) | 3.31±0.64 |
| Negatively worded items | | | | | |
| 6. At times, I think I am no good at all. | 1(2.4) | 15(35.7) | 12(28.6) | 14(33.3) | 2.93±0.89 |
| 7. I feel I do not have much to be proud of | 2(4.8) | 7(16.7) | 17(40.5) | 16(38.1) | 3.12±0.86 |
| 8. I certainly feel useless at times. | 2(4.8) | 6(14.3) | 18(42.9) | 16(38.1) | 3.14±0.84 |
| 9. I wish I could have more respect for myself. | 20(47.6) | 21(50.0) | 1(2.4) | 0(0) | 1.55±0.55 |
| 10. All in all, I feel that I am a failure. | 1(2.4) | 4(9.5) | 18(42.9) | 19(45.2) | 3.31±0.75 |

In [Table 3](#) above, the self-esteem of persons with albinism is shown to be significantly lower in the group who had no formal education and primary education than those with higher levels of education ($p=0.001$), in those living in rural areas than urban ($MD = 3.9$; $p = 0.045$), those uncertain of fathers' acceptance compared with those certain ($MD = 4.87$; $p = 0.038$). Self-esteem level was also noted to be lower among those who perceived that school or work colleagues avoided them ($MD = .468$; $p = 0.004$) and those who reported verbal abuse on account of albinism ($MD=3.70$; $p = 0.023$).

Table 3. Factors associated with self-esteem level of persons with albinism

| S/N | Variable | Mean self-esteem score | Mean difference(MD) | t-test | p-value |
|-----|--|--------------------------|---------------------|--------|---------|
| 1. | Age Adolescents Adults | 32.06±3.8 29.67±5.78 | 2.40 | 1.52 | 0.14 |
| 2. | Gender Male Female | 31.39±4.27 30.08±5.62 | 1.51 | 0.99 | 0.33 |
| 3. | Educational status † No formal education & primary | 23.20± 7.73 | | 8.25# | 0.001 |

| S/N | Variable | Mean self-esteem score | Mean difference(MD) | t-test | p-value |
|-----|--|------------------------|---------------------|--------|---------|
| | Secondary | 31.61±0.79 | | | |
| | Post-secondary | 31.86±4.00 | | | |
| 4. | Residence | | | | |
| | Rural | 28.50±6.63 | 3.29 | 2.03 | 0.045 |
| | Urban | 31.79±3.85 | | | |
| 5. | History of family albinism | | | | |
| | Yes | 29.96±5.44 | 2.18 | 1.31 | 0.20 |
| | No | 32.14±4.20 | | | |
| 6. | Father Accepts me | | | | |
| | Yes | 31.27±5.04 | 4.87 | 2.62 | 0.038 |
| | uncertain | 26.40±3.71 | | | |
| 7. | Discriminated against by someone in authority | | | | |
| | Yes | 29.88±5.49 | 1.32 | 0.77 | 0.45 |
| | No | 31.19±5.78 | | | |
| 8. | Colleagues avoid me | | | | |
| | Yes | 27.57±5.23 | 4.68 | 3.07 | 0.004 |
| | No | 32.25±4.36 | | | |
| 9. | Physical abuse on account of albinism | | | | |
| | Yes | 26.27±4.27 | 4.91 | 1.88 | 0.067 |
| | No | 31.16± | | | |
| 10. | Verbal abuse on account of albinism | | | | |
| | Yes | 29.37±4.70 | 3.70 | 2.37 | 0.023 |
| | No | 33.07±5.12 | | | |
| 11. | Dissatisfied with the current state of life | | | | |
| | Yes | 30.91±5.59 | 0.49 | 0.31 | 0.76 |
| | No | 30.42±4.61 | | | |
| 12. | Needs counsel on self-esteem | | | | |
| | Yes | 30.93±4.79 | 0.79 | 0.29 | 0.76 |
| | No | 30.42±6.16 | | | |

Notes: †- Anova; # - F test

4. Discussion

Our study aimed to assess self-esteem levels and factors associated with the self-esteem of persons with albinism. The high mean scores obtained in individual items and summative scores of the Rosenberg self-esteem scale by most individuals indicate that most subjects perceived themselves as valuable and confident. This is a positive and commendable find, as skin colour has been found to affect self-esteem depending on whether it is perceived as atypical, as observed in albinism or a desired ideal with issues of colourism (Aborisade, 2021; Lipenga, Ngwira, 2018; Sharif, Siddique, 2020). Similar findings were reported in a previously conducted comparative study among secondary school students in South West Nigeria, where all subjects with albinism had moderate to high levels of self-esteem. In another study among teenagers with albinism in South Africa, significantly higher levels of self-esteem were observed compared to non-albino controls (Ahanonye, 2017; Selepe, 2007).

Our findings differ from that of a hospital-based study of persons with other skin conditions (acne, psoriasis and eczema) by Costeris (2021), showing significantly lower self-esteem and less social support they perceived they had compared with controls without these skin conditions. These may be coming from a sense of ill-health centred around these acquired conditions of hospital

subjects, which would explain the lower self-esteem compared to our finding of high self-esteem in persons with albinism. The person with albinism has a condition they were born with and have lived their entire life with, and they may also have psychologically adapted to it. Another possibility is that our participants' responses were influenced by being in a social gathering of individuals with albinism, which gave them a positive feeling during the interview, boosting their self-esteem.

Specific items (six and nine), which were negatively worded, had lower mean scores than other statement items. These statements were likely not understood due to cultural and language orientation differences. A statement such as, 'I wish I could have more respect for myself' may be answered with agreement regardless of how much respect they already had for themselves. In our setting, it may be understood as a positive statement. Furthermore, the larger proportion of our subjects with albinism had educational levels above the primary level as opposed to reports from previous studies of a significant proportion of persons in this marginalised group having little or no formal education (Ero et al., 2021; Hong et al., 2006; Possi, Milinga, 2018). This may mean more persons affected by albinism are no longer being restricted to the home as it was in the past but are out accessing educational institutions, which underscores the need for low vision aids and skin protective strategies.

The difference we found in self-esteem levels between the education levels was expected as self-efficacy, which is usually higher with higher levels of education is a component of self-esteem. Self-esteem, in turn, is a driver in pursuing and completing educational goals; implying that inculcating educational interventions for this disadvantaged group is crucial (Bano et al., 2015; Ferkany, 2008). Also, being a resident of an urban area increases access to education, health, and other social infrastructure and will likely affect self-esteem positively. This explains the relationship between place of residence and self-esteem levels found in our study participants.

Compared to mothers, a larger number of participants expressed uncertainty about their fathers' acceptance of them, and those who were uncertain of their fathers' support also showed significantly lower levels of self-esteem. Fathers are more reluctant to accept infants with albinism and, in some cases, reject both mother and child (Ero et al., 2021; Kromberg, 2018; Lipenga, Nwigira, 2018). Fathers' acceptance and support are so crucial that they have been shown to be a major contributor to building self-esteem and psychological adjustment in childhood and even up to adulthood (Wagani, 2016). This has also been noted specifically among persons with albinism (Ero et al., 2021; Hajinia, Nasirian, 2014).

Furthermore, discrimination against individuals with albinism by persons in place of authority was common among the study's participants, with more than a third reporting such experiences. This is consistent with others who reported prevalent institutional, family, and community abuse and prejudice (Ero et al., 2021; Hong et al., 2006). There was no significant difference in self-esteem levels compared to individuals who had not reported discrimination. This could be due to the commonplace abuse by authority figures across the country, regardless of a person's disability status (Etieyibo, Omiegbe, 2016; Ojilere, 2018). On the other hand, being avoided by colleagues at work or school and being verbally abused were associated with lower self-esteem scores. These are expressions and effects of the relatively common stigma caused by ignorance, resulting in the stigmatised groups losing status in different aspects, including economically, socially, and politically (Aborisade, 2021; Ikuomola, 2015; Lin 2020 et al., 2020). Physical abuse was less common than others reported. However, the participants may not have linked any physical abuse they experienced to albinism; it is not clear if this is reflective of the situation on the Plateau.

The sense of dissatisfaction experienced by over half of our subjects did not influence self-esteem levels and was mainly attributed to challenges with finance, exposure to the sun and stigma, which encapsulates the most fundamental and urgent needs of persons with albinism across Africa. Having family as the primary source of support with little or no institutional support for the unique needs of individuals with albinism may lead to a lot of strain on the already limited resources, resulting in neglect and worsening of the psychology and physical morbidities.

5. Limitation

Our findings may not be generalisable due to the convenience sampling of individuals with albinism whom the organisation could reach. Research conducted on neglected persons or those from remote and difficult-to-reach areas who were not invited may have revealed different outcomes.

6. Implications of the study

In this study, our primary goal was to evaluate persons with albinism's self-esteem levels and related factors, especially discrimination by others. We have done this by documenting discriminatory behaviours and attitudes that persons with albinism have encountered from various sources. This has implications for the prevalent beliefs and practices in a community that may be harmful to disadvantaged individuals in general and to people with albinism in particular. Another implication is that in addition to physical health, there is a need to prioritise the psychological health of individuals and groups with albinism. Providing these vulnerable persons in Nigeria with visual aids and skin protective commodities will likely reduce dissatisfaction and improve self-esteem and overall health.

7. Conclusion

The findings of this study have indicated that even though persons with albinism are exposed to different forms of prejudice, a large proportion of them still have high self-esteem. Self-esteem is negatively influenced by lower educational level, residing in rural areas, uncertainty of acceptance by father, being avoided by peers and verbal abuse—a follow-up to trace and explore the state of persons with albinism, even in remote rural settlements. Institutional support is needed to provide basic amenities, education and healthcare. This support will help boost the self-esteem and overall health of persons with albinism. To combat stigmatisation and discrimination, a continuous awareness programme targeted at family members and community members of persons with albinism is required.

8. Declarations

Data collection was guided by ethical principles for research involving human subjects and complied with the Helsinki Declaration. Ethical approval was obtained from the Plateau State Ministry of Health Research and Ethical Committee (MOH/MIS/202/VOL2/X). Informed consent was obtained with assurance that declining to partake had no negative consequences.

Consent for publication

Not applicable

Availability of data and materials

Data and other related study materials are available upon request.

Conflict of interest

The authors have no conflict of interest to disclose, and all reference materials have been duly acknowledged.

Funding


Not applicable.

9. Acknowledgements

The authors wish to thank Margaret Ewule for assistance with data collection. Mr. Abel Mvendaga and all the staff of the Centre for Albinism Right and Empowerment Network, Plateau State, appreciate the support given during the study.

Author's ORCID

Adah Ruth  <https://orcid.org/0000-0002-3907-7772>

Adah Gabriel  <https://orcid.org/0000-0003-1011-408X>

References

Aborisade, 2021 – Aborisade, R.A. (2021). "Why always me?": Childhood experiences of family violence and). Prejudicial treatment against people living with albinism in Nigeria. *Journal of Family Violence*. 36(8): 1081-1094.

Ahanonye, Omomia, 2017 – Ahanonye, U.A., Omomia, T.A. (2017). Impact of albinism on the Self-esteem of Students: a case study of Albino Students in Nigerian Secondary Schools. In INTED2017 Proceedings (pp. 6981-6987). IATED.

Awe, Azeke, 2018 – Awe, O.O., Azeke, T.A. (2018). Cutaneous cancers in Nigerian albinos: a review of 22 cases. *Nigerian Journal of Surgery*. 24(1): 34-38.

- Bano et al., 2015 – Bano, H., Anjum, N., Pasha, S. (2015). Differences in self-esteem of university students with and without disability. *Journal of Educational Research*. 18(1): 114.
- Berber, Odacı, 2020 – Berber Çelik, Ç., Odacı, H. (2020). Does child abuse have an impact on self-esteem, depression, anxiety and stress conditions of individuals? *International Journal of Social Psychiatry*. 66(2): 171-178.
- Costeris et al., 2021 – Costeris, C., Petridou, M., Ioannou, Y. (2021). Psychological impact of skin disorders on patients' self-esteem and perceived social support. *Journal of Dermatology and Skin Science*. 3(1): 14-22.
- Enitan et al., 2022 – Enitan, A., Ajani, A., Olasode, O., Olasode, B., Bello, H., Oripelaye, M., Umeaku, U. (2022). Pattern of cutaneous lesions in patients with oculocutaneous albinism in South-western Nigeria. *Nigerian Journal of Dermatology*. 12(1): 7-13.
- Ero et al., 2021 – Ero, I., Muscati, S., Boulanger, A. R., Annamanthadoo, I. (2021). People with albinism worldwide. A Human Rights Perspective. [Electronic resource]. URL: <https://www.ohchr.org/sites/default/files/2022-12/Albinism-Worldwide-Report-2021-EN.pdf>
- Etieyibo, Omiegbe, 2016 – Etieyibo, E., Omiegbe, O. (2016). Religion, culture, and discrimination against persons with disabilities in Nigeria: Opinion papers. *African Journal of Disability*. 5(1): 1-6.
- Ezeilo, 1989 – Ezeilo, B.N. (1989). Psychological aspects of albinism: An exploratory study with Nigerian (Igbo) albino subjects. *Social Science & Medicine*. 29(9): 1129-1131.
- Ferkany, 2008 – Ferkany, M. (2008). The educational importance of self-esteem. *Journal of Philosophy of Education*. 42(1): 119-132.
- García et al., 2019 – García, J.A., Olmos, F.C., Matheu, M.L., Carreño, T.P. (2019). Self-esteem levels global scores on the Rosenberg Self-Esteem Scale. *Heliyon*. 5(3).
- Grønskov et al., 2007 – Grønskov, K., Ek, J., Brøndum-Nielsen, K. (2007). Oculocutaneous albinism. *Orphanet Journal of Rare Diseases*. 2(1): 1-8.
- Hajinia, Nasirian, 2014 – Hajinia, A., Nasirian, M. (2014). Effect of self-awareness teaching on social anxiety in albino subjects. *Asian Journal of Medical and Pharmaceutical Researches*. 4(3): 139-44.
- Hong et al., 2006 – Hong, E.S., Zeeb, H., Repacholi, M.H. (2006). Albinism in Africa as a public health issue. *BMC Public Health*. 6(1): 1-7.
- Ikuomola, 2015 – Ikuomola, A.D. (2015). Socio-cultural conception of albinism and sexuality challenges among persons with albinism (PWA) in South-West, Nigeria. *AFRREV IJAH: An International Journal of Arts and Humanities*. 4(2): 189-208.
- Kromberg, 2018 – Kromberg, J.G. (2018). Psychosocial and cultural aspects of albinism. In *Albinism in Africa* (pp. 171-201). Academic Press.
- Lai et al., 2018 – Lai, V., Cranwell, W., Sinclair, R. (2018). Epidemiology of skin cancer in the mature patient. *Clinics in Dermatology*. 36(2): 167-176.
- Lima, Souza, 2019 – Lima, T.J.S.D., Souza, L.E.C.D. (2019). Escala de Autoestima de Rosenberg: Efecto del Método e Equivalencia a Través de Género [Rosenberg Self-Esteem Scale: Method Effect and Equivalence Across Gender.]. *Psico-USF*. 24: 517-528. [in Spanish]
- Lin et al., 2020 – Lin, C.Y., Tsang, H.W. (2020). Stigma, health and well-being. *International journal of environmental research and public health*. 17(20): 7615.
- Lund, 1997 – Lund, P.M., Puri, N., Durham-Pierre, D., King, R.A., Brilliant, M.H. (1997). Oculocutaneous albinism in an isolated Tonga community in Zimbabwe. *Journal of Medical Genetics*. 34(9): 733.
- Lipenga, Nwigira, 2018 – Lipenga, K., Ngwira, E. (2018). 'Black on the inside': albino subjectivity in the African novel. *Disability and the Global South*. 5(2): 1472-1487.
- Marcon, Maia, 2019 – Marçon, C.R., Maia, M. (2019). Albinism: epidemiology, genetics, cutaneous characterisation, psychosocial factors. *Anais Brasileiros de Dermatologia*. 94: 503-520.
- National Policy on Albinism, 2012 – National Policy on Albinism. National policy on albinism in Nigeria: Implementation guidelines. Federal Ministry of Education: Abuja. 2012. [Electronic resource]. URL: <https://albinofoundation.org/wp-content/uploads/2017/04/National-Policy-on-Albinism-Implementatio-Guideline.pdf>
- Nguyen et al., 2019 – Nguyen, D.T., Wright, E.P., Dedding, C., Pham, T.T., Bunders, J. (2019). Low self-esteem and its association with anxiety, depression, and suicidal ideation in Vietnamese secondary school students: A cross-sectional study. *Frontiers in Psychiatry*. 698.

Ojilere, 2018 – *Ojilere, A.* (2018). African mythology and the violation of life and dignity of albino minorities in Nigeria. *GLR*, 1, 201.

Palmer, 2005 – *Palmer, C.* (2005). The social competence of children with albinism. In *International Congress Series*. (1282: 917-921). Elsevier.

Possi, Milinga, 2018 – *Possi, M.K., Milinga, J.R.* (2018). Perceptions on people with albinism in urban Tanzania: implications for social inclusion. *Journal of Advocacy, Research and Education*. 5(2): 81-92.

Rosenberg, 1979 – *Rosenberg, M.* (1979). *Conceiving the self*. New York

Rosenberg et al., 1995 – *Rosenberg, M., Schooler, C., Schoenbach, C., Rosenberg, F.* (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review*. 60(1): 141-156.

Selepe, 2007 – *Selepe, D.M.* (2007). Teenagers with oculocutaneous albinism in Polokwane: their self-esteem and perceptions of societal attitudes (Doctoral dissertation).

Sharif, Siddique, 2020 – *Sharif, H., Siddique, D.* (2020). Impact of colorism and self-rated skin tone in predicting self-esteem among women from Pakistan. *Biodemography and Social Biology*. 66(3-4): 250-260.

Tus, 2020 – *Tus, J.* (2020). Self-concept, self-esteem, self-efficacy and academic performance of the senior high school students. *International Journal of Research Culture Society*. 4(10): 45-59.

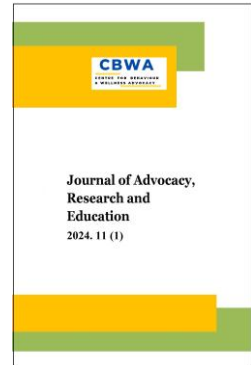
Wagani, 2018 – *Wagani, R.* (2018). Role of father versus mother in self-esteem of adolescence. *Journal of Psychosocial Research*. 13(2): 173-182.



Publisher: Centre for Behaviour and Wellness
Advocacy, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
ISSN 2410-4981. E-ISSN 2508-1055
2024. 11(1): 87-91

DOI: 10.13187/jare.2024.1.87

Journal homepage:
<http://kadint.net/our-journal.html>



Beyond Teacher Competencies: A Position Statement on Meeting the Needs of Neurodevelopmental Disorders in Inclusive Classrooms in Ghana

Valda Deide Commey  ^{a, *}

^a University of Ghana, Legon, Ghana

Abstract

Inclusive education stands as a beacon of progress in ensuring the holistic development of children with neurodevelopmental Disorders. Ghana has made significant strides in promoting inclusive education through the inclusive education policy developed in 2015. Central to the successful implementation of inclusive education is the attitude and competence of teachers in managing children with special needs. Notable progress has been observed among teachers, reflecting a growing recognition of the importance of inclusive practices and a willingness to embrace diversity within the classroom. Yet, the journey toward successful policy implementation is fraught with substantial institutional challenges, such as inadequate resources and curriculum rigidity. This paper contends that addressing the complexities of inclusive education demands a comprehensive strategy that extends beyond the realm of teacher attributes alone. Recognising that the barriers to inclusive education in Ghana are multifaceted and encompass various systemic, environmental, and attitudinal factors is imperative. This paper emphasises the imperative for a multidimensional approach that extends beyond the teacher.

Keywords: inclusive education, inclusive education policy, teacher competence, neurodevelopmental disorders, mainstream schools.

1. Inclusive Education Policy in Ghana

In Ghana, the shift towards inclusive education has been driven by several factors. Legal and policy frameworks, including the Ghana Education Act and international agreements like the United Nations Convention on the Rights of Persons with Disabilities, have emphasised the rights of children with disabilities and promoted inclusive practices (Deku, Vanderpuye, 2017; Ministry of Education..., 2013; Naami, Mort, 2023). There is a growing recognition of the diverse learning needs of students, leading to efforts to integrate children with disabilities into mainstream educational settings. Inclusive education is seen as a means to promote equity and ensure equal access to quality education for all children (Gómez-Marí et al., 2021).

Additionally, inclusive education is essential for social inclusion, economic development, and poverty reduction (Vanderpuye et al., 2020). Evidence-based research supports the benefits of inclusive education for students with disabilities and their peers, highlighting improved academic outcomes and social integration (Akalin et al., 2014; Karr et al., 2020; Strnadová et al., 2023).

* Corresponding author

E-mail addresses: vdcommey@st.ug.edu.gh (Valda Deide Commey)

Received: 14 March 2024 Revised: 10 April 2024 Accepted: 10 April 2024 Published: 31 April 2024

Overall, the necessitation of inclusive education in Ghana reflects a commitment to creating inclusive, equitable, and sustainable educational opportunities for all children. This demonstrates the government's commitment to upholding the rights of every child to education, including those with disabilities, and contributes to the achievement of Sustainable Development Goals (SDG) 4 and 16 (United Nations, 2015). By promoting inclusive practices, Ghana aims to create a more inclusive, equitable, and sustainable educational environment, fostering social inclusion, promoting tolerance, and building inclusive institutions for the benefit of all its citizens.

2. Neurodevelopmental Disorders and Inclusive Education

Neurodevelopmental disorders encompass a spectrum of conditions affecting cognitive, behavioural, and motor functions, posing unique educational challenges (American Psychiatric Association, 2013). While previously confined to specialised schools, advocacy efforts and the implementation of the Inclusive Education Policy (IEP) have propelled the integration of children with NDDs into mainstream educational settings, a move associated with significant social, psychological, and academic progress (Akalin et al., 2014; Gómez-Marí et al., 2021; Roberts, Webster, 2020). The research underscores the benefits of inclusive education, including stigma reduction, enhanced academic and social development, and improved mental wellness (Asamoah et al., 2023; Nyaaba, Nyaaba Akanzire et al., 2021; Opoku, 2022; Vanderpuye et al., 2020), aligning with the MOE's assertion of its cost-effectiveness over special education (MOE, 2013).

In recent years, Ghana has made significant strides in advancing inclusive education policies through the sensitisation of communities, screening of school children, and training of teachers to identify children with special educational needs (Duorinaah, 2023; Naami, Mort, 2023). While positive strides have been made in cultivating teacher attitudes and readiness to support children with NDDs, institutional challenges persist, transcending individual attributes. Inadequate resources pose a primary hurdle, with many mainstream schools lacking tailored materials and assistive equipment for accommodating diverse needs (Nyaaba, Aboyinga et al., 2021). Furthermore, physical accessibility barriers hinder the mobility and participation of students with physical disabilities (Asamoah et al., 2023). A shortage of specialised teachers exacerbates the issue, and insufficient orientation on inclusive practices leads to implementation gaps. The rigidity of the curriculum further limits equal participation, necessitating adaptations to ensure inclusivity (Naami, Mort, 2023). Moreover, the underutilisation of relevant stakeholders, including parents and therapists, hampers the creation of a supportive ecosystem vital for holistic child development (Hervie, 2023).

This position underscores the imperative of addressing multifaceted challenges within inclusive education, recognising the pivotal role of institutional readiness alongside individual preparedness. By surmounting these hurdles and leveraging available opportunities, Ghana can foster a more equitable and inclusive education system, ensuring that children with NDDs receive the support and resources necessary to thrive within mainstream settings.

3. Psychological Implications of Inclusive Education

Inclusive education carries profound psychological implications that cannot be understated. It is not merely about physical integration but entails a profound interplay of psychological factors that significantly impact the well-being and development of children, particularly those with neurodevelopmental disorders.

One psychological theory that elucidates the benefits of inclusive education is Vygotsky's Social Development Theory (Vygotsky, Cole, 1978). According to Vygotsky, learning occurs within the zone of proximal development (ZPD), which is the gap between what a learner can accomplish independently and what they can achieve with guidance and support from more knowledgeable others (Fani, Ghaemi, 2011). Inclusive education allows children with neurodevelopmental disorders to interact with typically developing peers, facilitating social learning and cognitive development. Through peer interactions, children with special needs can access role models and social scaffolding, enabling them to acquire competencies faster and expand their ZPD (Balakrishnan, Claiborne, 2012).

Moreover, inclusive education serves as a potent antidote to the marginalisation and stigmatisation that characterised the special schooling system (Deku, Vanderpuye, 2017). By dismantling barriers and fostering an inclusive learning environment, it promotes acceptance, belonging, and a sense of dignity for all students. However, the persistence of challenges within the

implementation of inclusive education poses a threat to its effectiveness and risks exacerbating the marginalisation and stigmatisation of children with neurodevelopmental disorders.

Also, positive psychological well-being, characterised by self-esteem, resilience, and a sense of belonging, is nurtured within supportive learning environments where students feel valued and included (Liu et al., 2016). However, the reality is that many children with neurodevelopmental disorders face significant barriers to their psychological well-being within the inclusive education system. These barriers include inadequate support services, negative attitudes and stereotypes, social exclusion, and bullying (Bakare et al., 2014). Without adequate interventions, the challenges within the inclusive education system could undermine its fundamental purpose and exacerbate psychological issues. Without adequate intervention, these challenges have the potential to diminish the psychological well-being and impede the academic success of children with neurodevelopmental disorders, thus perpetuating cycles of marginalisation and stigma.

4. Way Forward: Harnessing an Institutional Culture of Inclusivity

Equipping schools with expertise and infrastructure sends a clear message of commitment to inclusion and diversity. By prioritising inclusive practices and providing the necessary support structures, schools foster a culture of acceptance, respect, and belonging for all students. This inclusive culture not only benefits students with disabilities but also enriches the educational experience for all students by promoting empathy, understanding, and appreciation of differences. This notion aligns strongly with Social Cognitive Theory, proposed by Albert Bandura, which emphasises the reciprocal interaction between personal factors, environmental factors, and behaviour (Bandura, 2001). According to this theory, individuals learn through observation, imitation, and reinforcement of behaviours exhibited by others in their environment. In the context of inclusive education, providing schools with the expertise and infrastructure necessary for inclusive practices serves as a powerful environmental cue that shapes the behaviours and attitudes of students, teachers, and staff members.

In pursuit of genuine inclusivity, policymakers must broaden their focus to encompass the entire ecosystem of inclusive education. Beyond equipping teachers with requisite skills, schools must fortify their support systems to accommodate the multifaceted needs of students with neurodevelopmental disorders. This entails provisions for ancillary support practitioners such as speech therapists and physiotherapists, as well as fostering robust partnerships with parents as integral stakeholders in the educational journey of their children.

By promoting diversity and inclusion, schools contribute to the achievement of SDG 4 – Quality Education, which aims to ensure inclusive and equitable quality education for all. Furthermore, fostering a culture of acceptance and respect within educational institutions aligns with SDG 16 – Peace, Justice, and Strong Institutions. The SDG 16 emphasises the importance of promoting inclusive societies, ensuring equal access to justice for all, and building effective, accountable, inclusive institutions. By prioritising inclusive practices, schools contribute to creating peaceful and inclusive societies where every individual, regardless of their abilities or backgrounds, has the opportunity to thrive.

5. Conclusion

Inclusive education is a fundamental human right and a key driver of social inclusion, equity, and sustainable development. By addressing the remaining institutional challenges and leveraging available opportunities, Ghana can further advance its inclusive education agenda and ensure no child is left behind. To unlock the transformative potential of inclusive education, a multi-pronged approach is crucial. While building teacher competencies is vital, systemic readiness through extensive resources, multi-disciplinary collaborations, and holistic involvement of all stakeholders is equally paramount. Only then can the true spirit of inclusion be realised, empowering students with NDDs to thrive academically, socially, and emotionally in a supportive, enriching environment. A robust policy framework prioritising both teacher preparedness and school-level provisions is the way forward.

6. Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Availability of data and materials

Not applicable.

Conflict of interest statement

The author reports no conflicts of interest.


Funding

Not applicable.

7. Acknowledgements

We want to thank the expert reviewers at the Centre for Behaviour and Wellness Advocacy, Ghana, for their free editing support.

Author's ORCID

Valda Deide Commey  <https://orcid.org/0000-0002-7961-4157>

References

- [Akalin et al., 2014](#) – Akalin, S., Demir, Ş., Sucuoğlu, B., Bakkaloğlu, H., İçsen, F. (2014). The needs of inclusive preschool teachers about inclusive practices. *Eurasian Journal of Educational Research*. 14(54): 39-60. DOI: <https://doi.org/10.14689/EJER.2014.54.3>
- [American Psychiatric Association, 2013](#) – American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders. DSM*. American Psychiatric Association. DOI: <https://doi.org/10.1176/APPI.BOOKS.9780890425596>
- [Asamoah et al., 2023](#) – Asamoah, E., Amaniampong, E.M., Manful, E., Gyasi-Boadu, N., Koomson-Yalley, E.N.M. (2023). Using Photovoice to Illuminate Challenges Facing Children with Disabilities in Inclusive Education in Ghana. *Social Work & Social Sciences Review*. 24(1): 7-28. DOI: <https://doi.org/10.1921/SWSSR.V24I1.2025>
- [Bakare et al., 2014](#) – Bakare, M.O., Munir, K.M., Bello-Mojeed, M.A. (2014). Public health and research funding for childhood neurodevelopmental disorders in Sub-Saharan Africa: a time to balance priorities. *Healthcare in Low-Resource Settings*. 2(1). DOI: <https://doi.org/10.4081/hls.2014.1559>
- [Balakrishnan, Claiborne, 2012](#) – Balakrishnan, V., Claiborne, L.B. (2012). Vygotsky from ZPD to ZCD in moral education: reshaping Western theory and practices in local context. *Journal of Moral Education*. 41(2). 225-243. DOI: <https://doi.org/10.1080/03057240.2012.678056>
- [Bandura, 2001](#) – Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*. 52(1): 1-26. DOI: <https://doi.org/10.1146/ANNUREV.PSYCH.52.1.1/CITE/REFWORKS>
- [Deku, Vanderpuye, 2017](#) – Deku, P., Vanderpuye, I. (2017). perspectives of teachers regarding inclusive education in Ghana. *International Journal of Whole Schooling*. 13(3): 39-54. [Electronic resource]. URL: <https://eric.ed.gov/?id=EJ1153995>.
- [Duorinaah, 2023](#) – Duorinaah, E. (2023). Community Driven Initiatives for The Enrolment of Children with Disability in Ghana. *International Journal of Developing Country Studies*. 5(1): 17-42. DOI: <https://doi.org/10.47941/IJDCS.1258>
- [Fani, Ghaemi, 2011](#) – Fani, T., Ghaemi, F. (2011). Implications of Vygotsky's Zone of Proximal Development (ZPD) in Teacher Education: ZPTD and Self-scaffolding. *Procedia - Social and Behavioral Sciences*. 29: 1549-1554. DOI: <https://doi.org/10.1016/J.SBSPRO.2011.11.396>
- [Gómez-Marí et al., 2021](#) – Gómez-Marí, I., Sanz-Cervera, P., Tárraga-Mínguez, R. (2021). Teachers' knowledge regarding autism spectrum disorder (ASD): A systematic review. *Sustainability*. 13(9): 5097. DOI: <https://doi.org/10.3390/SU13095097>
- [Hervie, 2023](#) – Hervie, V.M. (2023). Social inclusion of children with intellectual disabilities in Accra, Ghana: Views of parents/guardians and teachers. *Children and Youth Services Review*. 147: 106845. DOI: <https://doi.org/10.1016/J.CHILDYOUTH.2023.106845>
- [Karr et al., 2022](#) – Karr, V., Hayes, A., Hayford, S. (2022). Inclusion of children with learning difficulties in literacy and numeracy in Ghana: A literature review. *International Journal of Disability, Development and Education*. 69(5): 1522-1536. DOI: <https://doi.org/10.1080/1034912X.2020.1792419>

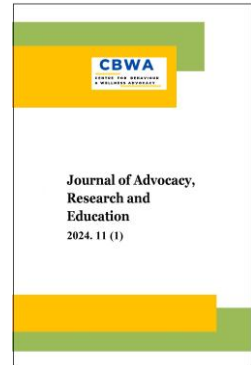
- [Liu et al., 2016](#) – Liu, Y., Li, J., Zheng, Q., Zaroff, C.M., Hall, B. J., Li, X., Hao, Y. (2016). Knowledge, attitudes, and perceptions of autism spectrum disorder in a stratified sampling of preschool teachers in China. *BMC Psychiatry*. 16(1): 1-12. DOI: <https://doi.org/10.1186/S12888-016-0845-2/TABLES/9>
- [Ministry of Education, 2013](#) – Ministry of Education. Republic of Ghana Ministry of Education Draft Inclusive Education Policy. Accra: Ministry of Education, 2013.
- [Naami, Mort, 2023](#) – Naami, A., Mort, K.S.T. (2023). Inclusive education in Ghana: How prepared are the teachers? *Frontiers in Education*. 8. DOI: <https://doi.org/10.3389/FEDUC.2023.1056630/PDF>
- [Nyaaba et al., 2021](#) – Nyaaba, M., Aboyinga, J., Akanzire, B.N. (2021). Pre-service parents teachers' attitude and perceived challenges about inclusive education in Ghana: The Ghanaian Inclusive Education Policy. *American Journal of Educational Research*. 9(6): 341-346. DOI: <https://doi.org/10.12691/education-9-6-3>.
- [Opoku, 2022](#) – Opoku, M.P. (2022). A novel approach to enhancing the implementation of inclusive education? *Support for Learning*. 37(4): 553-572. DOI: <https://doi.org/10.1111/1467-9604.12427>
- [Roberts, Webster, 2020](#) – Roberts, J., Webster, A. (2020). Including students with autism in schools: A whole school approach to improve outcomes for students with autism. *International Journal of Inclusive Education*. 26(7): 701-718. DOI: <https://doi.org/10.1080/13603116.2020.1712622>
- [Strnadová et al., 2023](#) – Strnadová, I., Danker, J., Dowse, L., Tso, M. (2023). Supporting students with disability to improve academic, social and emotional, and self-determination and life-skills outcomes: umbrella review of evidence-based practices. *International Journal of Inclusive Education*. 1-17. DOI: <https://doi.org/10.1080/13603116.2023.2221239>.
- [United Nations, 2015](#) – United Nations. The UN Sustainable Development Goals. United Nations New York. 2015. [Electronic resource]. URL: <https://www.un.org/sustainabledevelopment/blog/2015/09/summit-charts-new-era-of-sustainable-development-world-leaders-to-gavel-universal-agenda-to-transform-our-world-for-people-and-planet/>
- [Vanderpuye et al., 2020](#) – Vanderpuye, I., Obosu, G.K., Nishimuko, M. (2020). Sustainability of inclusive education in Ghana: Teachers' attitude, perception of resources needed and perception of possible impact on pupils. *International Journal of Inclusive Education*. 24(14): 1527-1539. DOI: <https://doi.org/10.1080/13603116.2018.1544299>.
- [Vygotsky, Cole, 1978](#) – Vygotsky, L.S., Cole, M. (1978). Mind in society: Development of higher psychological processes. Harvard University Press.



Publisher: Centre for Behaviour and Wellness
Advocacy, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
ISSN 2410-4981. E-ISSN 2508-1055
2024. 11(1): 92-121

DOI: 10.13187/jare.2024.1.92

Journal homepage:
<http://kadint.net/our-journal.html>



Western Cinema on the Pages of the *Soviet Screen Magazine* (1969–1985): Ideologized Articles Emphasizing Criticism of Bourgeois Cinema and Its Harmful Influence on the Audience

Alexander Fedorov  ^{a, *}

^a Rostov State University of Economics, Russian Federation

Abstract

The abstract analyzes the content of the *Soviet Screen* magazine from 1969 to 1985, focusing on its portrayal of Western cinema during the Soviet Union's "stagnation" period. The study finds that articles on Western cinema were heavily ideologized, emphasizing criticism of bourgeois cinema and its negative influence on audiences. This trend was less prominent than in the late 1960s due to significant political shifts, particularly after the 1968 events in Czechoslovakia. A crucial decree issued on January 7, 1969, by the Central Committee of the Soviet Communist Party mandated a more stringent opposition to bourgeois ideology and a vigorous promotion of communist ideals. This decree criticized media personnel for deviating from class criteria and sometimes promoting views contrary to socialist ideology. Additional resolutions in 1972 reinforced these directives, stressing the harmfulness of bourgeois ideology and the necessity for a rigorous ideological struggle against non-Marxist views and revisionist trends in literature and art. Consequently, *Soviet Screen's* management aligned closely with these resolutions, resulting in a marked decrease in content about Western cinema and an increase in critical coverage. Unlike during the 1960s Thaw, featuring Western movie stars on the magazine's cover became unthinkable. This period reflects the Soviet Union's broader efforts to control cultural narratives and suppress influences contrary to socialist values.

Keywords: Articles, film criticism, ideology, politics, reviews, soviet screen magazine, western cinema.

1. Introduction

The coverage of Western cinematography in the *Soviet Screen* magazine from 1969 to 1985 was significantly less extensive compared to the latter half of the 1960s. This shift can be attributed to several key factors. As Fedorov and Levitskaya (2023) noted, the final rejection of the "thaw" tendencies in the USSR followed the events in Czechoslovakia in 1968. Consequently, on January 7, 1969, the Decree of the Secretariat of the Central Committee of the Soviet Communist Party titled "On Increasing the Responsibility of the Heads of the Press, Radio, Television, Cinematography, Cultural and Art Institutions for the Ideological and Political Level of Published Materials and Repertoire" was issued (*Postanovlenie...*, 1969). This decree, marked by secrecy and intended for a select group of media-related leaders, emphasized the need for stricter ideological control.

* Corresponding author

E-mail addresses: 1954alex@mail.ru (A. Fedorov)

Received: 20 February 2024 Revised: 15 March 2024 Accepted: 16 March 2024 Published: 31 April 2024

The resolution highlighted the intensified ideological struggle between socialism and capitalism, stressing the importance of media and cultural workers in opposing bourgeois ideology and promoting communist ideals and the Soviet way of life. It criticized some authors, directors, and stage directors for straying from class criteria and occasionally endorsing views contrary to socialist ideology. It also reproached some heads of publishing houses and media institutions for failing to prevent the publication of ideologically erroneous works and for demonstrating political leniency (Postanovlenie..., 1969).

As a result, the Central Committee decided to strengthen the editorial teams of magazines, newspapers, radio and television, and cultural and art institutions, emphasizing the need for meticulous selection and preparation of materials for publication (Postanovlenie..., 1969). In 1972, two additional resolutions were adopted: "On Literary and Artistic Criticism" (January 21, 1972) and "On Measures for the Further Development of Soviet Cinematography" (August 22, 1972). These resolutions reiterated the dangers of bourgeois ideology and the necessity of an uncompromising ideological struggle against such influences. They specifically pointed out that Soviet literary and artistic criticism was not sufficiently active in exposing the reactionary nature of bourgeois "mass culture" and combating non-Marxist and revisionist aesthetic concepts (Postanovlenie..., 1969).

D. Pisarevsky (1912–1990), the editor-in-chief of Soviet Screen, who remained in his position despite sharp criticism in late 1968, strove to adhere to these directives. Consequently, the number of articles about Western cinema on the Soviet Screen was reduced, and the coverage that did exist was more critical of bourgeois cinema. It became unthinkable for a Western movie star to appear on the magazine's cover, a practice that had occasionally occurred during the thaw of the 1960s. Conversely, the magazine began to actively promote the cinema of socialist countries, dedicating issues to Polish (No. 14), Bulgarian (No. 17), Romanian (No. 18), and East German (No. 19) cinema in 1969. In 1970, several issues featured positive articles about Hungarian (No. 7), Czechoslovak (No. 9), and Yugoslav (No. 22) filmmakers.

2. Materials and Methods

The research methodology of this paper was grounded in key philosophical principles that emphasize the interconnectedness, interdependence, and integrity of real-world phenomena and the unity of historical and social aspects in cognition. The study employed a multidisciplinary approach, incorporating scientific, film studies, sociocultural, culturological, hermeneutical, and semiotic perspectives as articulated by leading scholars (Aronson, 2003; Bakhtin, 1996; Balazs, 1935; Bibler, 1990; Casetti, 1999; Demin, 1966; Eco, 1976; Eisenstein, 1964; Gledhill, Williams, 2000; Hess, 1997; Hill, Gibson, 1998; Khrenov, 2006, 2011; Lotman, 1973, 1992, 1994; Mast, Cohen, 1985; Stam, 2000; Villarejo, 2007).

The research framework is structured around a content-based approach, which involves identifying the content of the process under study, considering the entirety of its elements and their interactions, and examining their nature through factual evidence, theoretical analysis, and synthesis. Additionally, the study adopts a historical approach, analyzing the concrete historical development of the project's theme.

Research methods include:

- Complex Content Analysis: This involves thoroughly examining the content, considering the interactions between various elements and their significance.
- Comparative Interdisciplinary Analysis: This method compares findings across different disciplines to identify common patterns and unique distinctions.

Theoretical Research Methods:

- Classification: Categorizing elements based on shared characteristics.
- Comparison: Evaluating similarities and differences between elements.
- Analogy: Drawing parallels between different phenomena.
- Induction and Deduction: Employing logical reasoning to derive general principles from specific observations and vice versa.
- Abstraction and Concretization: Simplifying complex phenomena to fundamental principles and applying these principles to specific instances.
- Theoretical Analysis and Synthesis**: Breaking down concepts to understand their components and combining elements to form comprehensive theories.

– Generalization: Formulating broad conclusions based on the analysis of specific cases.

Empirical Research Methods:

– Information Collection: Gathering relevant data related to the project's subject.

– Comparative-Historical Method: Analyzing the historical context and evolution of the subject matter.

– Hermeneutic Method: Interpreting texts and cultural artifacts to uncover underlying meanings and implications.

By integrating these diverse methods, the research aimed to provide an understanding of the phenomena under investigation.

3. Results and discussion

In this article, I focused on analyzing materials about Western cinema published in the Soviet Screen magazine from 1969 to 1985, during the tenures of its editors-in-chief: D.S. Pisarevsky (1912–1990), A.D. Golubev (1935–2020), and D.K. Orlov (1935–2021). [Table 1](#) presents statistical data reflecting changes from 1969 to 1985, including the organizations associated with the journal, its circulation, and its periodicity. The table also indicates the names of the editors and the time intervals during which they led the publication.

Table 1. Soviet Screen magazine (1986–1991): statistical data

| Year of issue of the magazine | Organizations whose authority was a magazine | Magazine circulation (in million copies) | Periodicity of the journal (numbers in year) | Editors of the magazine |
|-------------------------------|--|--|--|--|
| 1969 | Cinematography Committee under the Council of Ministers of the USSR, Union of Cinematographers of the USSR | 2.0–2.8 | 24 | D.S. Pisarevsky |
| 1970 | Cinematography Committee under the Council of Ministers of the USSR, Union of Cinematographers of the USSR | 1.8–2.2 | 24 | D.S. Pisarevsky |
| 1971 | Cinematography Committee under the Council of Ministers of the USSR, Union of Cinematographers of the USSR | 1.4–1.9 | 24 | D.S. Pisarevsky |
| 1972 | Cinematography Committee under the Council of Ministers of the USSR (No. 1-16), USSR State Committee for Cinematography (No. 17-24), Union of Cinematographers of the USSR | 1.5–1.8 | 24 | D.S. Pisarevsky |
| 1973 | USSR State Committee for Cinematography, Union of Cinematographers of the USSR | 1.8 | 24 | D.S. Pisarevsky |
| 1974 | USSR State Committee for Cinematography, Union of Cinematographers of the USSR | 1.8–1.9 | 24 | D.S. Pisarevsky (Nos. 1-4). A.D. Golubev (Nos. 5-24). |
| 1975 | USSR State Committee for Cinematography, Union of Cinematographers of the USSR | 1.9–2.0 | 24 | A.D. Golubev |
| 1976 | USSR State Committee for Cinematography, Union of | 1.9 | 24 | A.D. Golubev |

| Year of issue of the magazine | Organizations whose authority was a magazine | Magazine circulation (in million copies) | Periodicity of the journal (numbers in year) | Editors of the magazine |
|-------------------------------|--|--|--|--|
| | Cinematographers of the USSR | | | |
| 1977 | USSR State Committee for Cinematography, Union of Cinematographers of the USSR | 1.9 | 24 | A.D. Golubev |
| 1978 | USSR State Committee for Cinematography, Union of Cinematographers of the USSR | 1.9 | 24 | A.D. Golubev (Nos. 1-11). Editorial board (Nos. 12-13). D.K. Orlov (Nos. 13-24). |
| 1979 | USSR State Committee for Cinematography, Union of Cinematographers of the USSR | 1.9 | 24 | D.K. Orlov |
| 1980 | USSR State Committee for Cinematography, Union of Cinematographers of the USSR | 1.9 | 24 | D.K. Orlov |
| 1981 | USSR State Committee for Cinematography, Union of Cinematographers of the USSR | 1.9 | 24 | D.K. Orlov |
| 1982 | USSR State Committee for Cinematography, Union of Cinematographers of the USSR | 1.9 | 24 | D.K. Orlov |
| 1983 | USSR State Committee for Cinematography, Union of Cinematographers of the USSR | 1.8–1.9 | 24 | D.K. Orlov |
| 1984 | USSR State Committee for Cinematography, Union of Cinematographers of the USSR | 1.8–1.9 | 24 | D.K. Orlov |
| 1985 | USSR State Committee for Cinematography, Union of Cinematographers of the USSR | 1.7 | 24 | D.K. Orlov |

The circulation of the Soviet Screen in 1969 was among the highest in its history, ranging from 2.0 to 2.8 million copies, although it showed a downward trend. This decline continued, with some fluctuations, until 1974. From then until early 1985, the circulation stabilized at around 1.9 million copies. The decline from 2.8 to 1.9 million copies cannot be solely attributed to a drop in film attendance, as cinema attendance remained relatively high at about 19 per capita per year during the early 1970s. The average city dweller watched a movie 21 times a year, and a rural dweller 17.5 times. Even during 1972–1974, cinema attendance in the USSR averaged over 18 per year. However, during the stabilization of the Soviet Screen's circulation at 1.9 million copies, cinema attendance began to decline noticeably, from 18.1 in 1974 to 15.3 in 1984, largely due to competition from television.

It is plausible that starting in 1970, the magazine's subscription base began to fall, but increased retail sales at press kiosks could have offset this. The decline in movie attendance did not prevent the Soviet Screen from maintaining a circulation of 1.9 million copies from the mid-1970s to 1984. Additionally, the decline in the journal's circulation since 1970 might have been the result of an administrative decision, possibly reallocating printing resources to more critical needs from the authorities' perspective. This could also relate to a desire to save paper, as the famous Russian actor N. Kryuchkov highlighted in an open letter in the *Ogonyok* magazine in 1968, where he criticized the Soviet Screen for promoting foreign cinema (Kryuchkov, 1968).

Starting in 1965, the Soviet Screen faced competition from the monthly illustrated advertising review *Cinemagoer Companion*, which started with a small circulation of 50 thousand copies and reached 400 thousand by 1969. However, during the period when Soviet Screen's circulation stabilized at 1.9 million copies, *Cinemagoer Companion*'s circulation also stabilized, averaging 400 thousand copies with a peak of 480 thousand in 1978.

Between 1969 and 1985, Soviet Screen saw three editors-in-chief. Despite the "rehabilitation" measures and adherence to party resolutions, film critic D. Pisarevsky, who held the longest tenure as editor-in-chief, was forced to leave his post in February 1974. It is believed that the trigger for his resignation was the publication of a large article by film critic V. Demin, "The Lessons of Moments," about the popular Soviet TV series *Seventeen Moments of Spring* (Demin, 1973). The article contained potentially ideologically sensitive content that might have been interpreted by the authorities as a metaphor for the Soviet party-bureaucratic machine, leading to concerns about Pisarevsky's ideological vigilance.

Following Pisarevsky's departure, A. Golubev, a sports journalist and former editor of *Smena* magazine, served as editor-in-chief until mid-1978. During Golubev's tenure, no significant innovations were introduced, but ideological control intensified. Professional filmmakers increasingly expressed dissatisfaction with Golubev, leading to his replacement in July 1978 by D. Orlov, a former head of the Main Script and Editorial Board of Goskino USSR and member of the State Committee for Cinematography of the USSR.

D. Orlov initially tightened ideological control further, exemplified by the absence of articles or reviews about Western cinema in issues Nos. 14-17 for 1978 and an increase in "Communist party" materials, including quotes from speeches by General Secretary L. Brezhnev. Orlov, a prominent figure in Soviet cinema, served as editor-in-chief from July 1978 to December 1986, a tenure that might have continued if not for the changes brought about by perestroika (Golovskoy, 2004; Orlov, 2011). Throughout the period from 1969 to 1985, the authors of texts about Western cinema on the Soviet Screen were typically well-known film experts and critics, many of whom held leading positions in the editorial offices of magazines and newspapers of that era.

Table 2. The main authors of the publications on the subject of Western cinema in the *Soviet Screen* magazine (1969–1985)

| No. | Surnames of film critics, film historians who most often published articles on Western cinema in the <i>Soviet Screen</i> magazine | The number of articles published by these film experts in the <i>Soviet Screen</i> magazine on the subject of Western cinema |
|-----|--|--|
| 1 | Bogemsky G.D. (1920–1995) | 20 |
| 2 | Dmitriev V.Y. (1940–2013) | 10 |
| 3 | Chertok S.M. (1931–2006) | 10 |
| 4 | Sulkin O.M. | 9 |
| 5 | Shitova V.V. (1927–2002) | 9 |
| 6 | Sobolev R.P. (1926–1991) | 8 |
| 7 | Chernenko M.M. (1931–2004) | 8 |
| 8 | Andreev F.I. (1933–1998) | 7 |
| 9 | Komov Y.A. | 7 |
| 10 | Rubanova I.I. | 7 |
| 11 | Mikhalkovich V.I. (1937–2006) | 6 |
| 12 | Plakhov A.S. | 6 |
| 13 | Anikst A.A. (1910–1988) | 5 |
| 14 | Braginsky A.V. (1920–2016) | 5 |
| 15 | Demin V.P. (1937–1993) | 5 |
| 16 | Dolmatovskaya G.E. (1939–2021) | 5 |
| 17. | Razlogov K.E. (1946–2021) | 5 |
| 18 | Solovieva I.N. | 5 |
| 19 | Khlopyankina T.M. (1937–1993) | 5 |
| 20 | Yurenev R.N. (1912–2002) | 5 |
| 21 | Yampolsky M.B. | 5 |

The main authors of the publications on the subject of Western cinema in the *Soviet Screen* magazine (1969–1985) are as follows:

1. G.D. Bogemsky (1920–1995): film critic and historian, Ph.D. Graduated from Leningrad State University (1941). He was a member of the Union of Writers of the USSR and Russia, the Union of Cinematographers of the USSR and Russia. Worked at the Research Institute of History and Theory of Cinema/Research Institute of Cinematography. Articles published by him in the collections *Myths and Reality* became the basis of his book *Cinema of Italy Today* (1977). Published in the magazines *Soviet Screen*, *Cinema Art*, scientific collections, etc. Author of books: *Through the cities of Italy* (1955); *Vittorio De Sica* (1963); *Sophia Loren* (1982); *Actors of Italian cinema* (1986; 1990); *Gian Maria Volonté* (1984), etc.

2. V.Y. Dmitriev (1940–2013): film critic, archivist. Graduated film studies department of VGIK (1962). Honored Worker of Culture of the Russian Federation (1998). He was a member of the Soviet Communist Party (since 1974), the Union of Cinematographers of the USSR and Russia. After graduating from VGIK, he worked at the State Film Fund (department of scientific processing of a foreign fund), since 1996 he was deputy Director General of the State Film Fund of Russia. Created and became the artistic director of the festival of archival films "White Pillars". Published in the magazines *Soviet Screen*, *Screen*, *Cinema Art*, *Film Studies Notes*, *Séance*, etc., in the newspapers: *Independent Paper*, *Culture*, etc. Author of books (together with V. Mikhalkovich): *Alexander Ford* (1968, the monograph was not published due to A. Ford's emigration to the West); *Anatomy of a myth: Brigitte Bardot* (1975). He starred in the films *Mournful insensibility* (1983) and *Down with commerce on the love front* (1988). Co-author of scripts for documentaries *Promised Land. Return* (2000), *Flowers of the Occupation Times* (2003), *Big Holidays of the 30s, Forties* (2004) and others. Laureate of the State Prize of the Russian Federation in the field of literature and art (2007) and the Nika Prize "For contributions to the motion picture sciences, criticism and education" (2013).

3. S.M. Chertok (1931–2006): journalist, film critic, editor. Graduated from the Moscow State Law Institute (1953). He was a member of the Union of Journalists of the USSR and the Union of Cinematographers of the USSR. From 1962 he was a correspondent, and from 1966 to 1975 – head of information department in the *Soviet screen* magazine; from 1976 to 1978 – an employee of the Research Institute of Theory and History of Cinema. From 1964 to 1973, he compiled the yearbook *Screen* (from 1964 to 1969, in collaboration with M. Dolinsky). Since 1979 he lived in Israel, where he successfully continued his journalistic activities. Published in newspapers: *Soviet Latvia*, *Soviet culture*, *Literary newspaper*, *Evening Moscow*, in the magazines *Soviet Screen*, *Cinema Art*, *Spark*, *Youth*, *Change*, *Znamya*, *October*, *Moscow*, *Questions of Literature*, *Soviet Photo*, *Art*, *Theatrical Life*, *Theatre*, etc. Author of books: *Stars meet in Moscow* (1967); *Foreign screen: interview* (1973); *Start. Cinema of Black Africa* (1973), *Tashkent festival* (1975); *There-there of the XX century* (1977); *Festival of the Three Continents* (1978); *About cinema and about myself* (1979); *Freeze frames. Essays on Soviet cinema* (1988) and others.

4. O.M. Sulkin: film critic, journalist. Graduated from Moscow State University. Member of the Union of Cinematographers of the USSR and Russia. Worked as head department of foreign cinema in the *Soviet Screen* magazine (1981–1987), editor-in-chief of the magazine *Soviet Film*. Co-author of the project of the film encyclopedia *Video Guide*. Since 1995 he has been living and working in the USA. He lectured at the UN, at a number of US universities. He was a film reviewer and reporter for the *New Russian Word* newspaper, and is currently a correspondent for the *Voice of America* Russian Service. Published in the magazines *Soviet Screen*, *Cinema Art*, *Itogi*, *New World*, etc., in the newspapers: *Vedomosti*, *Rossiyskaya Gazeta*, *Evening New York*, etc. Author of books: *Natalia Andreichenko* (1984); *Yuri Ozerov* (co-authored with N. Sumenov) (1986); *Oleg Yankovsky* (1987).

5. V.V. Shitova (1927–2002): film and theater critic and historian. Graduated from Moscow State University (1953). She was a member of the scriptwriting and editorial board of the 2nd creative association of the Mosfilm film studio (1962–1967), a member of the Union of Cinematographers of the USSR and Russia. Published in the magazines *Soviet Screen*, *Cinema Art*, *Film Studies Notes*, *Cinemagoer Companion*, scientific collections, etc. Author of the books: *Luchino Visconti* (1965); *Jean Gabin* (1967) (together with I.N. Soloviova), *Seven years in the theater. Television and us* (1968) (together with V.S. Sappak); *Fourteen sessions* (1981) (together

with I.N. Solovieva); *Vakhtang Kikabidze* (1981); *Annie Girardot* (1985); *K.S. Stanislavsky* (1985) (together with I.N. Solovieva).

6. R.P. Sobolev (1926–1991): film critic, PhD (1966). Graduated from the Moscow Library Institute (1955). He was a member of the Soviet Communist Party (since 1958), Union of Cinematographers of the USSR. Articles published by him in the collections *Myths and Reality* and in the *Soviet Screen* became the basis for his monographs: *West. Cinema and youth* (1971), *Hollywood. 60s* (1975). Published in the magazines *Soviet Screen*, *Cinema Art*, *Cinemagoer Companion*, scientific collections, etc. Author of books: *People and Films of Pre-Revolutionary Cinema*. (1961); *Meeting with Polish cinema* (1967); *Cinema of India (first acquaintance)* (1977), etc.

7. M.M. Chernenko (1931–2004): film critic, Ph.D. (1978). Graduated from Kharkov Law Institute (1952) and VGIK (1964). He was a member of the Union of Cinematographers of the USSR and Russia. He worked in the *Soviet Screen* magazine, since 1974 – at the Research Institute of Cinematography (head of the sector). For many years he was the President of the Guild of Film Critics of the Russian Federation. Laureate of the Prize of the Guild of Film Critics of Russia (2001), honorary awards of Poland for his contribution to the study and popularization of Polish cinema. He taught at VGIK. Published on film issues since 1956. Published in scientific collections, in the magazines *Soviet Screen*, *Screen*, *Cinema Art*, *Film Studies Notes*, *Cinemagoer Companion*, in the newspapers *Culture*, *Soviet Cinema*, *Screen and Scene*, *SK-Novosti*, etc. Author of books: *Andrzej Wajda* (1966); *Fernandel* (1968); *Cinema of Mongolia* (1976); *Cinema of Yugoslavia* (1986); *Red star, yellow star* (2001; 2005); *Kazimierz Kutz* (2011, in the *Film Studies Notes* journal).

8. F.I. Andreev (1933–1998): film critic, journalist. He was a member of the Soviet Communist Party and the Union of Cinematographers of the USSR. Worked as a deputy editor-in-chief of the *Soviet Screen* magazine (1980–1990). From 1990 to 1998 he lived and worked in the USA, where, in particular, he was Executive Director of the Brighton Beach Borough Management Association (New York). Published in the magazines *Soviet Screen*, *Crocodyl*, in the newspapers *Soviet Culture*, *Soviet Cinema*, etc. Author of books: *Ivan Pereverzev* (1982); *Oleg Tabakov* (1983).

9. Y.A. Komov: journalist, film critic, translator, member of the Union of Journalists of the USSR and Russia. Published in the magazines *Soviet Screen*, *Cinema Art* and others. Author of books: *Hollywood without a mask* (1982); *Shadow racing* (1985); *Close avenues of fame* (1991); *Frameless portraits* (1992; 2003).

10. I.I. Rubanova (born 1933): film critic and historian. Graduated from Moscow State University (1956), Ph.D. (1966). Member of the Union of Cinematographers of the USSR and Russia. Since 1962, he has been a researcher at the Institute of Art History (now the State Institute of Art Studies). In 1964–1967 she hosted TV programs about Polish cinematography on Moscow television. Published in the magazines *Soviet Screen*, *Cinema Art*, *Seance*, *Film Studies Notes*, in the newspapers *Izvestia*, *Kommersant-daily*, etc. Author of books: *Cinematography of the countries of socialism* (1963); *Polish cinema. Films about war and occupation. 1945–1965* (1966); *Conrad Wolf* (1973); *Vladimir Vysotsky* (1983). Laureate of the Guild of Film Critics of Russia.

11. V.I. Mikhalkovich (1937–2006): film critic and historian. Graduated from the Belarusian State University (1959) and film history department of VGIK (1968). Ph.D. (1997), professor. He was a member of the Union of Cinematographers of the USSR and Russia. He worked as a researcher at the State Film Fund (1963–1966), in office of foreign cinema at VGIK (1966–1968), editor of the foreign department in the journal *Cinema Art* (1968–1970), researcher at the Institute of Art History (1970–1974), researcher at the Research Institute of History and Theory of Cinema (1974–1977), researcher at the State Institute of Art Studies (1977–2006), professor at VGIK (1986–2006) and at the State University of Management (2000–2006). Published in scientific collections, in the magazines *Soviet Screen*, *Screen*, *Cinema Art*, *Film Studies Notes*, *Literary Review*, etc. Author of books: *Alexander Ford* (1968, together with V. Dmitriev, the book was not published due to A. Ford's emigration to the West); *Anatomy of a myth: Brigitte Bardot* (1975) (together with V. Dmitriev); *Meetings with the X muse* (1981) (together with V. Demin, I. Weisfeld and R. Sobolev); *Barbara Brylska* (1984); *Figurative language of mass media* (1986); *Poetics of photography* (1989) (together with V. Stigneev); *Selected Russian cinemas* (2006). Laureate of the Guild of Film Critics of Russia.

12. A.S. Plakhov (born 1950): film critic and historian. Ph.D. (1982). Graduated from the Faculty of Mechanics and Mathematics of the Lviv University (1972) and the Film Studies Faculty of VGIK (1978). Member of the Union of Cinematographers of the USSR and Russia. Honored

Worker of Culture of the Russian Federation (2014). He was a member of the Soviet Communist Party (since 1980), President of FIPRESCI (2005–2010). Worked in the department of culture of the newspaper *Pravda* (1977–1988), taught at VGIK. Browser in newspaper *Kommersant*. Published in the magazines *Soviet Screen*, *Screen*, *Cinema Art*, *Seance*, *Sight & Sound*, etc. Author of books: *Struggle of ideas in modern Western cinema* (1984); *Western screen: the destruction of personality* (1985); *Catherine Deneuve* (three editions: 1989; 2005; 2008); *33 in total. Stars of world film directing* (1999); *33 in total. Close-up of the stars* (2004); *Aki Kaurismaki. The last romantic* (2006); *Directors of the present* (2008); *Directors of the future* (2009); *Cinema on the brink of a nervous breakdown* (2014); *Ozone* (2018); *Cinema beyond* (2019); *Visconti. History and myth. Beauty and death* (2022), etc. Laureate of the Guild of Film Critics of Russia, Honorary Diploma of the President of Russia (2014), Nika Prize "For Contribution to Cinematographic Sciences, Criticism and Education" (2017),

13. A.A. Anikst A. (1910–1988): literary and film critic, Ph.D. (1963). Graduated from Moscow State Pedagogical Institute (1933). He was a member of the Soviet Communist Party (since 1942), the Union of Cinematographers of the USSR and the Union of Writers of the USSR. Published in the magazines *Soviet Screen*, *Cinema Art*, *Theater*, *Questions of Literature*, etc. Author of books: *History of English Literature* (1956); *Daniel Defoe* (1957); *6 stories about American theatre* (1963) (together with A. Boyadzhiev); *The work of Shakespeare* (1963). *Shakespeare* (1964); *Shakespeare theater* (1965); *Drama Theory from Aristotle to Lessing* (1967); *Drama Theory in Russia. From Pushkin to Chekhov* (1972); *First Editions of Shakespeare* (1974); *Shakespeare: The Dramatist's Craft* (1974); *Faust Goethe: Literary Commentaries* (1979); *The history of the doctrine of drama: the theory of drama from Hegel to Marx* (1983); *Goethe and Faust: from idea to accomplishment* (1983); *The creative path of Goethe* (1986); *Shakespeare's tragedy "Hamlet"* (1986); *Drama theory in the West in the second half of the 19th century* (1988).

14. A.V. Braginsky (1920–2016): film critic and historian, translator. Graduated from the Moscow Pedagogical Institute of Foreign Languages (1941). Was a member of the Soviet Communist Party, Union of Cinematographers of the USSR and Russia. Author of many articles and books on French cinema. Published in the magazines *Soviet Screen*, *Cinema Art*, etc. Author of books: *Le Chanois* (1972); *Christian-Jacques* (1981); *Jean-Paul Belmondo. In cinema and in life* (1997); *Gerard Depardieu. Stolen letters* (1998); *Alain Delon. In love and life* (1999); *Catherine Deneuve* (2000), etc. Laureate of the Guild of Film Critics of Russia in the category "Literature about cinema" (for a series of books about French film masters) (1999).

15. V.P. Demin (1937–1993): film critic and historian, editor. Graduated from the Film Studies Department of VGIK (1960). Ph.D. (1973). He was a member of the Union of Cinematographers of the USSR and Russia. He worked as an editor in the film department of the Art publishing house (Moscow) and a researcher at the State Film Fund and the Research Institute of Art Studies (Moscow). In the last years of his life, he was one of the secretaries of the Union of Cinematographers and the editor-in-chief of the *Soviet Screen/Screen* magazine. Repeatedly delivered a series of lectures on cinema art in various cities of the country. He has been publishing on film issues since 1963. Published in scientific collections of the Research Institute of Art Studies, etc., in the magazines *Soviet Screen/Screen*, *Cinema Art*, *Cinemagoer Companion*, *Spark*, *Soviet Film*, *Cinema* (Latvia), *Cinema* (Lithuania), *Filmovi Novini* (Bulgaria), etc., in the newspapers *Soviet Culture*, *Soviet Cinema*, *Teacher's Newspaper*, etc.

In the 1980s – 1990s, he increasingly turned to screenwrite and, in order to feel the filming process from the inside, played several episodic roles in the films of Gennady Poloka, Alexander Itygilov and Leonid Maryagin, who liked his colorful, imposing appearance.

One of the most brilliant film critics of the 1960s – 1980s, Victor Demin had a unique creative style and a unique capacity for work. Being one of the most opposition filmmakers of his era, he skillfully clothed his most "seditious" passages in an ironic and allegorical form. Already his first book, *Film without intrigue* (1966), was rightfully recognized as an event in Russian film criticism. With all that, the literary language of V.P. Demin – bright and imaginative – was far from abstruse scientism. He wrote with equal success about Russian and foreign, feature and documentary films. Author of books: *A film without intrigue* (1966); *Jean Marais* (1968) (together with I. Yanushevskaya); *First person* (1976); *Do films get old?* (1978); *Sense education* (1980); *Meetings with the X muse* (1981) (together with I. Weisfeld, R. Sobolev, V. Mikhalkovich); *Man on earth* (1982); *Vytautas Žalakevičius: a portrait of the director* (1982); *Vitaly Melnikov: three*

conversations with the director (1984); *Let's talk about cinema*. (1984); *Eldar Ryazanov: creative portrait* (1984); *Meetings on the scorched earth* (1985). (together with V. Ishimov); *George Danelia* (1986); *Gleb Panfilov* (1986); *Sergei Solovyov* (1987); *Victor Proskurin* (1988); *Leonid Maryagin: creative portrait* (1988); *Aloiz Brenčs: creative portrait* (1990); *Leonid Yarmolnik* (1991).

16. G.E. Dolmatovskaya (1939–2021): film critic and historian, Ph.D., screenwriter, director. She was a member of the Union of Cinematographers of the USSR and Russia. Graduated from the Faculty of Journalism of Moscow State University. She worked for *Literaturnaya Gazeta*. Since 1974 – at Research Institute of History and Theory of Cinema (head of the department of non-fiction films). Published in the magazines *Soviet Screen*, *Cinema Art*, in scientific collections, etc. In recent years, she lived in France. Book Author: *Rod Steiger* (1976); *Who is who in the Soviet Cinema* (1979) (together with I. Shilova); *France talks about itself* (1980); *Notes on the past* (1983); *Sheets of the lunar calendar*. (1985). Scriptwriter of documentaries: *Somewhere near Tierra del Fuego...* and *Muse of Exile* (1990, directed by M. Litvyakov), *Leave... Stay...* (1992, directed by I. Mordmilovich). Director of documentary films shot according to his own scripts: *Go to Tryokhprudny lane...* (1992), *Matchmaker* (1993), *To a distant land...* (1995), *Cinema address – Krasnogorsk* (1996), *Ivan Mozzhukhin, or Child of Carnival* (1999), *Serebryakovs. French Studies* (2009), *Lucky 60s* (2012).

17. K.E. Razlogov (1946–2021): film critic and historian, culturologist, educator. Ph.D. (1984), Professor (1988), Honored Art Worker of Russia (1997). He was a member of the Soviet Communist Party (since 1973), the Union of Cinematographers of the USSR and Russia, of the Russian Academy of the Internet, the National Academy of Motion Picture Arts and Sciences of Russia, the Russian Academy of Motion Picture Arts "Nika", a member of the Scientific Council of the Russian Academy of Sciences on the complex problem "History of World Culture". Headed the Russian Institute of Cultural Studies (1989–2013). He was a professor at VGIK, director of programs at the Moscow International Film Festival (1999–2021),

Graduated from Moscow State University (1969). From 1969 to 1976 he worked at the State Film Fund. From 1977 to 1988 he was the advisor to the Chairman of the Soviet Goskino. He taught at the Higher Courses for Scriptwriters and Directors (since 1972), at the Film Studies Department of VGIK (since 1988) and at the Institute of European Cultures (since 1999). Author and presenter of television cycles: *Cinema marathon* (RTR, 1993–1995), *Cinema Age* (1st Russian TV channel, 1994–1995), *From avant-garde cinema to video art* (Channel "Culture", 2001–2002), *Cinema cult* (Channel "Culture", 2001–2021).

Published in numerous scientific collections, in the journals *Problems of Philosophy*, *Cinema Art*, *Soviet Screen*, *Film Studies Notes*, *Kinoglaz*, *Media Education*, *Opinions*, *Social Sciences*, *Free Thought*, *Seance*, *Technology of Cinema and Television*, *Reading Room*, etc., in the newspapers *Culture*, *Moskovskaya Pravda*, *Independent Paper*, *Today*, *Screen and Stage*, etc. In total he published (in Russia and abroad) more than 800 articles.

Repeatedly participated in various Russian and international conferences, symposiums and seminars. He has lectured at universities in the USA, Canada, France, Finland, the Netherlands, Costa Rica, Australia and other countries.

Author of books: *Counterculture and the "new" conservatism* (1981) (together with A. Melville); *Disillusionment: The Politicization of the Western Screen* (1982); *Gods and devils in the mirror of the screen* (1982); *Screen Art: Problems of Expression* (1982); *The Dream Conveyor and Psychological Warfare* (1986); *Marilyn Monroe* (1991); *Commerce and art: enemies or allies?* (1992); *Not only about cinema* (2009); *Screen art: from the cinematograph to the Internet* (2010); *World Cinema: A History of Screen Art* (2011; 2013); *Planet Cinema. History of world screen art* (2015); *My festivals* (2015); *Film process of the XX – beginning of the XXI century* (2017); *Harutyun Khachatryan. Eternal return* (2019).

18. I.N. Solovieva (born 1927) is a literary and theater critic and historian. Ph.D. (1974), professor. Honored Art Worker of the Russian Federation (1993). Laureate of the State Prize of the Russian Federation (2003). Laureate of the Prize of the Union of Cinematographers of the USSR (1969). Member of the Union of Writers of the USSR and Russia, the Union of Cinematographers of the USSR and Russia. She graduated from the theater department of GITIS (1949). From 1982 to 2001, she led a theater criticism workshop at the Russian Academy of Theater Arts. Since 2001, she taught the history of Russian theater at the Moscow Art Theater School, where she was in charge of the scientific sector.

Published in the journals *Soviet Screen*, *Cinema Art*, *Theater*, *Theatre Issues*, in scientific collections, etc. Author of books: *Cinema of Italy (1945–1960)* (1961); *The play is on today* (1966); *Jean Gabin* (1967) (together with V. Shitova); *I.N. Nemirovich-Danchenko* (1979); *K.S. Stanislavsky* (1985) (together with V. Shitova); *Fourteen sessions* (1981) (together with V. Shitova); *Branches and roots* (1998); *First studio. Second Moscow Art Theater: from the practice of theatrical ideas of the XX century* (2016); *A.S. Suvorin: a portrait against the background of a newspaper* (2017) (together with V. Shitova).

19. T.M. Khlopyankina (1937–1993): film critic, screenwriter, playwright. She was a member of the Union of Cinematographers of the USSR and Russia. Graduated from VGIK (1959). She worked in the newspaper *Soviet Culture*, in the *Literary Newspaper*. In 1990–1992 she was the first deputy editor-in-chief of the magazine *Soviet Screen/Screen*. She has been published in the magazines *Cinema Art*, *Soviet Screen*, *Soviet Film*, *Cinema* (Riga), *Cinemagoer Companion*, *Theatre*, etc.; newspapers *Soviet Culture*, *Moscow News*, *Literaturnaya Gazeta* (where she was the head of the department of arts), etc. The author of the script for the film *Who is knocking on my door...*, the play *Funny Case*, the story *Hello, dear edition*. Author of books: *Ticket to the cinema* (1981); *Tatyana Dogileva* (1986); *Zastava Ilyicha* (1990).

20. R.N. Yurenev (1912–2002): film critic and historian, screenwriter. Ph.D. (1961), professor (1963). Honored Art Worker of Russia (1969), laureate of the Union of Cinematographers award for film studies and film criticism. He graduated from VGIK (1936). During the Second World War, he was a navigator in military aviation. He was awarded the Orders of the Red Star, the Order of the Patriotic War of the 2nd degree, the Red Banner of Labor, and the Friendship of Peoples. From 1939 to 2002 he taught at VGIK, led the film criticism workshop. He worked in the journal *Cinema Art* (1946–1948), was a senior researcher at the Institute of Art History of the Academy of Sciences (1948–1974), head of the film history department of the Film Research Institute (1974–2002). Wrote scripts for several documentaries, mostly about Russian filmmakers. Repeatedly participated in the work of international film festivals (Cannes, Berlin, Venice, Moscow and others).

In the 1960s – 1980s he was one of the most influential representatives of official film criticism, who received accreditation at major international film festivals. In the 1990s, he was mainly engaged in teaching activities.

He has been publishing on cinema since 1937. Published in numerous scientific collections on the theory and history of domestic and foreign cinematography, in the magazines *Cinema Art*, *Film Scripts*, *Novy Mir*, *Motherland*, *Soviet Screen*, etc., in the newspapers *Vechernyaya Moskva*, *Izvestiya*, *Soviet Cinema*, *Literaturnaya Gazeta*, *Literaturnaya Rossiya*, *Pravda*, *Soviet Art*, *Soviet Culture*, *Trud*, etc. (more than 600 publications).

Author of books: *About the film "Amangeldy"* (1938); *Grigory Alexandrov: the creative path of a film director* (1939); *Alexey Kapler: creative portrait of a screenwriter* (1940); *Academician Ivan Pavlov* (1949); *Soviet biopic* (1949); "Kuban Cossacks". *About the film and its creators* (1950); "Country Doctor". *About the film and its creators* (1952); *Modern Soviet cinema* (1958); *Alexander Dovzhenko* (1959); *Cinema is the most important of the arts* (1959); *At international film festivals* (1959); *Cinema abroad* (1961); *Modern cinema art of the capitalist countries* (1961); "Clear sky". *Film essay* (1961); *Eisenstein* (1962); *Cannes-Moscow-Venice* (1963); *Soviet film comedy* (1964); *Funny on the screen* (1964); *Soviet film comedy* (1964); "Battleship Potemkin" by *Sergei Eisenstein* (1965); *Innovation and traditions of owls. Movie* (1965); *Tamara Nosova* (1965); *Brief history of Soviet cinema. Issue. 1. (1917–1941)* (1967); *Art born in October* (1968); *Lyubov Orlova* (1968); *Mikhail Zharov* (1971); *Film director Evgeny Chervyakov* (1972); *Serei Eisenstein and the present* (1973); *Soviet cinematography* (1977); *Brief history of Soviet cinema* (1979); *Laughter of the strong* (1979); *Alexander Medvedkin, satirist* (1981); *Film book* (1981); *Miraculous Window: A Brief History of Foreign Cinema* (1983); *Sergei Eisenstein. Ideas. Movies. Method*. In 2 vols. (1985; 1988); *Innovation of the Soviet cinematography* (1986); *L.V. Kuleshov: film theory, directing, pedagogy* (1987); *V. Turkin: criticism, screenwriting, pedagogy* (1989); *Japanese cinema of the post-war years* (1993); *My dear VGIK* (1994); *Films by Gleb Panfilov* (1995); *Poems from the cherished box* (1997); *Soviet cinema of the 30s* (1997); *A Brief History of Cinema* (1997); *To justify this life* (2007).

21. M.B. Yampolsky (born in 1949) is a film critic, culturologist, philosopher, philologist, Ph.D. (1991). Member of the Union of Cinematographers of the USSR and Russia. Member of the editorial board of the journal *New Literary Review*, advisory councils of the Eisenstein Center and

the journal *Film Studies Notes*. Laureate of awards from the Union of Cinematographers of the USSR (1991) and the Guild of Film Critics of Russia (2004). Graduated from the Moscow Pedagogical Institute (1971). Worked as a school teacher, researcher at the Research Institute of Cinematography (1974–1990). He taught at VGIK and at the Higher Courses for Scriptwriters and Directors (Moscow). Since 1992 he has been a professor at New York University.

Author of numerous works on cinema art, semiotics, visual phenomenology. Published in the magazines *Soviet Screen*, *Cinema Art*, *Film Studies Notes*, *New Literary Review*, etc. Author of books: *Visible world. Essays on early film phenomenology* (1993); *Memory of Tiresias. Intertextuality and cinema* (1993); *Babel* (1994). (co-authored with Alexander Zholkovsky); *Demon and labyrinth. Diagrams, deformations, mimesis* (1996); *Recklessness as a source. Reading Kharms*. (1998); *Observer. Essays on the history of vision* (2000); *About close. Essays on non-mimetic vision* (2001; 2012); *Physiology of the symbolic. Book 1. Return Leviathan: political theology, representation of power and the endold regime* (2004); *Loner community* (2004); *Language – body – case: Cinematography and the search for meaning* (2004); *Weaver and visionary. Essays on the history of representation, or On the material and ideal in culture* (2007); *Muratova. The experience of film anthropology* (2008); *Through a Glass Darkly: 20 Chapters on Uncertainty* (2010); *Spatial history. Three texts about history* (2013); *Picturesque gnosis. Grisha Bruskin, Alefbet, individual salvation, dual world, eschaton, gnosis* (2015); *Out of chaos (Dragomoshchenko: poetry, photography, philosophy)* (2015); *Prigov: Essays on artistic nominalism* (2016); *Image. Lecture course* (2019).

Receiving a lot of letters from readers regarding the repertoire of Western films on Soviet screens, the editors of the magazine in 1972 decided to give an official explanation on this matter.

Soviet Screen published the answer of the then head of the Directorate of Cinematography and Film Distribution of the Committee on Cinematography under the Council of Ministers of the USSR F. Belov. He emphasized that the cinematography of Western countries is now experiencing a severe crisis of content and form. The film market is flooded with commercial movies of a detective and pseudo-historical character, therefore, Soviet film distribution must be insured against various low-grade crafts, from film production produced by the social order of reactionary circles, propagating bourgeois ideology. As the practice of recent years shows, commissions for the selection of foreign films recommend films that deserve a mostly positive assessment. ... And yet there are still many critical remarks about our foreign repertoire. These remarks often help film distribution authorities correct errors, allowed in the purchase of foreign films (Belov, 1972: 17).

As an example, F. Belov drew the attention of the readers of the *Soviet Screen* to the fact that even “progressive artists of the West”, developing acute social themes, often, for the sake of bad taste, include rough, naturalistic scenes, elements of sex, pathology in films. Films like this hit our screen from time to time. It happens that due to naturalistic episodes in films, individual viewers do not accept the picture as a whole, do not notice its progressive tendencies (Belov, 1972: 17).

But then a caveat followed: “It is, of course, not the spectator who is to blame here. This is the result of the fact that our press, including the *Soviet Screen*, does not yet pay due attention to reviewing foreign films” (Belov, 1972: 17).

Here, in fact, there was a clear dissonance with the recent history of the *Soviet Screen*, since in 1968 in the articles of the philosopher and film critic V. Razumny (1924–2011) (Razumny, 1968) and the famous actor N. Kryuchkov (1915–1993) (Kryuchkov, 1968) and at meetings with managers of Soviet Communist Party, the editors were sharply criticized precisely for the increase (from the point of view of the critics) in the volume of materials on Western cinema.

F. Belov saved the answer to the most pressing question for last: “Why didn’t they buy such and such a film? After all, this is an interesting work. Does the purchasing commission understand this?”. I dare to say: I understand. ... However, the issue of acquiring a particular painting is decided not only by our desire to buy it, but also by the willingness of our partners to sell it. It is no secret that many masters of foreign cinema are dependent on various dealers. And the latter, when it comes to the rental of a film in the USSR, sometimes deliberately raise such a price or put forward such conditions that it becomes impossible to purchase a film. This is the main reason why not everything that we would like gets on our screen. As our international distribution links grow, the number of “unavailable” films is steadily declining. We hope that the hour is not far off, when it is reduced to zero. But this applies only to genuine works of cinema. As for the ideologically and

artistically dubious films of the capitalist countries, the committee takes all measures to ensure that such films cannot penetrate the Soviet screen in any way” (Belov, 1972: 17).

A few years later, the conversation on this topic continued with Vice-Chairman of the USSR Goskino L. Mosin.

To begin with, he once again edifyingly reminded the readers of the magazine that cinema is included in the sphere of global ideological and spiritual confrontation between working people and the bourgeoisie, between socialism and capitalism. It exists and develops in conditions of acute confrontation between the champions of international detente and the instigators of the reckless nuclear arms race (Mosin, 1978: 1).

And then he argued (albeit, as Perestroika soon showed, recklessly) that film works that preach the cult of violence, militarism and cruelty, racism and pornography will never have a way to the Soviet screen, no matter how much our foreign ones hysteria about this (Mosin, 1978: 1).

Like F. Belov (Belov, 1972: 17), L. Mosin emphasized that the Soviet film distribution was open to cinematic works that “display progressive, democratic, freedom-loving ideas”, for films with a distinct social and humanistic sound, opposing everything that that offends the dignity of a person, takes away his strength, deprives him of happiness (Mosin, 1978: 1).

This was followed, however, by the reservation that it is impossible not to take into account the fact that in modern bourgeois society there are many figures of cinema who are, as it were, at a crossroads: they do not accept the ideas of communism, but at the same time, speaking from the positions of anti-fascism and anti-militarism, with positions of protest against reactionary phenomena, albeit half-heartedly and inconsistently, but carry out in their works the ideas of progress, thus objectively linking up with the activities of those who consciously and consistently participate in this struggle. The best films of this type appear on our screens, and the works of Western authors do not appear on them, reminiscent of clan shamanism, rushing about in an atmosphere of disintegration of content and form and seeing in the “mass man” an inert personality, devoid of the ability to think independently, socially and creatively powerless (Mosin, 1978: 1).

In this context, one of the most influential film critics of the 1970s, V. Baskakov (1921–1999), emphasized that in cinematography, as in other forms of art, the process of “polarization” has intensified: on the one hand, the owners of the bourgeois film market are striving to fill the screen with films that oppose socialism, against the progress of humanism, against man; at the same time, those forces that oppose frankly bourgeois, decadent art are sharply identified. Socialist art occupies an increasingly important position on the world screen. ... In a number of capitalist countries, films are being born, the authors of which stand on the positions of critical realism, the process is developing under the direct influence and under the powerful influence of the struggle of fraternal communist parties and the changes that have taken place and are taking place in the world (Baskakov, 1973: 2).

As a positive reaction to the resolutions of the Central Committee of the Soviet Communist Party concerning culture and ideology, in 1974 the All-Union Theoretical Conference “The Movie Screen and the Ideological Struggle” was held in Moscow, organized by the Research Institute of Theory and the history of cinema, Goskino of the USSR and the Union of Cinematographers of the USSR, the course of which was reflected on the pages of the magazine *Soviet Screen* (Kinoekran..., 1975: 2).

Chairman State Committee of the Council of Ministers of the USSR for Cinematography F.T. Ermash (1923–2002), who was appointed to this position in August 1972, emphasized in his report the importance of fighting all kinds of bourgeois ideology, actively using the movie screen in their class interests.

Director of the Research Institute of Theory and history of cinema V. Baskakov (1921–1999) made a presentation on his favorite topic: “A Critique of Bourgeois ‘Mass Culture’ and Decadent Currents in Cinematography”. He recalled that the détente of international tension in the world is taking place against the backdrop of an intensification of the struggle in the field of ideology, he analyzed the main processes and trends in Western cinema, which largely accumulates phenomena characteristic of bourgeois ideology as a whole: both extreme forms of anti-communism and propaganda myths about inexhaustible the possibilities of a “free” society, traditional and new philosophical idealistic currents (existentialism, Freudianism, neo-Freudianism), as well as left-wing extremist and Maoist trends. Today, bourgeois propagandists and film business owners, under the influence of the changes that have taken place in the world,

given the growing ideological influence of the forces of socialism and communism on the masses, are forced to abandon the old patterns and clichés, are forced to use sophisticated camouflage to mask their true goals of influencing the public consciousness. The front of the ideological struggle passes not only through the films themselves, but also touches on the fundamental questions of film theory (Kinoekran..., 1975: 2).

Further, the following reports were made by leading film critics (among whom was the famous director S. Yutkevich) on the topic of cinema and ideology: "The main directions of the ideological struggle in cinematography" (R. Yurenev), "Cinematographic process and some problems of film criticism" (A. Karaganov), "Models of political cinema" (S. Yutkevich), "Criticism of reactionary concepts of the history of Soviet cinema" (M. Zak), "Dziga Vertov and the Modern Ideological Struggle" (S. Drobashenko), "The Chapaev Phenomenon and Problems of the Ideological Struggle" (D. Pisarevsky), "Scientific and technological revolution – personality is the future" (Y. Khanyutin), "Cinematography as an object of mass consumption" (I. Turovskaya) and others (Kinoekran ..., 1975: 2).

Many of the theses voiced at this conference were included in the article by F. Yermash "Cinema in the struggle for the ideals of communism" (Ermash, 1979: 1-3).

On the whole, all three editors of the *Soviet Screen*, who succeeded each other in this post in the 1970s, adhered to a single editorial line regarding the irreconcilable ideological struggle against bourgeois cinema.

– *ideologized articles emphasizing criticism of bourgeois cinema and its harmful influence on the audience*

So, after the beginning of the Czechoslovak events of 1968 and the subsequent series of resolutions of the Central Committee of the Soviet Communist Party (Postanovlenie, 1969; Postanovlenie, 1972, etc.), ideologized articles began to appear more often in the *Soviet Screen*, emphasizing criticism of bourgeois cinema and its harmful influence on the audience.

Due to the fact that until the mid-1970s the United States continued to wage an aggressive war in Vietnam, the *Soviet Screen* quite reasonably associated this event with Hollywood productions that glorified the American army.

Thus, in the article "The Truth and Lies about Vietnam on the Screens of America", it was noted that "it is flaring up more and more in USA fight against war in Vietnam. More and more voices are heard demanding an end to this dirty war. That is why the government and the military tend to use every possible means to prove the correctness of their policy. And they attach more and more importance to the enormous impact that the art of "political cinema" has. ... For the US government "watered films" and the shield with which they cover and defend their political line, and the weapon with which they attack those who prevent them from pursuing this policy. ... by order of the US government, a huge number of films are being created that in one way or another promote the war in Vietnam. ... For example, in New York alone, more than ten films glorifying the American military were shown on television during one week. But there is another America that hates war and fights against it" (Yurenev, 1970: 15).

In the second half of the 1970s, this anti-war theme was continued on the pages of the magazine: "When the film *The Green Berets* (USA, 1968) appeared on the screens of the West at the height of American aggression in Vietnam, few people imagined that this one was miserably a failed and booed Hollywood action movie, like a sown dragon's teeth, will give a poisonous growth of frankly militaristic and chauvinistic films. The Pentagon, as you know, lost the "dirty war" in Indochina. Punishers barely took their feet from the territory of freedom-loving heroic Vietnam. And Hollywood, charged with aggressiveness, took the shameful baton from the Pentagon and launched a conveyor belt of frankly false, misanthropic films with full force. ... In the "dream factory" during the year, up to ten action films about the US Indo-Chinese adventure are filmed. Among them there are "leaders", breaking all records for rigging and distorting events ... Thus, the Vietnam War, which caused a deep split in American society, through the efforts of filmmakers, takes on the appearance of a kind of "heroic epic", the participants of which supposedly bravely defended the "free world" from the "red danger". ... Explosions and shots do not subside on the film sets of Hollywood. The extras in the "green berets" go on endless attacks in order to convince the Western layman that under the guise of the "free world" genocide is not genocide, aggression is not aggression, but the United States, which over the past thirty years has used its armed forces more than two hundred times to achieve political goals, of course, as always right. Specializing in gilding

the unsightly facade of the world of capital, Hollywood, as we see, remains true to itself" (Romanov, 1979: 18).

The policy of "détente", which was carried out between the USSR and the USA in the 1970s, did not cancel, as you know, the struggle in the sphere of ideology. Therefore, on the pages of the *Soviet Screen* it was emphasized that imperialism is shaking from class battles... After the Vietnam adventure, Watergate, scandalous cases of corruption in the corridors of power... a campaign for the "protection of human rights" was born in the West. In general, it is rather absurd: how can one expect protection of human rights from those who trample on these rights on a daily basis? Who is throwing millions of unemployed people out onto the street? Who is developing misanthropic plans for the extermination of people? Who deprives the temper of the colored? The purpose of this campaign is also to divert the attention of the masses of the people from the deep crisis of the capitalist system, to discredit socialism, to disorientate and split the progressive social and political forces in the capitalist states. Its peculiarity lies in the fact that it is raised to the government level, the question of alleged violations of human rights in the socialist countries is associated with interstate relations. The ideological struggle, in fact, is turning into a "psychological" one, fraught with serious consequences. In the field of foreign policy, it was decided to replace the bankrupt anti-communism and anti-Sovietism with a crusade for "human rights". But changing signs does not change the essence: there is still the same open anti-communism with attempts to interfere in the internal affairs of other countries (Chernousov, 1979: 17).

Moving further directly to the material of cinematography, the author of the article asked himself the question: "What kind of "legality", what kind of "order" can we talk about in a bourgeois society, where the guardians of law and order themselves violate them at every step? Those who have seen the American film *Serpico* (USA, 1973) could be convinced of this... Such is the cruel truth about human rights in capitalist countries, about "democracy" in the West, expressed in the language of cinema. It is high time for the bourgeois preachers who bask about "democracy and genuine human rights" in the socialist countries to look at their own countries and finally understand that in order to talk about human rights, one must at least have the right to do so. Not to mention the fact that in relation to the socialist community their complaints and heart-rending cries are pointless" (Chernousov, 1979: 16-18).

In a similar ideological vein, A. Palladin's article titled "The Barriers of Anti-Sovietism" was maintained (Palladin, 1978: 17).

The journalist Y. Komov in a series of his articles in the *Soviet Screen* also spoke sharply against Western commercial cinema and the ideas propagated by it: "What kind of "value criteria" does bourgeois cinema splash out on the audience? Violence, atrocities, pornography, sexual perversions, drug addiction... Moreover, fabulous funds are spent on advertising horror films, disaster movies, paintings that incite the basest instincts. ... And the dumbfounded spectator – old and young – deafened by the noisy pandemonium, dutifully looks at the picture that he did not choose himself, but was slipped to him by those who are trying to distract the masses from the burning problems and contradictions of the capitalist world" (Komov, 1979: 18).

Y. Komov further argued that the American adult and children's audiences have long been accustomed to movie atrocities. They go like hot cakes, bringing huge profits to businessmen. An American from a young age is forced to get used to recreational violence; according to statistics, he spends much more time in front of the TV and in the auditorium than at school at his desk. In front of him are fantastic monsters, gangsters, bandits... Some of them greedily devour people, others terrorize entire cities, others, performing their "exploits", shoot, kill, cut, rape. Children like chases, attacks, gambling fights – they want to be strong, they want to be adults, they want to act. And under the influence of the screen, they become rapists in the jungles of huge American cities. A terrible thing happens: they talk about crimes, they think about them, but they talk and think, as if it were something ordinary. It would seem that murder is a monstrous act of inhumanity. But when there are so many of them... Both in the cinema and in the surrounding reality. ... One way or another, but children and adults in American society consume the same drug (or variations of it) for a long time, they get used to it, they cannot do without it. In fact, violence remains an old concept, but in the age of progress, the rapid development of science and technology, it has become widely available, now it corrupts everyone without exception, from the cradle to the end of days (Komov, 1979: 18).

In approximately the same vein, Y. Komov wrote on the pages of the magazine about Hollywood science fiction films and disaster films and gangster dramas (Komov, 1977: 20-21; 1980: 17).

One of the main film critics who exposed the negative influence of bourgeois cinema on the mass audience in the 1970s and the first half of the 1980s was the then secretary of the board of the Union of Cinematographers of the USSR A. Karaganov (1915–2007).

His articles of this period were sustained in the strict framework of the Soviet Communist party's ideological struggle. Here, for example, is a typical beginning of such texts: "The politics and philosophy of the struggle for peace live on in the decisions of the 26th Congress of Lenin's party, no matter how much militant politicians across the ocean shout about the "Soviet military threat" and world terrorism, allegedly fanned by the Kremlin. The policy and philosophy of the struggle for peace is for us the strategic line, the deepest essence of the creative labor, thoughts and feelings of the builders of communism. That is why the social psychology of the people and the individual psychology of man, his moral world organically unite in support of all new initiatives and actions of the party of the state, the outstanding peace fighter Leonid Ilyich Brezhnev, aimed at restoring the development of international detente and strengthening the cause of peace" (Karaganov, 1982: 1).

It was A. Karaganov who drew the attention of the readers of the *Soviet Screen* to the fact that although among the filmmakers of bourgeois countries there have always been many serving the imperialist ideology and propaganda, but these are not only corrupt souls from third-rate artisans ... we know that the famous American actor who became a director, John Wayne directed the film *The Green Berets* (USA, 1968), openly glorifying the "heroes" of American aggression against the Vietnamese people. Billy Wilder staged *One, Two, Three* (USA, 1961), Alfred Hitchcock – *Topaz* (USA, 1969), Henri Verneuil – *Snake (Le Serpent)*. France-FRG-Italy, 1973), films slandering Soviet foreign policy. ... Plots and motifs from the arsenal of screen anti-Sovietism and anti-communism pass from Bondiade into films about catastrophes and Star Wars (Karaganov, 1982: 1).

A. Karaganov saw a rehabilitation trend of whitewashing aggression in Michael Cimino's film *The Deer Hunter* (USA, 1978), in which the misfortunes of three Americans, participants in aggression who were captured by the Vietnamese, are portrayed sentimentally, sympathetically, and the Vietnamese are presented as sophisticated torturers of prisoners of war: racist motives are quite clearly visible in the film (Karaganov, 1982: 1).

And here A. Karaganov recalled that for various reasons, bourgeois filmmakers help the cold and psychological war. Some are by conviction. Others – by cynical calculation: money does not smell. Still others have allowed themselves to be broken... But not only the convinced troubadours of militarism, not only those who have sold themselves out and are broken, participate in the dissemination of ideas favorable to the reaction. It often happens that they are played along by artists who got lost in the labyrinths of false ideas of bourgeois individualism, a bourgeois understanding of democracy, or fell under the influence of propaganda cries about the "Soviet military threat". Not helping, but hindering the moral support of anti-militarist activity are also those artists who believe in concepts that represent life as an insurmountable chaos, man as a hopelessly corrupted being: a philosophy of behavior based on such concepts makes people obedient slaves of circumstances created by the masters of their own society. A cinematographer who has allowed himself to be deceived by false ideas almost inevitably becomes an unwitting but quite dangerous accomplice of the reactionary forces (Karaganov, 1982: 1).

A year later, A. Karaganov returned to the theme of the ideological struggle in cinema, noting that in some cases, market films of an aesthetically lightweight but enticing "cinema" turn to the techniques of "upper floor" cinema, adorn themselves with sparkles of intellectuality and sophistication. However, the traditional lures and traps for the viewer remain almost unchanged – the intricacies of the plot that mythologizes life, frank sex, the aestheticization of cruelty and violence (Karaganov, 1983: 1).

That is why, A. Karaganov continued, one should more effectively oppose films that sow enmity between peoples, spread racial prejudice, promote anti-Sovietism, anti-communism, romanticize the exploits of the aggressors in Vietnam (*The Deer Hunter*. USA, 1978) and white mercenaries in Africa (*The Wild Geese*. USA, 1978). In a number of films, attempts are made to revise the course of the Second World War, to whitewash Hitler and his army, or to dissolve the social essence of fascism in the problems of sexopathology and Freudian psychoanalysis (Karaganov, 1983: 1).

Hence the previous conclusion was drawn: “The screen remains a field and a weapon of struggle. ... Films that spread fear of life weaken the social and moral stamina of a person in the fight against manifestations of evil; a person struck by such a feeling of fear of life easily falls into total pessimism, which prevents him from becoming an active fighter and simply a fighter against the arms race fanned by the imperialists, against the growing military dangers” (Karaganov, 1983: 1).

In the same 1983, the journalist V. Chernenko clearly (and as it turned out later, quite presciently) identified the “main direction of the ideological attack” that the United States launched against the socialist countries: the desire for ideological and political “erosion”, the desire to destabilize the social system of socialism, to destroy its system of moral, moral values and the spiritual world, to the spread of bourgeois and, above all, American norms and views on the way of life – monopolistic capital (Chernenko, 1983: 16).

The article went on to say that many types of ideological influence are carried out, as it were, gradually, unobtrusively, “not on the forehead”, when norms and patterns of behavior, value orientations in the field of culture, morality, everyday life are distributed through advertising of technical achievements, fashion standards and etc., consciously and purposefully presented as symbols of the American way of life and the American social system. ... American cinema has developed such a concept of personality, which is designed to have a destructive effect on public consciousness, instill in the masses faith in the bourgeois legal order, the “American way of life”, and assert the “moral” values of capitalism (Chernenko, 1983: 16-17).

As examples of this kind of destructive influence, V. Chernenko presented the anti-Soviet films *Firefox* (USA, 1982) and *Steiner – Das Eiserne Kreuz/Cross of Iron* (FRG-UK, 1977). And then it was argued that in Western films of anti-Soviet, anti-humanistic orientation there are motives for the inevitability of war, destruction, all kinds of global cataclysms. The viewer is actively accustomed to the idea that war with the use of atomic weapons, laser and other means of mass destruction of people cannot be avoided. As an alternative, propaganda of “easy war”, rehabilitation of militarism, etc. is proposed. ... Eloquent proof of this is a whole series of films about “space wars” that appeared in the late 70s and early 80s ... in which future wars are shown as a kind of attraction. These films are by no means harmless. ... they have the ability to stun, overwhelm and serve the interests of American ideological expansion. ... All these and many other models of cinema spectacles directed against the cause of peace, humanism, like anti-Soviet films, are a reflection of the deep spiritual crisis of modern capitalism (Chernenko, 1983: 16-17).

In a similar vein, the article of the film critic I. Kokorev was sustained. He noted that Hollywood of the early 1980s was characterized by “a more sophisticated method of manipulating public consciousness based on a differentiated approach to the viewer. The old principle of “brainwashing” was replaced by, in the words of the futurologist Alvin Toffler, “de-massification”, that is, shooting according to the principle of separating warheads aimed at different audiences – youth, black, women, pensioners, rural, conservative, etc. Thus, the dominant ideology is trying to intercept and neutralize the mass mood of discontent, directing them into channels that are safe for the existing system, gradually controlling the agitated and politically fragmented audience in the interests of the ruling class. This is how the youth get their “rebellious” films, supposedly subverting bourgeois morality, and at the same time family values; participants in the anti-war movement – anti-war films, militarists – militarist films: the women's movement of the 70s has a whole line of so-called women's films: for those who suffer from nostalgia for a “cloudless” past – pictures in the “retro” style and so on, and other ... The social roots of such fragmentation should be sought in the growing polarization of American society in connection with the problems of inflation and unemployment, the threatening rampant crime, the fall in US prestige in the world and the dangerous militarization of foreign policy” (Kokorev, 1983: 17).

Of particular concern to the *Soviet Screen* caused “aggression of violence and sex on the commercial screens of the world”.

Film critic I. Weisfeld (1909–2003), for example, wrote in this case we are talking about a phenomenon that has assumed the scale of a moral disaster in the life of modern bourgeois society. It has an impact not only on aesthetic tastes, demeanor, but also on the spiritual appearance of the audience. ... Of course, the escalation of violence and sex on the screen is directly caused by the laws of commercial filmmaking, the speculative considerations of the producers. They may simply not accept a film from the director if it does not contain erotica and violence (Weisfeld, 1973: 2).

At the same time, a problem arises: Western artists, who sincerely want to expose the vice, to show the inhumanity of imperialist aggression, the hypocrisy of bourgeois morality, often stop in difficulty: where is the line that separates, say, the display of cruelty with the aim of condemning it from such a display that this cruelty aestheticize? But the question of the line separating art from non-art also arises when the artist seeks to show the beauty of human feelings in their entirety, psychological and physical, the happiness of love or its tragedy with striking sharpness, non-trivially, but in any case, in world cinema there is a situation of struggle, and not a passive subordination of art to anti-art, of a progressive principle to a reactionary one. The contamination of the screen with pornography and sadism is strongly protested by honest artists, by critics (Weisfeld 1973: 2-3).

Based on the task of condemning the display of violence on the screen, the *Soviet Screen* published articles on its pages telling about the dangers of horror films (Moroz..., 1969, etc.).

In particular, film critic G. Bogemsky (1920–1995) also wrote about this. He began his article by emphasizing that in Italy in the early 1970s, the most common genre of commercial cinema spectacle remains the homegrown cowboy film, or 'pasta western' as it is derisively called abroad. Much has already been written about these purely conventional films, devoid of any national character and imbued with unbridled cruelty, which unexpectedly received an incredibly wide distribution in Italian cinema about five or six years ago (Bogemsky, 1973: 18).

And then there was a transition to the fact that an Italian horror film uses all the finds, tricks and situations of directors who specialized in this genre – Hitchcock, Clouseau, Polanski. “These films are both “scary”, and detective, and sexy at the same time. And some of them – even with a certain touch of “intellectual” and “psychological” a la Antonioni. ... I would call these films rather drug films. They fool the viewer. To make you afraid means to make you stop thinking. Film product creators often state that their films allegedly stand outside of ideology, that they are a conditional movie spectacle, a kind of “game” between the director and the audience. I agree, it's a game, but the game is dirty enough. It is conducted, undoubtedly, for ideological purposes, in the direct interests of those who want to lull people's mind and conscience” (Bogemsky, 1973: 18).

The article of the journalist V. Reznichenko (1945–2010) was also devoted to the condemnation of Western commercial cinema: “Come to us to freshen up!” movie posters call. But is cinema really “refreshing”? ... Movies – those defined by the prefixes “sex” and “porn” are scattered around the movie poster. All these movies, starting with the pseudo-exotic French *Emmanuelle* (France, 1974) and ending with the Swedish primitives..., are stamped according to the same stencil. The names of the heroines are changing and, of course, the dimensions of the actresses who play their roles. Everything else – situations and plots – is the same, like banknotes, for the sake of which only they are created. “Porn-boom” ... sharply declined: simply the audience was tired. However, advertising persists, promises more and more “hot” spectacles – the film business does not want to back down. Next to the naked flesh, bleeding human flesh appears on the screen. Cannibals chew it with gusto in raw and fried form. They also show a certain medieval countess taking a tonic bath of fresh maiden blood; “donor” girls tear each other to pieces in front of an astonished spectator. ... On the screen they shoot, beat, torture, rape and burn. Monsters are angry, evil spirits are writhing. Both on earth and in space, in the recent past and in the distant future. Always and everywhere, says the commercial screen, vice and animal passion rule the world (Reznichenko, 1976: 16-17).

Of course, in the era of the “sexual revolution” *Soviet Screen* did not get tired of fighting cinematic pornography.

For example, journalist A. Kuleshov (1921–1990) complained that the screens of Paris were filled with porn films, and that even quite decent directors in the past could not resist the temptation to make films of this kind (Kuleshov, 1976: 18-19).

The journalist Y. Komov fully agreed with him (Komov, 1978: 18; 1979: 18), arguing that seducing little girls with firebirds, movie dealers make them undress on the screen, go to bed with men, shout monstrous curses, pretend to be prostitutes, victims of collective rape. The *Soviet Screen* introduced its readers to the fate of thirteen-year-old Marilyn Hemingway, who appeared in openly pornographic episodes of the film *Lipstick* (USA, 1976). We can also recall the twelve-year-old Jodie Foster, whom the creators of the film *Taxi Driver* (USA, 1976) in order to “gain experience” and “enter the image” of a juvenile “street girl” before filming drove through the lush areas of New York (Komov, 1979: 18).

Film critic A. Plakhov continued the topic of condemning the sexual exploitation of children in Western cinema on the pages of the *Soviet Screen*: “Respect for the country of childhood, for the moral world of a young person has always been inherent in humanistic cinema. We see something different in today's bourgeois cinema. From the screen they openly preach the false aesthetics of "permissiveness", immorality and lack of spirituality. And increasingly, children are becoming the targets of shameless and cynical commercial exploitation. ... The numbers of child and juvenile delinquency in the West are growing at an alarming rate today. And, as if competing with them, the Western screen demonstrates an unprecedented escalation of immorality and cruelty. The wave of violence, pornography and sexomania that has swept through bourgeois cinema erodes not only the generally accepted age-old concepts of the boundaries of decency, but also the remnants of humanistic values that feed art. ...

Arguments in favor of such plots are also found among those Western ideologists who declare the right and duty of art to interpret the problems of real life. Don't child prostitution, parental sadism, early crime and even child trafficking flourish in Western Europe and the USA? From this it is concluded that these shameful phenomena for a civilized society are quite legitimate to reflect on the screen. Meanwhile, sociologists have long noted the direct impact of cinematic cruelty, the notorious "sexual revolution" on the moral atmosphere of society, especially on young people. It turns out a vicious circle: rampant immorality and violence in life and on the screen mutually stimulate each other. ...

The heroine of the young Linda Blair, who played in William Friedkin's film *The Exorcist* (USA, 1973) ..., appears at first on the screen as a charming girl, and then before our eyes – in the literal sense of the word – turns into a disgusting monster, inside which "settled" the devil. The movie abounds in detail, in detail, shot scenes of rampage of the victim of evil spirits, with curses and beatings...

The most outspoken forms of mysticism and occult hysteria coexist on the bourgeois screen with rehashings of the Christian myth of the Antichrist. The son of Satan is born already in the relatively old film by Roman Polanski *Rosemary's Baby* (USA, 1968), in the film *The Omen* (USA, 1976) (directed by Richard Donner) the offspring of evil spirits appears in the form of an angelic five-year-old boy (Plakhov, 1983: 17).

As a result, A. Plakhov came to the Marxist-Leninist conclusion that “while pseudo-philosophical disputes are being conducted on the screen, whether children's vices are tricks of nature or intrigues of Satan, life gives irrefutable evidence that their real reason is social ill-being, an atmosphere of moral permissiveness and cynicism. In forcing this atmosphere, in closing the vicious circle of spiritual contradictions, Western cinema continues to make its contribution, in which the deepest crisis of bourgeois ideology and bourgeois public consciousness is directly reflected” (Plakhov, 1983: 17).

Responding to the “Star Wars” program put forward by the United States in the early 1980s, the writer E. Parnov (1935–2009) in his article on the pages of the *Soviet Screen* denounced Hollywood space cinema fiction: “The transgalactic field on which *Star Wars* (USA, 1977) is deployed and their sequel – *The Empire Strikes Back* (USA, 1980), socially copies modern capitalist reality. ... And this is no coincidence. Behind the semi-fabulous props, there is a clearly set goal to impose on an audience of one hundred or more million people! – a stereotype of the future, which, in principle, does not differ from the present. ... contemporary American fiction radiates a directed stream of tension and fear. ... There are more than enough sources for fear. Here and uncertainty about the future, and constant inflation, and unemployment, and unrest in Negro neighborhoods, and an increase in crime. ... Such a fantasy ... reflecting the echo of fear spilled in society, softens it, bringing to the fore the fairy-tale hero – a simple American guy... This hero turned out to be a real find for the creators of film adventures in a fantasy world. With its help, masquerading as the most modern genre, lightweight adventure fiction seeks to distract people from serious reflections about the future and from the real battle for their tomorrow (Parnov, 1982: 16-17).

The USSR and the USA met 1984 at the next peak of ideological confrontation, so it is clear that Western media and cinema, in particular, could not get past George Orwell's anti-totalitarian novel *1984*, which was published in 1949, banned in the USSR, but widely discussed in Western countries. A new wave of discussions about this novel logically broke out in 1984.

Film critic O. Sulkin, who worked at that time in the editorial office of the *Soviet Screen*, believed that “the hype around the novel” had “a clear class, political background. The bursting

verbal-organizational storm has quite a certain poisonous aftertaste. Reactionaries of all shades are in a hurry to list Orwell as their ally. ... The writer's morbid fantasies ... were included in the asset of the "psychological war" against the USSR and other socialist countries. But time puts a lot in its place. And today, in the "year of Orwell", when it is so tempting to speculate "it came true or it didn't come true", the voices of those who come to the conclusion that the science fiction writer's prophecies are gaining ground, but ... in the world of capital, are getting louder in the West. ... One of the most sinister symbols of the book is the image of "Big Brother", the head of the regime, invisible and omnipotent. The world where he rules seems to be turned upside down: The "Ministry of Truth" sows lies and slander, the "Ministry of Love" spreads terror, the "Ministry of Peace" kindles wars... The parallels suggest themselves. It is no coincidence that in connection with the US aggression against Grenada, *The New York Times* noted, not without sarcasm, that Reagan had surpassed Orwell. The invasion of Grenada by American imperialism is, after all, in the style of "Big Brother", and the thoroughly false arguments in its defense seem to have been cured in the offices of the "Ministry of Truth". And the apocalyptic plans to turn the planet into an atomic cemetery? What about neutron weapons? What about the planned Star Wars?" (Sulkin, 1984: 20-21).

In 1985, the *Soviet Screen* again returned to the condemnation of Western film interpretations of the theme of the Second World War.

Film critic L. Melville recalled that the films *The Night Porter* (*Il portiere di notte*. Italy-France, 1973) and *Lacombe Lucien* (France-Italy-FRG, 1973) caused a heated discussion and sharp protests of veterans of the Resistance, outraged by the hidden justification of both vile servanthood and fascism, which in these movies was explained by the hidden sadomasochistic complex allegedly lurking in the depths of the soul of every person, suggesting the possibility of only two states of the human personality – "executioner" or "victim" (Melville, 1985: 20).

And then it was reasonably noted that film commerce lives according to laws that are very far from moral norms. And the aforementioned movies, tendentious in direction, but performed at a fairly high professional level, were followed by a whole series of disgusting films that received the name "swastika-porn". ... in these movies, leather uniforms, whips and torture served only as an unusual shocking background for trivial pornographic plots. However, in this case, not only the moral sense of the spectators was subjected to corruption, but also their political and historical consciousness, which was inspired by far from harmless examples of the actual apology of fascism (Melville, 1985: 20).

L. Melville also sharply criticized the painting *Patton* (USA, 1970), imbued with a "frankly militaristic spirit", "in the center of which is a general who is infinitely "in love" with the war, one of the commanders of the American troops during World War II. For the authors, the fight against fascism is clearly a secondary concept, just a decoration (Melville, 1985: 20).

Similar examples were cited in the article by V. Ivanov: Film fake *The Bunker* (USA-France, 1980) called it a documentary drama. ... The shameful and pitiful details of the departure of the Fuhrer and his relatives into oblivion are presented as a "pathetic spectacle." ... It is not clear what is more in it – the zoological hatred of the authors of the current muddy brew for the Soviet Union or attempts to slander everyone who took part in the fight against fascism. *The Bunker* deforms the historical truth beyond recognition. Slanderous movies of this kind are actively used in the "psychological warfare" waged by Western propaganda centers against the Soviet Union and other socialist countries. ... The movie *Hitler's Career* (*Hitler – Eine Karriere*. FRG, 1977) was staged in Germany. There is not a word about the atrocities of the Nazis, about the anti-fascist struggle. Instead, the audience is regaled with scenes of parades, the combat "exploits" of the Wehrmacht, filmed by order of Goebbels propaganda. ... The "Hitleromania" that has now engulfed the West is a multifaceted phenomenon, and the whitewashing of fascism with the help of the screen is carried out by a variety of methods. ... The viewer is stuffed with rigged footage for the sole purpose of placing the blame for all the horrors of the war unleashed by Hitler's fascism on those who became the object of aggression. The thesis about the "suffering of the Germans" has long been persistently exaggerated by Western propaganda, which does everything to ensure that the masses do not know the truth about the crimes of the fascist invaders. It is monstrous, but true, four decades after the defeat of fascism in Germany, the Goebbels newsreel of 1941–1942 is again shown. And not at gatherings of Nazi underdogs, but on television, all over the country. Frames are coming: burning cities and villages of Belarus. Ukraine. Russia... And the Nazi announcer goes into a heart-rending cry – about the fight against the "communist threat", the "red danger". The purpose of such

blasphemous "retro" is quite obvious. The Nazi chronicle shamelessly mounts an unbridled campaign over the imaginary "Soviet threat" (Ivanov, 1985: 20-21).

The American action movie *Red Dawn* (USA, 1984) was also justifiably criticized in the *Soviet Screen*: "The Hollywood movie-making *Red Dawn* broke all records in terms of piling up absurdities and terry anti-Sovietism. ... And how else would you order to evaluate the plot, where "Soviet-Cuban-Nicaraguan"(!) paratroopers land in the United States and brutally crack down on American civilians. Of course, they cannot do without a "happy ending" in Hollywood: a handful of American schoolchildren who "went into the partisans" manage to defeat the "occupation troops". The artistic merits of this dirty opus do not deserve any detailed analysis. A very disturbing circumstance forces us to talk about it: this extremely primitive film ... is heavily advertised by American propaganda ... So, strenuously inflating the myth of the "Soviet military threat", the ideologists of aggression and militarism resort to the services of a cinematography mixed with lies and misanthropy. ... The militaristic and chauvinistic movie lie is aimed at sowing enmity and hatred towards the peoples of the socialist countries, serving as a smoke screen for the aggressive plans of the US and NATO administrations, which are fraught with the most dangerous consequences for humanity" (Vasin, 1985: 18-19).

4. Conclusion

Based on content analysis (in the context of the historical, socio-cultural and political situation, etc.) of texts published during the "stagnant" period of the *Soviet Screen* magazine (1969–1985), the author made the conclusion that materials on Western cinema on this stage were largely based on ideologized articles emphasizing criticism of bourgeois cinema and its harmful influence on the audience.

The topics of Western cinema on the pages of the *Soviet Screen* magazine in 1969–1985 were presented more sparingly than in the second half of the 1960s. There were significant reasons for this.

The final rejection of the "thaw" trends in the USSR occurred after the events in Czechoslovakia in 1968.

Therefore, it is logical that on January 7, 1969, the Decree of the Secretariat of the Central Committee of Soviet Communist Party (*Postanovlenie...*, 1969) was issued, distributed under the heading of "secrecy", that is, for a narrow circle of leaders at various levels related to the media. This resolution contained urgent recommendations to "more sharply, from class and party positions, oppose any manifestations of bourgeois ideology, actively and skillfully promote communist ideals, the advantages of socialism, the Soviet way of life, deeply analyze and expose various kinds of petty-bourgeois and revisionist trends" (*Postanovlenie...*, 1969).

The Resolution condemned the fact that "individual authors, directors and producers deviate from class criteria when assessing and covering complex socio-political problems, facts and events, and sometimes become carriers of views alien to the ideology of a socialist society. ... Some heads of publishing houses, press organs, radio, television, cultural and art institutions do not take proper measures to prevent the publication of ideologically erroneous works" (*Postanovlenie...*, 1969).

In 1972, two more resolutions of the Central Committee of Soviet Communist Party were adopted concerning cinematography and literary and artistic criticism, which also emphasized the harm of bourgeois ideology and propaganda and the need for an irreconcilable ideological struggle against such phenomena and influences. In particular, it was emphasized that Soviet literary and artistic criticism is still not active enough "in exposing the reactionary essence of bourgeois "mass culture" and decadent trends, in the fight against various kinds of non-Marxist views on literature and art, revisionist aesthetic concepts" (*Postanovlenie...*, 1969).

Under these conditions, the management of the *Soviet Screen* magazine did everything to take into account, to the greatest possible extent, all the "general lines" of these resolutions.

In particular, the number of materials about Western cinema in the *Soviet Screen* magazine decreased, and bourgeois cinema itself began to be subjected to more severe criticism. For many years, it was now unimaginable that a photograph of a Western movie star would appear on the first cover of a magazine (which sometimes happened during the Thaw of the 1960s).

5. Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Availability of data and materials

Not applicable.

Conflict of interest statement

The author reports no conflicts of interest.

Funding

Not applicable.

6. Acknowledgements

This research was funded by the Russian Science Foundation grant (RSF, project No. 23-28-00015, <https://rscf.ru/project/23-28-00015/>) at the Taganrog Institute of Management and Economics. Project theme: “Western cinema on the pages of the Soviet Screen Magazine (1925–1991)”. The head of the project is Professor A. Levitskaya.

Author’s ORCIDAlexander Fedorov  <https://orcid.org/0000-0002-0100-6389>**References**

- [Aristarco, 1951](#) – *Aristarco, G.* (1951). *Storia delle teorie del film*. Torino: Einaudi.
- [Aronson, 2003](#) – *Aronson, O.* (2003). *Metakino [MetaCinema]*. Moscow. [in Russian]
- [Bakhtin, 1996](#) – *Bakhtin, M.* (1996). *Sobranie sochinenij [Collected Works]*. Moscow. [in Russian]
- [Baskakov, 1973](#) – *Baskakov, V.* (1973). Smotr mirovogo kinoiskusstva [Review of world cinematography]. *Sovetskij ekran*. 9: 2. [in Russian]
- [Bazin, 1971](#) – *Bazin, A.* (1971). *What is Cinema?* Berkeley: University of California Press.
- [Belov, 1972](#) – *Belov, F.* (1972). Kak priobretayutsya zarubezhnye fil'my [How foreign films are acquired]. *Sovetskij ekran*. 5: 17. [in Russian]
- [Bibler, 1990](#) – *Bibler, V.* (1990). Ot naukoucheniya – k logike kul'tury: dva filosofskih vvedeniya v dvadcat' pervyj vek [From science-teaching to the logic of culture: two philosophical Introductions to the twenty-first century]. Moscow. [in Russian]
- [Bogemsky, 1973a](#) – *Bogemsky, G.* (1973). Palatka na ploshchadi. Rabochij klass na ekrane Italii [Tent on the square. The working class on the screen of Italy]. *Sovetskij ekran*. 9: 14-15. [in Russian]
- [Bogemsky, 1973b](#) – *Bogemsky, G.* (1973). Uzhasy po-ital'yanski [Horrors in Italian]. *Sovetskij ekran*. 18: 18. [in Russian]
- [Casetti, 1999](#) – *Casetti, F.* (1999). *Theories of Cinema, 1945–1990*, Austin: University of Texas Press.
- [Chernenko, 1983](#) – *Chernenko, V.* (1983). “Novye modeli” agressii [“New Models” of Aggression]. *Sovetskij ekran*. 7: 16-17. [in Russian]
- [Chernousov, 1979](#) – *Chernousov, M.* (1979). Pravo govorit' o pravah [The right to speak about rights]. *Sovetskij ekran*. 5: 16-18. [in Russian]
- [Demin, 1973](#) – *Demin, V.* (1973). Uroki “Mgnovenij” [Lessons of “Moments”]. *Sovetskij ekran*. 24: 4-5. [in Russian]
- [Eco, 1975](#) – *Eco, U.* (1975). *Trattato di semiotica generale*. Milano: Bompiani.
- [Eco, 1976](#) – *Eco, U.* (1976). *A Theory of Semiotics*. Bloomington: Indiana University Press.
- [Eisenstein, 1964](#) – *Eisenstein, S.M.* (1964). *Izbrannye proizvedeniya [Selected works]*. Moscow. [in Russian]
- [Ermash, 1979](#) – *Ermash, F.* (1979). Kino v bor'be za idealy kommunizma [Cinema in the struggle for the ideals of communism]. *Sovetskij ekran*. 20: 1-3. [in Russian]
- [Fedorov, 2022a](#) – *Fedorov, A.* (2022). Luchshie i hudshie fil'my sovetskogo kinoprokata: mneniya chitatelej zhurnala *Sovetskij ekran* (1958-1991) [The best and worst films of the Soviet film distribution: the opinions of the readers of the *Soviet Screen* magazine (1958-1991)]. Moscow. 330 p. [in Russian]
- [Fedorov, 2022b](#) – *Fedorov, A.* (2022). Theoretical Concepts of Film Studies in the *Cinema Art Journal* During the Perestroika Era: 1986–1991. *Media Education*. 18(4): 574-599.

- [Fedorov, Kornienko, 2023](#) – Fedorov, A., Kornienko E. (2023). The Ideological Topic in the Magazine *Soviet Screen*: 1957–1968 (Western Cinema Aspect). *European Researcher. Series A*. 14(1): 25-30. DOI: 10.13187/er.2023.1.25
- [Fedorov, Levitskaya, 2022a](#) – Fedorov, A., Levitskaya, A. (2022). Theoretical Concepts of Film Studies in Cinema Art Journal in the First Post-Soviet Years: 1992–2000. *International Journal of Media and Information Literacy*. 7(2): 355-397.
- [Fedorov, Levitskaya, 2022b](#) – Fedorov, A., Levitskaya, A. (2022). Theoretical Concepts of Film Studies in the *Cinema Art Journal* in the First Decade (1931–1941) of Its Existence. *Media Education*. 18(2): 169-220.
- [Fedorov, Levitskaya, 2022c](#) – Fedorov, A., Levitskaya, A. (2022). Theoretical Concepts of Film Studies in *Cinema Art Journal*: 1945–1955. *International Journal of Media and Information Literacy*. 7(1): 71-109.
- [Fedorov, Levitskaya, 2023](#) – Fedorov, A., Levitskaya, A. (2023). Western Cinema on the Pages of the Magazine *Soviet Screen*: 1957-1968. *Media Education*. 19(2): 212-269. DOI: 10.13187/me.2023.2.212
- [Gledhill, Williams, 2000](#) – Gledhill, C., Williams, L. (eds.) (2000). *Reinventing Film Studies*. Oxford: Arnold & Oxford University Press.
- [Golovskoy, 2004](#) – Golovskoy, V. (2004). Mezhdru ottepel'yu i glasnost'yu. Kinematograf 70-h. [Between the Thaw and Glasnost. Cinema of the 70s.]. Moscow. [in Russian]
- [Hess, 1997](#) – Hess, D.J. (1997). *Science Studies*. New York: New York University Press.
- [Hill, Gibson, 1998](#) – Hill, J., Gibson, P.C. (eds.) (1998). *The Oxford Guide to Film Studies*. Oxford: Oxford University Press.
- [Ivanov, 1985a](#) – Ivanov, V. (1985). Professiya: telerepoter [Profession: TV reporter]. *Sovetskij ekran*. 2: 10. [in Russian]
- [Ivanov, 1985b](#) – Ivanov, V. (1985). Proiski "vechno vcherashnih" [The intrigues of "eternally yesterday"]. *Sovetskij ekran*. 7: 20-21. [in Russian]
- [Karaganov, 1982](#) – Karaganov, A. (1982). Zadacha samaya vazhnaya [The most important task]. *Sovetskij ekran*. 6: 1. [in Russian]
- [Karaganov, 1983](#) – Karaganov, A. (1983). Ekran – pole i oruzhie bor'by [Screen is a field and a weapon of struggle]. *Sovetskij ekran*. 21: 1. [in Russian]
- [Khrenov, 2006](#) – Khrenov, N. (2006). Zrelischa v epohu vosstaniya mass [Spectacles in the age of revolt of the masses]. Moscow. [in Russian]
- [Khrenov, 2011](#) – Khrenov, N. (2011). Civilizacionnaya identichnost' v perekhodnuyu epohu: kul'turologicheskij, sociologicheskij i iskusstvovedcheskij aspekty [Civic Identity in a transitional epoch: cultural, sociological and art history aspects]. Moscow. [in Russian]
- [Kinoekran..., 1975](#) – Kinoekran i ideologicheskaya bor'ba [Cinema Screen and Ideological Struggle] (1975). *Sovetskij ekran*. 2: 2. [in Russian]
- [Kokorev, 1983](#) – Kokorev, I. (1983). Mify i real'nost' [Myths and reality]. *Sovetskij ekran*. 13: 17. [in Russian]
- [Komov, 1977](#) – Komov, Y. (1977). Obez'yanij marafon [Monkey Marathon]. *Sovetskij ekran*. 22: 20-21. [in Russian]
- [Komov, 1978a](#) – Komov, Y. (1978). Begstvo otreal'nosti [Escape from reality]. *Sovetskij ekran*. 18: 7. [in Russian]
- [Komov, 1978b](#) – Komov, Y. (1978). Zapreshchennye igry [Forbidden games]. *Sovetskij ekran*. 7: 18. [in Russian]
- [Komov, 1979a](#) – Komov, Y. (1979). Deti-ubijcy, ubijcy detej [Child killers, killers of children]. *Sovetskij ekran*. 11: 18. [in Russian]
- [Komov, 1979b](#) – Komov, Y. (1979). Komu sluzhit Paramaunt? [Who does Paramount serve?] *Sovetskij ekran*. 19: 17. [in Russian]
- [Komov, 1980](#) – Komov, Y. (1980). Mir prizrachnyj i kovarnyj [The world is ghostly and insidious]. *Sovetskij ekran*. 3: 17. [in Russian]
- [Komov, 1982](#) – Komov, Y. (1982). Epidemiya uzhasov [Epidemic of Horrors]. *Sovetskij ekran*. 22: 18. [in Russian]
- [Kornienko, Novikov, 2023](#) – Kornienko, E., Novikov, A. (2023). Western Cinematography on the Pages of the *Soviet Cinema Screen Magazine*: 1939-1941. *Media Education*. 19(2): 281-289. DOI: 10.13187/me.2023.2.281

- [Kryuchkov, 1968](#) – *Kryuchkov, N.* (1968). Spravedlivaya kritika [Fair criticism]. *Ogonek*. 48: 17. [in Russian]
- [Kuleshov, 1976](#) – *Kuleshov, A.* (1976). Neistovstvo porno [Fury of porn]. *Sovetskij ekran*. 6: 18-19. [in Russian]
- [Levitskaya et al., 2013](#) – *Levitskaya, A., Kornienko, E. Novikov, A.* (2023). Western Cinematography on the Pages of the *Soviet Screen Magazine: 1928-1930*. *International Journal of Media and Information Literacy*. 8(1): 122-144. DOI: 10.13187/ijmil.2023.1.122
- [Levitskaya, 2022](#) – *Levitskaya, A.* (2022). Theoretical Concepts of Film Studies in *Cinema Art Journal: 1956-1968*. *Media Education*. 18(3): 390-438.
- [Levitskaya, Fedorov, 2023](#) – *Levitskaya, A., Fedorov, A.* (2023). Western Cinematography on the Pages of the *Soviet Screen Magazine of 1925-1927*. *Media Education*. 19(1): 71-96. DOI: 10.13187/me.2023.1.71
- [Lotman, 1973](#) – *Lotman, Y.* (1973). Semiotika kino i problemy kinoestetiki [Semiotics of cinema and the problems of film aesthetic]. Tallin. [in Russian]
- [Lotman, 1992](#) – *Lotman, Y.* (1992). Stat'i po semiotike i topologii kul'tury [Articles on semiotics and topology of culture]. Vol.1. In: *Izbrannye stat'i*. Tallin. [in Russian]
- [Lotman, Tsvijan, 1994](#) – *Lotman, Y., Tsvijan, Y.* (1994). Dialog s ekranom [Dialog with the Screen]. Tallin. [in Russian]
- [Mast, Cohen, 1985](#) – *Mast, G., Cohen, M.* (eds.) (1985). *Film Theory and Criticism: Introductory Readings*. Oxford: Oxford University Press.
- [Melville, 1985](#) – *Melville, L.* (1985). V krivom zerkale [In a crooked mirror]. *Sovetskij ekran*. 19: 20. [in Russian]
- [Metz, 1974](#) – *Metz, C.* (1974). *Language and cinema*. The Hague: Mouton.
- [Moroz..., 1969](#) – *Moroz* po kozhe [Frost on the Skin]. *Sovetskij ekran*. 22. [in Russian]
- [Mosin, 1978](#) – *Mosin, L.* (1978). Poliekran planet [Polyscreen of the planet]. *Sovetskij ekran*. 12: 1. [in Russian]
- [Orlov, 2011](#) – *Orlov, D.* (2011). Replika v zal. Zapiski "deystvuyushchego lica" [Replica in the hall. Notes of the "actor"]. Moscow. [in Russian]
- [Palladin, 1978](#) – *Palladin, A.* (1978). Bar'ery antisov'etizma [Barriers of anti-Sovietism]. *Sovetskij ekran*. 18: 17. [in Russian]
- [Parnov, 1982](#) – *Parnov, E.* (1982). Slagaemye fenomena [Terms of the phenomenon]. *Sovetskij ekran*. 9: 16-17. [in Russian]
- [Plakhov, 1983a](#) – *Plakhov, A.* (1983). Chto takoe "belmondism" [What is Belmondism]. *Sovetskij ekran*. 19: 17. [in Russian]
- [Plakhov, 1983b](#) – *Plakhov, A.* (1983). Strah, poshchadivshij dushu [Fear that spared the soul]. *Sovetskij ekran*. 11: 5-6. [in Russian]
- [Plakhov, 1983c](#) – *Plakhov, A.* (1983). Zamknutyj krug. V mire duhovnogo krizisa [Vicious circle. In the world of spiritual crisis]. *Sovetskij ekran*. 5: 17. [in Russian]
- [Postanovlenie..., 1969](#) – Postanovlenie sekretariata CK KPSS "O povyshenii otvetstvennosti rukovoditelej organov pechati, radio, televideniya, kinematografii, uchrezhdenij kul'tury i iskusstva za idejno-politicheskij uroven' publikuemyh materialov i repertuara" ot 7.01.1969 [Resolution of the Secretariat of the Central Committee of the Soviet Communist Party "On increasing the responsibility of the heads of the press, radio, television, cinematography, cultural institutions and art for the ideological and political level of the published materials and repertoire". 7.01.1969]. [in Russian]
- [Postanovlenie..., 1972a](#) – Postanovlenie CK KPSS "O literaturno-hudozhestvennoj kritike" [Decree of Central Committee of the Soviet Communist Party "On Literary and Artistic Criticism"]. 21.01.1972. [in Russian]
- [Postanovlenie..., 1972b](#) – Postanovlenie CK KPSS "O merah po dal'nejshemu razvitiyu sovetskij kinematografii" [Decree of the Central Committee of the Soviet Communist Party "On measures for the further development of Soviet cinematography"]. *Pravda*. 22.08.1972. *Sovetskij ekran*. 1972. 19. [in Russian]
- [Razumny, 1968](#) – *Razumny, V.* (1968). Poziciya... no kakaya? [Position ... but what?]. *Ogonek*. 43: 26-27. [in Russian]
- [Reznichenko, 1976](#) – *Reznichenko, V.* (1976). Prodiktovano biznesom [Dictated by business]. *Sovetskij ekran*. 22: 16-17. [in Russian]

- [Romanov, 1979](#) – Romanov, Y. (1979). Agressivnyj Gollivud [Aggressive Hollywood]. *Sovetskij ekran*. 18: 18. [in Russian]
- [Stam, 2000](#) – Stam, R. (2000). *Film Theory: an Introduction*. Malden, MA: Blackwell.
- [Sulkin, 1984a](#) – Sulkin, M. (1984). O proshlom – radi budushchego [About the past – for the sake of the future]. *Sovetskij ekran*. 21: 21. [in Russian]
- [Sulkin, 1984b](#) – Sulkin, O. (1984). Pochti po Oruellu, ili Kak Gollivud “ekraniziruet” nashumevshij roman [Almost according to Orwell, or How Hollywood “screens” a sensational novel]. *Sovetskij ekran*. 14: 20-21. [in Russian]
- [Vasin, 1985](#) – Vasin, A. (1985). Fal'shivka [Fake]. *Sovetskij ekran*. 8: 18-19. [in Russian]
- [Villarejo, 2007](#) – Villarejo, A. (2007). *Film Studies: the Basics*. London: Routledge.
- [Weisfeld, 1973](#) – Weisfeld, I. (1973). Pora skazat' “Dovol'no!” [It's time to say "Enough!"]. *Sovetskij ekran*. 14: 2-3. [in Russian]
- [Yurenev, 1970](#) – Yurenev, A. (1970). Pravda i lozh' o V'etname na ekranah Ameriki [Truth and lies about Vietnam on the screens of America]. *Sovetskij ekran*. 2: 15. [in Russian]

Appendix

Key dates and events relating to the historical, political, economic, ideological, sociocultural, and cinematic context in which *Soviet Screen* magazine was published in 1969–1985.

1969

January 7: Resolution of the Central Committee Secretariat of Soviet Communist Party "On increasing the responsibility of the heads of press, radio, television, cinematography, cultural and art institutions for the ideological and political level of the published materials and repertoire".

January 16: In Prague, student J. Palach (1948-1969) performs self-immolation as a protest against the introduction of the Warsaw Pact troops into Czechoslovakia.

January 20: R. Nixon (1913–1994), who won the elections, officially replaced L. Johnson (1908–1973) as president of the USA.

January 22: In Moscow, a junior lieutenant V. Ilyin made an unsuccessful attempt on the General Secretary of the Central Committee of Soviet Communist Party, Leonid Brezhnev (1906–1982).

March 2–15: Soviet-Chinese border armed conflict on Damansky Island.

April 15: The American Academy of Motion Picture Arts awards an Oscar to the Soviet film *War and Peace* (directed by S. Bondarchuk) as the best foreign film of the year.

April 17: A. Dubček (1921–1992) is removed as first secretary of the Communist Party of Czechoslovakia. H. Husak (1913–1991) is elected as the new first secretary.

April 28: the resignation of President Charles de Gaulle (1890–1970) of France.

April 28: A. Dubček is elected president of the Czechoslovak National Assembly.

May: The film *Andrei Rublev* (directed by A. Tarkovsky) is awarded the FIPRESCI Prize at the Cannes International Film Festival.

May: The Communist magazine (n 9, 1969) published an article against the film *The Sixth of July* (screenwriter M. Shatrov, director Y. Karasik).

June 15: Georges Pompidou (1911–1974) is elected president of France.

July 7–22: International Film Festival in Moscow. Gold prizes: *Till Monday* (USSR, directed by S. Rostotsky), *Lucia* (Cuba, directed by U. Solas), *Serafino* (Italy–France, directed by P. Germi).

July 20–21: The landing of American astronauts on the Moon.

August: The USSR celebrated the fiftieth anniversary of Soviet cinematography.

September 25–26: Plenum of the Central Committee of the Communist Party of Czechoslovakia, which removes A. Dubček supporters from state posts, cancels a number of decisions made in July–August 1968 by the Czechoslovak leadership and the Extraordinary XIV Congress of the Communist Party of Czechoslovakia.

October 15: A. Dubček is deprived of his position as Chairman of the Czechoslovak National Assembly.

November 4: A. Solzhenitsyn is expelled from the USSR Union of Writers.

November 17: after an inspection by the People's Control Committee, V. Surin (1906–1994), director of the Mosfilm studio, is relieved of his post. N. Sizov (1916–1996) was appointed the new director of Mosfilm.

November 24: The USSR and the United States ratify the Treaty on the Non-Proliferation of Nuclear Weapons.

1970

March 19: Open letter by Academician A. Sakharov (1921–1989) demanding democratization of the USSR.

March 28: *Ogonyok* magazine publishes an article by the historian N. Savinchenko and A. Shirokov “About the film *The Sixth of July*”, which finally dashed the hope of awarding the Lenin Prize to the film.

April 22: USSR solemnly celebrated the centenary of the birth of Vladimir Lenin (1870–1924).

May 12–22: All-Union Film Festival (Minsk).

October 8: writer A. Solzhenitsyn (1918–2008) is announced the winner of the Nobel Prize for Literature.

October 15: Aeroflot plane hijacking from the USSR to Turkey (hijackers and murderers of flight attendant N. Kurchenko: father and son Brazinskas).

October 24: S. Allende (1908–1973) is elected president of Chile.

December 13: Increase in prices of meat and other foodstuffs initiated unrest and the resignation of the country's leadership in Poland.

December 17: The culmination of workers' protests in Poland.

1971

March 30–April 9: XXIV Congress of the Soviet Communist Party.

May 11–13: II Congress of Soviet Cinematographers.

June 29 – July 2: The Fifth Congress of Soviet Writers.

July 20–August 3: Moscow International film Festival. Golden prizes: *The White Bird with a Black Mark* (USSR, directed by Y. Ilyenko), *The Confession of the Police Commissioner to the Public Prosecutor* (Italy, directed by D. Damiani), *Live Today, Die Tomorrow* (Japan, directed by K. Shindo).

1972

January 21: Resolution of the Central Committee of the Soviet Communist Party "On literary and art criticism".

February 22–29: All-Union Film Festival (Tbilisi).

August 2: The Central Committee of Soviet Communist Party decree "On measures for further development of the Soviet cinematography".

August 4: Decree of the Presidium of the Supreme Council of the USSR on transformation of the Committee on Cinematography under the Council of Ministers of the USSR (Film Committee of the USSR) into the Union-Republic State Committee on Cinematography (Goskino USSR).

December 30: The USSR celebrated its fiftieth anniversary.

1973

April: All-Union Film Festival (Alma-Ata).

June 18–25: Leonid Brezhnev's visit to the USA, signing a number of agreements.

May 27: The USSR joined the World (Geneva) Copyright Convention.

July 3: Opening of the Conference on Security and Cooperation in Europe (Helsinki).

July 10–23: International film Festival in Moscow. Gold prizes: *That Sweet Word: Freedom!* (USSR, director V. Žalakevičius), *Love* (Bulgaria, director L. Staikov), *Oklahoma Crude* (USA, director S. Kramer).

August 29: The publication in the newspaper *Pravda* open letter of Soviet scientists, condemning the anti-Soviet actions and speeches of Academician A. Sakharov (1921–1989). The letter was signed by academicians: N. Basov (1922–2001), N. Belov (1891–1982), N. Bogolyubov (1909–1992), A. Braunstein (1902–1986), A. Vinogradov (1895–1975),

S. Vonsovsky (1910–1998), B. Vul (1903–1985), N. Dubinin (1907–1998), N. Zhavoronkov (1907–1990), B. Kedrov (1903–1985), M. Keldysh (1911–1978), V. Kotelnikov (1908–2005), G. Kurdyumov (1902–1996), A. Logunov (1926–2015), M. Markov (1908–1994), A. Nesmeyanov (1899–1980), A. Obukhov (1918–1989), Y. Ovchinnikov (1934–1988), A. Oparin (1894–1980), B. Paton (1918–2020), B. Petrov (1913–1980), P. Pospelov (1898–1979), A. Prokhorov (1916–2002), O. Reutov (1920–1998), A. Rumyantsev (1905–1993), L. Sedov (1907–1999), N. Semenov (1896–1986), D. Skobeltsyn (1892–1990), S. Sobolev (1908–1989), V. Spitsyn (1902–1988), V. Timakov (1905–1977), A. Tikhonov (1906–1993), V. Tuchkevich (1904–1997), P. Fedoseev (1908–1990), I. Frank (1908–1990), A. Frumkin (1895–1976), Y. Khariton (1904–1996), M. Khrapchenko (1904–1986), P. Cherenkov (1904–1990), V. Engelhardt (1894–1984).

August 31: The publication in the *Pravda* newspaper of an open letter from Soviet writers condemning the anti-Soviet actions and speeches of Academician A. Sakharov (1921–1989) and writer A. Solzhenitsyn (1918–2008). The letter was signed by: Ch. Aitmatov (1928–2008), Y. Bondarev (1924–2020), R. Gamzatov (1923–2003), O. Gonchar (1918–1995), N. Gribachev (1910–1992), S. Zalygin (1913–2000), V. Kataev (1897–1986), V. Kozhevnikov (1909–1984), G. Markov (1911–1991), S. Mikhalkov (1913–2009), S. Narovchatov (1919–1981), B. Polevoy (1908–1981), A. Salynsky (1920–1993), S. Sartakov (1908–2005), K. Simonov (1915–1979), S. Smirnov (1915–1976), A. Sofronov (1911–1990), M. Stelmakh (1912–1983), A. Surkov (1899–1983), N. Tikhonov (1896–1979), K. Fedin (1892–1977), A. Chakovsky (1913–1994), M. Sholokhov (1905–1984), S. Shchipachev (1899–1980) and other famous Soviet writers.

September 3: Publication in the *Pravda* newspaper of an open letter by Soviet composers condemning the anti-Soviet actions and speeches of Academician A. Sakharov (1921–1989). The letter was signed by: D. Kabalevsky (1904–1987), K. Karaev (1918–1982), G. Sviridov (1915–1998), S. Tulikov (1914–2004), A. Khachaturian (1903–1978), T. Khrennikov (1913–2007), D. Shostakovich (1906–1975), A. Eshpai (1925–2015), R. Shchedrin, and other famous Soviet composers.

September 5: The publication in the newspaper *Pravda* of an open letter of Soviet filmmakers, condemning the anti-Soviet actions and speeches of Academician A. Sakharov (1921–1989). The letter was signed by G. Alexandrov (1903–1983), A. Alov (1923–1983), V. Artmane (1929–2008), S. Bondarchuk (1920–1994), S. Gerasimov (1906–1985), E. Dzigan (1898–1981), S. Dolidze (1903–1983), M. Donskoy (1901–1981), V. Žalakevičius (1930–1996), A. Zarkhi (1908–1997), A. Zguridi (1904–1998), A. Karaganov (1915–2007), R. Carmen (1906–1978), L. Kulidzhanov (1924–2002), T. Levchuk (1912–1998), E. Matveev (1922–2003), A. Medvedkin (1900–1989), V. Monakhov (1922–1983), V. Naumov (1927–2021), Y. Ozerov (1921–2001), Y. Reisman (1903–1994), G. Roshal (1898–1983), V. Tikhonov (1928–2009), V. Sanayev (1912–1996), I. Heifits (1905–1995), D. Khrabrovitsky (1923–1980), S. Yutkevich (1904–1985), L. Chursina.

September 10: Temporarily stopping the jamming of *BBC*, *DW* and *Voice of America* broadcasts on Soviet territory.

September 11: A military coup in Chile. President S. Allende (1908–1973) commits suicide. The military led by General A. Pinochet (1915–2006) seized power.

December 29: Resolution of the Central Committee of the Communist Party of the Soviet Union "On Measures for Further Development of the Soviet Cinematography".

December: The first volume of Solzhenitsyn's anti-Soviet/anti-communist book *The Gulag Archipelago* is published in Paris.

1974

January 4: Resolution of the Secretariat of the Central Committee of Soviet Communist Party "On the exposure of the anti-Soviet campaign of bourgeois propaganda in connection with the publication of Solzhenitsyn's book *Gulag Archipelago*.

February 13: writer A. Solzhenitsyn was deported from the USSR.

April 12–19: All-Union Film Festival (Baku).

May 19: V. Giscard d'Estaing (1926–2020) is elected president of France.

July 3: U.S. President Richard Nixon's visit to the USSR. The treaty limiting underground nuclear tests is signed.

July 15–19: the docking of the Soyuz and Apollo spacecraft.

August 9: As a result of the Watergate scandal, President Nixon (1913–1994) resigns. Vice-President Gerald Ford (1913–2006) becomes president of the United States.

October 24: Soviet Minister of Culture E. Furtseva (1910–1974) commits suicide.

November 23–24: U.S. President G. Ford's visit to the USSR.

1975

January 15: the USSR withdrew from a trade treaty with the United States, protesting the statements of the U.S. Congress on the subject of Jewish emigration.

March: Anatoly Golubev (1935–2020) replaced Dmitry Pisarevsky (1912–1990) as editor of Soviet Screen magazine. A. Golubev held this post until 1978.

April 18–25: All-Union Film Festival (Kishinev).

April 30: end of the Vietnam War.

May 9: the USSR celebrated the thirtieth anniversary of the victory over Nazi Germany.

July 10–23: Moscow International Film Festival. Gold prizes: *Dersu Uzala* (USSR–Japan, directed by A. Kurosawa), *Promised Land* (Poland, directed by A. Wajda), *We So Loved Each Other* (Italy, directed by Ettore Scola).

August 1: the USSR together with 35 other countries signs the Final Act of the Conference on Security and Cooperation in Europe in Helsinki.

October 9: One of the most active Russian dissidents, Academician A. Sakharov (1921–1989) was awarded the Nobel Peace Prize.

1976

February 24 – March 5: the XXV Congress of the Soviet Communist Party.

April 18–25: All-Union film festival (Frunze).

May 11–13: III Congress of Cinematographers of the USSR.

May 28: The USSR and the USA sign a treaty on the prohibition of underground nuclear explosions for peaceful purposes with a yield of more than 150 kilotons.

21–25 June: The Sixth Congress of Soviet Writers.

October 12: Decree of the Central Committee of Soviet Communist Party "On work with creative young people".

1977

January 20: U.S. President J. Carter took office.

May 19–26: All-Union Film Festival (Riga).

July 7–21: Moscow International Film Festival. Golden prizes: *Mimino* (USSR, directed by G. Danelia), *The Fifth Seal* (Hungary, directed by Z. Fabri), *Weekend* (Spain, directed by J.–A. Bardem).

October 4: Opening of the Belgrade Conference to oversee implementation of decisions of the Conference on Security and Cooperation in Europe.

October 7: The Supreme Soviet of the USSR adopts the Constitution (Basic Law) of the USSR.

November 7: The sixtieth anniversary of the 1917 Revolution is solemnly celebrated in the USSR.

1978

April 17: Coup d'état in Afghanistan, supported by the USSR.

May 5–13: All-Union Film Festival (Yerevan).

July 5: By decree of the Supreme Soviet of the USSR, the State Committee on Cinematography of the USSR Council of Ministers (Goskino USSR) was transformed into the State Committee on Cinematography of the USSR (Goskino USSR).

July: Dal Orlov (1935–2021) replaced Anatoly Golubev (1935–2020) as editor of *Soviet Screen* magazine. D. Orlov held this post until 1986.

1979

May 6: Resolution of the Central Committee of Soviet Communist Party "On Further Improvement of Ideological, Political and Educational Work".

May 11–20: All-Union Film Festival (Ashkhabad).

June 18: The USSR and the United States concluded a treaty on limiting strategic offensive arms.

August 14–28: Moscow International Film Festival. Gold prizes: *Christ Stopped at Eboli* (Italy–France, directed by F. Rosi), *Seven Days in January* (Spain–France, directed by J.–A. Bardem), *Amateur* (Poland, directed by K. Kieslowski).

August: the USSR celebrated the 60th anniversary of Soviet cinematography.

September 16: The second coup d'etat in Afghanistan, again supported by the USSR.

December 16–17: Soviet troops are brought into Afghanistan.

1980

January 3: U.S. President J. Carter postpones ratification of the U.S.–Soviet Strategic Arms Limitation Treaty (START II) due to Soviet troops entering Afghanistan.

January 4: U.S. President J. Carter announces that he is curtailing ties with the USSR and intends to boycott the 1980 Olympics in Moscow.

January 22: Academician A. Sakharov is exiled to Gorky. By the decree of the Presidium of the Supreme Soviet of the USSR he was deprived of the title of thrice Hero of Socialist Labor and by the decree of the USSR Council of Ministers, of the title of laureate of the Stalin (1953) and Lenin (1956) prizes.

April 8–15: All–Union Film Festival (Dushanbe).

April 22: The USSR solemnly celebrated 110 years since the birth of Vladimir Lenin (1870–1924).

July 19 – August 3: the XXII Summer Olympic Games in Moscow.

July 25: death of actor and bard V. Vysotsky (1938–1980).

August 14: strike in Poland at the Gdansk Shipyard, start of the Solidarity mass movement and mass strikes.

August 20: The resumption of jamming of *BBC*, *DW* and *Voice of America* broadcasts on Soviet territory.

November: World oil prices reach their highest peak in the Soviet era (\$41 per barrel).

1981

January 20: R. Reagan (1911–2004) takes office as president of the United States.

February 23–March 3: XXVI Congress of the Soviet Communist Party.

March 27: Poland's largest national warning strike in history, involving about 13 million people.

March 27: The USSR declares the Polish Solidarity trade union a counterrevolutionary organization.

March 31: The American Academy of Motion Picture Arts awards the Oscar for Best Foreign Film of the Year to the Soviet film *Moscow Doesn't Believe in Tears* (directed by V. Menshov).

April 24: U.S. President R. Reagan lifted the embargo on grain shipments to the USSR.

May 13: Political film directed by A. Wajda, *Man of Iron*, which supported the Solidarity movement, received the Palme d'Or at the Cannes International Film Festival.

May: All–Union Film Festival (Vilnius).

May 19–21, 1981: IV Congress of Filmmakers of the USSR.

May 21: After winning the elections, François Mitterrand (1916–1996) takes office as President of France.

June 30 – July 3: The Seventh Congress of Soviet Writers.

July 7–21: International Film Festival in Moscow. Gold prizes: *Tehran 43* (USSR–France–Switzerland, directed by A. Alov, V. Naumov), *Squeezed Man* (Brazil, directed by J.B. di Andradi), *Wasted Field* (Vietnam, directed by N. Hong Sheng).

October 27: Resolution of the Central Committee of Soviet Communist Party "On Improving the Production and Screening of Films for Children and Teenagers".

November 20: The USSR signed contracts for the supply of natural gas from Siberia to Western European countries.

December 13: Chairman of the Polish Council of Ministers W. Jaruzelski (1923–2014) declared martial law in Poland. Beginning of mass arrests and restrictions of civil and trade union rights in Poland.

December 29: U.S. President Reagan's statement concerning the inadmissibility of Soviet interference in Poland and the announcement of new U.S. sanctions against the USSR.

1982

January 20: Resolution of the Council of Ministers of the RSFSR "On Improving the Production and Screening of Films for Children and Teenagers in the RSFSR".

January 23: The signing of the contract between the USSR and France for the supply of Siberian gas.

April 12–22: All–Union film festival (Tallinn).

July 23: Resolution of the Plenum of the Central Committee of Soviet Communist Party. "On the creative links of literary and art magazines with the practice of communist construction".

November 10: Death of Leonid Brezhnev (1906–1982), general secretary of the Central Committee of Soviet Communist Party., Chairman of the Presidium of the USSR Supreme Soviet.

November 12: Y. Andropov (1914–1984).

November 13: U.S. President R. Reagan repeals the sanctions he imposed in connection with the events in Poland.

December 30: The USSR solemnly celebrates its sixtieth birthday.

1983

May 17–26: All–Union Film Festival (Leningrad).

June: Resolution of the Plenum of the Central Committee of Soviet Communist Party "Topical Issues of Ideological, Mass–Political Work of the Party".

July 4–6: a visit to the USSR by Chancellor G. Kohl (1930–2017).

July 20: the Polish government announced the end of martial law and an amnesty for political prisoners.

July 7–21: International Film Festival in Moscow. Gold prizes: *Vassa* (USSR, directed by Gleb Panfilov), *Amok* (Morocco–Guinea–Senegal, directed by S. Ben Barca), *Alcino and the Condor* (Nicaragua–Cuba–Mexico–Costa Rico, directed by M. Littin).

August 20: U.S. President Reagan imposed a ban on shipments of pipeline construction equipment to the USSR.

September 1: a South Korean passenger plane is shot down by a Soviet fighter jet.

November 18: a Soviet plane is seized in Georgia with the purpose of hijacking it abroad. Among those who unsuccessfully tried to hijack the plane was the young actor G. Kobakhidze (1962–1984, shot 3.10.1984), son of the famous Soviet director M. Kobakhidze (1939–2019), who directed the films *Wedding* and *Umbrella*. Shortly before that Kobakhidze had played one of the roles in Abuladze's yet–to–be–released film *Repentance* (the episodes with his participation were removed from the final version of the film and the role was given to another actor).

November 24: Yuri Andropov issued a statement against the deployment of Pershing–2 missiles in Europe and cancelled the moratorium on the deployment of intermediate–range nuclear missiles.

1984

January 17: A conference on disarmament in Europe opened in Stockholm.

February 9: death of Yuri Andropov (1914–1984), General Secretary of the Central Committee of Soviet Communist Party.

February 13: K. Chernenko (1911–1985) becomes General Secretary of the Central Committee of Soviet Communist Party.

April 19: Resolution of the Central Committee of Soviet Communist Party and the USSR Council of Ministers "On measures for further improvement of the ideological and artistic level of films and strengthening of the material and technical basis of the cinematography".

May 8: USSR statement on the boycott of the Olympic Games in Los Angeles.

May 7–16: All–Union Film Festival (Kiev).

June 21–23: French President François Mitterrand visits the USSR.

June 29: the USSR protested against the U.S. military program "Star Wars".

July 10: at a press conference in Milan, filmmaker A. Tarkovsky (1932–1986) announces that he has decided to remain in the West. Also present at this press conference was theater director Yuri Lyubimov (1917–2014), who was soon stripped of his Soviet citizenship and also remained in the West.

December 15–21: visit of Politburo member M. Gorbachev (1931–2022) to Great Britain, his meeting with Prime Minister M. Thatcher (1925–2013).

1985

March 10: Death of K. Chernenko (1911–1985), General Secretary of the Central Committee of Soviet Communist Party, Chairman of the Presidium of the USSR Supreme Soviet.

March 11: Plenum of the CPSU Central Committee elected M. Gorbachev (1931–2022) as General Secretary of the Central Committee of Soviet Communist Party.

March 12: the resumption of the negotiations on arms limitation in Geneva.

April 20: M. Gorbachev put forward the slogan of "acceleration" (raising industry and the welfare of the population in a foreseeable short time, including at the expense of the cooperative movement).

May 9: The USSR celebrated the fortieth anniversary of the victory over Nazi Germany.

May 16: Decree of the Presidium of the Supreme Soviet of the USSR "On Intensifying the Battle against Drunkenness", beginning of the anti-alcohol campaign, which raised the price of alcohol by 45 % and reduced its production (also by destroying vineyards), intensified samovanivir (which in turn led to a shortage of sugar); simultaneously began increasing the life span of the USSR population and there was a slight decrease in crimes committed under the influence of alcohol.

May 13–20: All-Union film festival (Minsk).

June 28–July 12: Moscow International Film Festival. Gold prizes: *Come and See* (USSR, directed by Elem Klimov), *A Soldier's Story* (USA, directed by N. Jewison), *End of Nine* (Greece, directed by H. Chopahas).

July 14: In Schengen (Luxembourg), seven Western European countries sign the Schengen Agreement.

July 30: M. Gorbachev (1931–2022) announces a unilateral moratorium on nuclear explosions by the USSR.

19–21 November: U.S. President R. Reagan and General Secretary of the of Soviet Communist Party M. Gorbachev met in Geneva.

December: B. Yeltsin (1931–2007) is appointed First Secretary of the Moscow City Committee of the Soviet Communist Party.

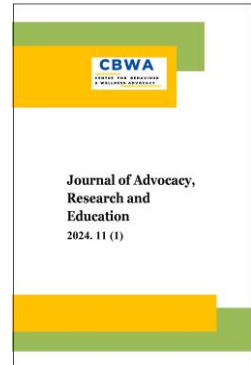


Publisher: Centre for Behaviour and Wellness
Advocacy, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
ISSN 2410-4981. E-ISSN 2508-1055
2024. 11(1): 122-137

DOI: 10.13187/jare.2024.1.122

Journal homepage:

<http://kadint.net/our-journal.html>



Perceived Effectiveness of Ghana's School Feeding Programme in Improving the Livelihood of Beneficiaries in Assin South District

Daniel Adjei ^a, Alexander Tetteh Kwasi Nuer ^{a, *}, Selorm Omega ^a,
Benjamin Chris Ampimah ^b

^a University of Cape Coast, Cape Coast, Ghana

^b Cape Coast Technical University Cape Coast, Ghana

Abstract

Ghana's SFP has played an essential role in combating malnutrition among school-age children and advancing the Universal Primary Education goal. This study investigates the overall impact of the school feeding Programme, with a focus on its effectiveness in improving the livelihoods of beneficiary communities in the Assin South District. The study followed a mixed methods approach, with 95 headteachers and 26 local food farmers as respondents. The study focuses on the perceived effectiveness of the Ghana School Feeding Programme in increasing employment opportunities within the district, as perceived by headteachers. The findings show that the Additional Employment Scheme component positively impacts the livelihoods of local food farmers, resulting in larger farm sizes and the adoption of improved farming practices. However, the challenges identified do not ensure a consistent market for local food farmers' produce, including cooks and caterers in beneficiary schools not frequently purchasing their produce. It has been revealed that caterers facing pre-financing challenges rely on suppliers willing to pay once government funds are released. Recommendations for improving the Programme's impact include expanding the programme to benefit more communities, thereby creating job opportunities. Furthermore, a registration system for local food producers as sole suppliers is proposed to ensure a market for their products. Other suggestions include allocating a percentage of the district's internally generated funds to caterers and collaborating with financial institutions to provide flexible loans to registered farmers.

Keywords: Assin South District, Beneficiaries, Ghana, Ghana's School Feeding Programme, Livelihood.

1. Introduction

Education is generally perceived as a basic human right. This has undoubtedly been confirmed by Article 26 of the Universal Declaration of Human Rights 1948, which declares that everyone has the right to education and that everyone is entitled to it irrespective of gender, religion, ethnicity, or status ([The United Nations Educational, Scientific and Cultural Organization \[UNESCO\], 2019](#)). Although education remains a right with its accessibility still posing a challenge in most developing countries, it is evident in the UNESCO Institute for Statistics (UIS) data in 2019

* Corresponding author

E-mail addresses: alexander.nuer@ucc.edu.gh (A.T.K. Nuer)

Received: 13 March 2024 Revised: 18 April 2024 Accepted: 21 April 2024 Published: 31 April 2024

that 19 % of children between the ages of six and eleven are not in school in low-income countries, compared to just 2 % in high-income countries. About 61% of all youths between the ages of 15 and 17 are out of school in low-income countries, as against 8% in high-income countries (UNESCO, 2019). Of this, 53 % are girls, and almost 43% are in sub-Saharan Africa (UNESCO, 2019). It has been further confirmed that the estimated number of out-of-school children has risen in sub-Saharan Africa from 29 million in 2008 to 31 million in 2010 due to poverty and hunger (World Food Program [WFP], 2013).

School-going children need to be fed properly to help them grow and concentrate on learning at school. Malnutrition and ill health remain impediments to overall educational outcomes such as academic performance, higher enrolment, and school retention. Although providing adequate food is a basic global right for children, most children of school-going age cannot meet their food requirements with parents and guardians (UNICEF, 2019). A balanced nutritious meal is needed for endurance, physical growth, cognitive development, and productivity of children at such a critical growth stage in their cognitive and psychomotor development (Asmare et al., 2018). In sub-Saharan Africa, many children's endurance, cognitive development, physical growth, and productivity have not been fully met. The reason is that malnutrition remains a pressing need that affects the ability of children to learn and causes them to perform below acceptable levels in school (Endalew et al., 2015).

Assessing the impact of malnutrition on academic achievement, Maghaireh (2019) indicated that the majority (67.1%) of the primary school children used in their study were academically disadvantaged due to inadequate nutrition. Poverty is the principal cause of malnutrition among children of school-going age in sub-Saharan African countries, including Ghana (Akombi et al., 2017). The School Feeding Programme (SFP) was, therefore, designed to help curb the problem of malnutrition that hinders children's academic progress (WFP, 2013). The programme was specifically designed to provide a feeding regime for school children in public primary and kindergarten schools, where one nutritious meal is provided per day in a school with locally produced foodstuffs and absorbs a higher percentage of feeding costs in the implementing communities (WFP, 2013). The SFP provides an opportunity to pursue Ghana's commitment to attaining the Sustainable Development Goals on poverty and hunger reduction.

The most obvious achievements of the SFP have been the increase in school enrollment and retention and the bridging of the gender gap in basic education (Mahama, 2018). A study conducted in the Tamale Metropolis showed that one hot, nutritious meal per day increased enrolment, attendance, and retention (Awojobi, 2019). Similarly, the provision of meals in basic schools in the Atwima Mponua and Atwima Nwabiagya Districts in the Ashanti Region positively impacted enrolment (Serebour, 2017). Also, the introduction of school feeding intervention in the Wa Municipality significantly increased girls' access to education (Mahama, 2018). The SFP also significantly impacted basic school enrolment in the Telensi District in the Northern Region (Awojobi, 2019). The study revealed that school enrolment in the district increased by 213 pupils after the commencement of the Programme (Awojobi, 2019).

To buttress the indicators mentioned above of the roles that the SFP play in ensuring higher enrolment, retention, and attendance, an assessment of the effectiveness of SFP in Burkina Faso revealed that school canteens had a relationship with increased school enrolment and regular attendance (Kamaludeen, 2014). Recounting the impact of the SFP on enrolment and retention in his study, Mahama (2018) pointed out that the programme feeds 1.6 million pupils nationwide. Literature that accounts for the contributions of the intervention of SFP to education has been numerous, but investigations about the perceptions of its effectiveness in improving the socio-economic livelihoods of the beneficiary communities in the Assin South District have been woefully limited. The study, therefore, sought to delve into detailed inquiries about stakeholder perceptions of the effectiveness of the intervention in improving the economic livelihoods of the beneficiary communities within the district. The purpose of this study is to examine the perceived effectiveness of SFP in improving the livelihoods of the beneficiary communities in the Assin South District. The research questions to be answered by the study are:

1. How does the Agricultural Extension Service component of the SFP influence the livelihoods of the local foodstuff farmers?
2. To what extent has the SFP effectively ensured the safety and prompt market avenues for local foodstuffs in the beneficiary communities?

This study intends to help examine the perceptions of beneficiary communities on the extent to which the SFP has been effective or otherwise in improving their socio-economic livelihoods. Also, the study intends to add to the body of knowledge on the SFP because previous studies had only concentrated on the impact of the intervention on enrolment, retention, and academic performance. Also, the results or outcome of this study could provide feedback to development agencies and stakeholders who are very concerned about the outcome of this social intervention and whether or not the SFP has met some of the economic needs of its beneficiary communities.

2. Research Method

Research paradigm and design

In this study, the pragmatist philosophical paradigm was used. This paradigm was deemed suitable for the study because the focus was to use an explanatory sequential mixed method in which the quantitative results were better explained with a detailed follow-up qualitative result (Creswell, 2014). The overall goal of this research study was to thoroughly investigate the extent to which the SFP has effectively improved the economic livelihoods of members of the beneficiary communities. Thus, the study sought to thoroughly examine the beneficiary communities' perceptions, views, and experiences regarding whether the intervention effectively brought about some changes in their socio-economic lives.

Study area

The Assin South District is part of the Central Region's 22 Municipal and District Assemblies out of 260 in Ghana (Ghana Statistical Service, 2013). The district has a male literacy rate of 85.3 % more than females (70.0 %). Six out of ten people (60.4 %) can speak and write both English and Ghanaian. Of the district's population aged three years and above (94,682), 19.4 % have never attended school, 44.3% are currently attending, and 36.3 % have previously attended (Ghana Statistical Service, 2013). Agriculture is a significant economic activity in the district, accounting for approximately 68.0%. Cassava, plantain, maize, and legumes are the most widely grown crops in the district. Cash crops such as cocoa, citrus, and oil palm provide a source of income for them.

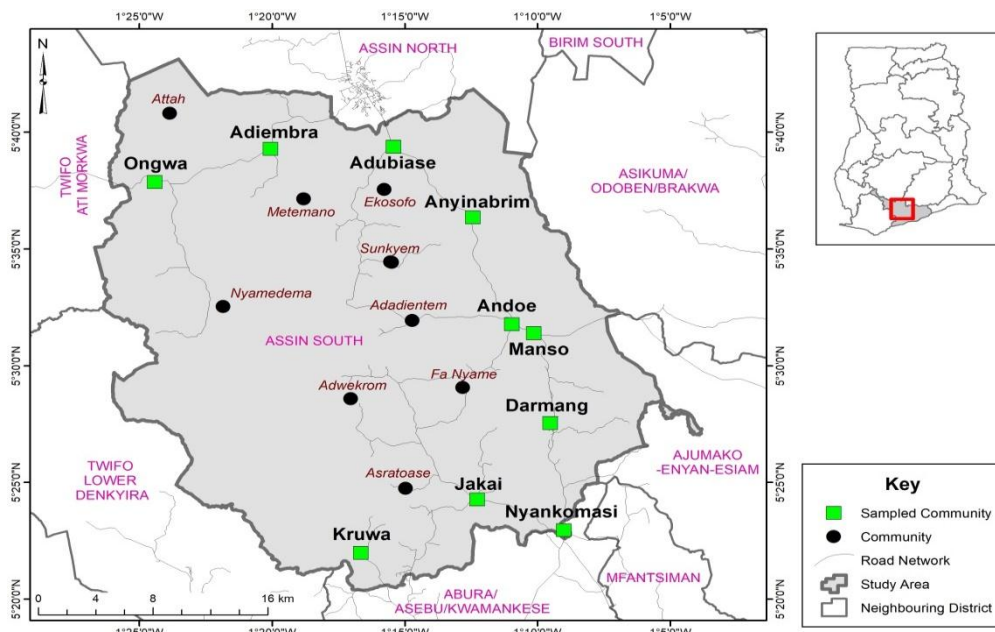


Fig. 1. Map of Assin South District showing the study area in green dots

Source: Department of Geography and Regional Planning, UCC.

Sample size and sampling procedure

The study population was made up of 95 headteachers from the total number of schools in the district (one head teacher from each school). However, at the time of the research, only 55 of the 95 schools in the district were under the SFP. Therefore, the study used the census to accommodate all 55 head teachers. For local foodstuff farmers, the study used all 26 local

foodstuffs farmers who supply foodstuffs to the 95 basic schools under the SFP in the 10 Educational Circuits in the district. See [Table 1](#) for details.

Table 2. Sample size of the study

| Names of | Number | of Number | of Number of Local |
|--------------|-----------|-----------|--------------------|
| Adiembra | 9 | 9 | 3 |
| Andoe | 8 | 8 | 2 |
| Manso | 10 | 10 | 3 |
| Darmang | 10 | 10 | 4 |
| Ongwa | 7 | 7 | 2 |
| Jakai | 11 | 11 | 3 |
| Kruwa | 10 | 10 | 2 |
| Nyankumasi | 12 | 12 | 3 |
| Adubiase | 8 | 8 | 2 |
| Anyinabrim | 10 | 10 | 2 |
| Total | 95 | 95 | 26 |

Source: Field Survey (2021)

Purposive sampling was used for the qualitative data collection, with Andoe, Anyinabrim, and Nyankumasi circuits chosen from the district's ten educational circuits. This is because these circuits were known to have partaken in the feeding intervention for a longer period, and participants were expected to have more experiences to share about the programme ([Sarfo et al., 2022](#)).

Table 2. Selected participants for the interview sessions

| Circuit | Head Teachers Population | No. Selected | Foodstuffs Farmer Population | No. Selected |
|--------------|--------------------------|--------------|------------------------------|--------------|
| Andoe | 8 | 5 | 2 | 2 |
| Anyinabrim | 10 | 5 | 2 | 2 |
| Nyankumasi | 12 | 7 | 3 | 3 |
| Total | 30 | 17 | 7 | 7 |

Source: Field Data (2021)

Three (3) focus group discussions (FGDs) were conducted at different venues specifically for local foodstuffs farmers. The FGDs were adopted for this study due to their suitability for yielding extensive information from the farmers ([Sarfo et al., 2021](#)). The venues were selected based on their proximity to other circuits.

Table 3. Number of participants (foodstuffs farmers), duration, FGDs held and their centres

| FGD | Duratio | Circuit | No. of | | Pool |
|---------------------|---------|------------|-----------|----------|-----------|
| | | | Mal | Fem | |
| 1 st FGD | 8:30- | Andoe | 6 | 3 | 2 |
| 2 nd | 10:30- | Anyinabrim | 5 | 3 | 2 |
| 3 rd FGD | 12:30- | Nyankumasi | 6 | 3 | 3 |
| Total | | | 17 | 9 | 26 |

Source: Field Data (2021)

Data Processing and Analysis

Questionnaires, informal interviews, and focus group discussions were used to solicit respondents' views and perceptions. Data processing and analysis were done in two different stages. The data (quantitative data) were coded and inputted into SPSS Version 25 to generate the required and appropriate statistical tools (frequencies, percentages, means, standard deviations, and thematic analysis) for the analysis. Table 4 below presents some basic characteristics of respondents used in the study.

Table 4. Basic characteristics of respondents

| Characteristics | Headteachers | | Foodstuffs farmers | |
|--------------------------------------|--------------|-------|--------------------|------|
| | Freq. | % | Freq. | % |
| Age of Respondents | | | | |
| 40 or below | 20 | 36.3 | 5 | 19.2 |
| Above 40 | 35 | 63.7 | 21 | 80.8 |
| Marital Status | | | | |
| Single | 38 | 69.1 | 3 | 11.5 |
| Married | 17 | 30.9 | 23 | 88.5 |
| Educational Level | | | | |
| No formal | 0 | 0.0 | 9 | 34.6 |
| Formal education | 55 | 100.0 | 17 | 65.4 |
| Alternative Sources of Income | | | | |
| Yes | 42 | 76.4 | 25 | 96.2 |
| No | 13 | 23.6 | 1 | 3.8 |
| Number of Dependents | | | | |
| 4 or less | 18 | 32.7 | 3 | 11.5 |
| Above 4 | 37 | 67.3 | 23 | 88.5 |
| Source of Credit | | | | |
| Banks | 6 | 10.9 | 1 | 3.8 |
| Personal Savings | 42 | 76.4 | 25 | 96.2 |
| Others | 7 | 12.7 | 0 | 0.0 |

Source: Field Survey (2022)

3. Results and Discussion

Perceived effectiveness of the sfp in improving the employment situations (rates) in the beneficiary communities

Table 5 presents the mean analysis of headteachers' perceptions in the beneficiary community basic schools on how the school feeding intervention has effectively improved employment situations (rates). The efficacy of the SFP intervention in ameliorating employment circumstances within the communities where it is implemented is widely acknowledged. According to the composite mean score of 3.67, headteachers have a favourable perception of the programme's influence on employment. Headteachers perceive that the programme is exceptionally successful in generating employment prospects for diverse stakeholders engaged in implementing the SFP. The programme is particularly regarded for its efficacy in securing employment for caterers, providers of firewood, and farmers.

Although the majority of employment-related aspects associated with the SFP are regarded as highly effective, the employment of egg suppliers is considered moderate. This implies that there might be potential for enhancement in this particular facet of job creation within the initiative.

Table 5. Perceived effectiveness of the SFP in improving the employment (rates) in the beneficiary communities

| Perceived Effectiveness | Mean | SD |
|---|-------------|-------------|
| Employment for some people as cooks for my school. | 3.98 | 0.13 |
| Employment for some people as caterers for my school. | 3.89 | 0.31 |
| Employment for some people as firewood suppliers for my school. | 3.67 | 0.47 |
| Employment for some people as palm oil suppliers for my school. | 3.64 | 0.49 |
| Employment for some people as suppliers of rice to caterers in my school. | 3.56 | 0.50 |
| Employment for some people as suppliers of eggs for my school. | 3.45 | 0.50 |
| Employment for some people as suppliers of meat and fish for my school. | 3.51 | 0.50 |
| Composite | 3.67 | 0.41 |

Notes: n = 55, Source: Field Survey (2021), Scale: 0 = Cannot Tell, 1 = Very Lowly Effective, 2 = Lowly Effective, 3 = Moderately Effective, 4 = Effective, 5 = Very Effective

The results underscore the significance of the supply chain in executing the school nutrition programme and its capacity to generate employment prospects. The programme's beyond-direct employment within the school's economic impact is exemplified through the utilisation of various suppliers to provide ingredients for school meals.

A respondent of a beneficiary basic school shared how the SFP has helped in employing:

"...I can testify that the employment condition in this community has improved with the SFP. As I speak, my school alone can boast of 1 permanent caterer, two cooks, and two rice suppliers who have gained employment and are currently working in the name of the programme" [Headteacher Respondent 1].

In a similar informal interview, a respondent of a beneficiary basic school in Andoe Circuit also shared how the SFP functions to provide employment:

"... I have been a headteacher in this school since 2014. The SFP ceased to operate in this school just in the era of the COVID-19 pandemic. When the programme was operational, my school had two permanent caterers, three cooks, one rice supplier, and one firewood supplier" [Headteacher Respondent 2].

The SFP's objective of creating employment opportunities was also confirmed by the field data gathered on the number of people who have gained employment in the beneficiary circuit communities through the programme. These employment data are presented in [Table 6](#).

Table 6. Number of cooks, caterers, and firewood suppliers in the selected beneficiary schools in the ten educational circuits in the district

| Name of Circuit | No. of Cooks | No. of Caterers | No. of Firewood Suppliers | Pooled |
|-----------------|--------------|-----------------|---------------------------|--------|
| Adiembra | 10 | 5 | 5 | 20 |
| Andoe | 12 | 4 | 4 | 20 |
| Manso | 13 | 6 | 6 | 25 |
| Darmang | 13 | 6 | 6 | 25 |
| Ongwa | 8 | 4 | 4 | 16 |
| Jakai | 15 | 6 | 6 | 27 |
| Kruwa | 12 | 6 | 6 | 24 |
| Nyankumasi | 15 | 7 | 7 | 29 |
| Adubiase | 10 | 5 | 5 | 20 |

| Name of Circuit | No. of Cooks | No. of Caterers | No. of Firewood Suppliers | Pooled |
|-----------------|--------------|-----------------|---------------------------|------------|
| Anyinabrim | 12 | 6 | 6 | 24 |
| Total | 120 | 55 | 55 | 230 |

Source: Field Survey (2021)

These results support the Gelli et al. (2019) report that the SFP has been an effective social intervention that provides income, employment, and economic integration benefits to the implementing communities. The report further stated that the programme had employed about 20,000 people as caterers and cooks in these communities nationwide.

Influence of the agricultural extension service (aes) component of sfp on local foodstuff farmers

Size of farmers' farm

Table 7 presents the analysis of how the AES component of SFP has influenced the living conditions of the foodstuff farmers in the area of their farm sizes. Results in Table 7 show that the majority (61.5 %) of the farmers had their farm size increased by 1 acre while 38.5 % had an increase of 2 acres of their existing farm sizes. Interactions with the farmers revealed that "the increase in the size of their existing farms resulted from the extension officers' recommendations on using weedicides to help manage large farms for the SFP".

Table 7. Size of farmers' farm

| Farm Size (in acres) | Frequency | Percentage |
|----------------------|-----------|--------------|
| 1 | 16 | 61.5 |
| 2 | 10 | 38.5 |
| Total | 26 | 100.0 |

Notes: n = 26, Source: Field Survey (2021)

In one of the informal interviews, a respondent in Anyinabrim Circuit shared how the AES officials have influenced the size of his existing farm:

"...The idea of going into commercial production was not part of my plans. Economic conditions in villages are such that they are unfriendly to farmers who manage small farms. Thankfully, I could increase my existing farm size from half an acre to one and a half acre upon the AES recommendation on the use of weedicides to produce in large quantities" [Farmer Respondent 1].

In an informal interview on the same topic, a respondent shared these as his inputs:

"... In the previous years, when the SFP was not operational in this community, I was only managing half an acre tomato plot for the livelihood of a family of 7 children. Economic conditions were extremely unbearable for me until the SFP and its AES component were introduced to give me sensitization on the use of weedicides for commercial production" [Farmer Respondent 2].

These results support the assertion by Jara-Rojas et al. (2020) that agricultural extension is meant to achieve a social balance and economic development in rural areas to maintain production capacities through increased farm sizes.

Farmers' methods of planting

The results in Table 8 indicate that row planting was the preferred method (100.0 %) practised by the study's respondents, with nothing recorded for both staggered (0.0 %) and broadcasting (0.0 %) methods.

Table 8. Farmers' methods of planting

| Planting Method | Frequency | Percentage |
|------------------------|------------------|-------------------|
| Row Planting | 26 | 100 |
| Staggered Planting | 0 | 0 |
| Broadcasting | 0 | 0 |
| Total | 26 | 100 |

Notes: n = 26, Source: Field Survey (2021)

In an informal interview, a respondent in Adiembra shared how the AES officials have influenced his choice of planting method:

"...Production used to be very low in the period before the SFP and its AES component were introduced because I was practising the staggered method of planting. Thankfully, the programme has been in this village for almost five years, and production has improved since I started practising the row planting method recommended by the AES officials" [Farmer Respondent 3].

These findings conform to that of a survey conducted by Donkor et al. (2016) on the impact of row-planting technology on rice farming in Northern Ghana. The survey revealed that more than two-thirds of the farmers adopted row planting. The findings also revealed that the farmers' massive adoption of the row planting method resulted from the ease in some farming operations being carried out and the realisation of a larger plant population compared to staggered and broadcasting methods.

Farmers' sources of planting materials

Table 9 showed that the majority (80.8 %) of the farmers adopted planting materials recommended to them by the AES officials. Four out of the farmers, representing 15.4 %, resorted to using their planting materials (materials from the previous harvest) and 1 of them, representing 3.8%, used materials from the local market.

Table 9. Farmers' sources of planting materials

| Sources of Planting Materials | Frequency | Percentage |
|--------------------------------------|------------------|-------------------|
| AES recommended materials | 21 | 80.8 |
| Farmers' materials | 4 | 15.4 |
| Materials from local markets | 1 | 3.8 |
| Total | 26 | 100 |

Notes: n = 26, Source: Field Survey (2021)

Interactions with the respondents to know the reasons for their choice of the recommended planting materials revealed that *"AES planting materials are known for their early maturing and high yield"*. In an interview granted to a respondent in Andoe Circuit, he shared how the AES officials in the area have influenced his choice of planting materials:

"...I used to prepare my planting materials, but I realised they were giving me low returns because they were found to be less viable. I started getting better returns when the SFP was introduced, and the AES officials recommended their improved and high-yielding planting materials to me" [Farmer Respondent 4].

These results support the findings of Bekele (2017), who found a remarkable improvement in the livelihoods of 84.7 % of improved cowpea seed beneficiary farmers. The results also revealed that the improved seed beneficiary farmers earned 41.8 % higher income compared to the non-beneficiaries. The results also support the findings of Dokyi et al. (2021) that the adoption of an Improved Maize Seed Technology (IMST) by the majority (91.2 %) of maize farmers in the Northern Region of Ghana resulted in an increase in the production of maize by 33.8 %. Similarly, these results conform with the findings of some maize variety trials in Northern Ghana. At the end of the trial, Asselt et al. (2018) found that two recommended foreign hybrid maize seeds performed extremely better than Obaatanpa, a local maize variety widely known in the region.

Farmers' usage of fertilisers in a cropping year

Commonly grown crops such as maize, carrots, garden eggs, and cabbage were identified, and it was found that the frequency at which farmers applied fertilisers in a cropping year under the influence of AES is high, as shown in Table 10. The table also shows that 26.9 % of the respondents applied fertiliser once, while the majority, representing 73.1 %, applied twice in a cropping year.

Table 10. Farmers' usage of fertiliser in a cropping year

| Type of Crops | Frequency of Usage | Frequency | Percentage |
|--|--------------------|-----------|--------------|
| Maize, Carrot, Garden eggs and Cabbage | Once | 7 | 26.9 |
| Maize, Carrot, Garden eggs and Cabbage | Twice | 19 | 73.1 |
| Total | | 26 | 100.0 |

Notes: n = 26, Source: Field Survey (2021)

According to the respondents, most farmers' positive attitudes towards the use of fertilisers could be due to the higher returns on yield. In Nyankumasi Circuit, a respondent shared how her decision on why the use of fertiliser has been influenced by the AES officials:

"... Yield used to be poor and less encouraging on my garden eggs farm until the AES officials' advice on the use of fertilisers. I started getting better returns when I heeded their advice" [Farmer Respondent 5].

These agree with the findings of a demonstration carried out to assess the effect of the use of fertiliser on two maize fields by Asselt et al. (2018). At the end of the demonstration period, the field without fertiliser recorded 880kg/ha, while the one with N: P: K 90:38:38 fertiliser yielded 1610kg/ha.

Farmers' frequency of harvest in a farming year

Table 11 provides the analysis of how the AES component of the SFP influences the frequency at which the foodstuffs farmers harvest their farm produce in a farming year to improve their living conditions. Specifically, the table provides information regarding the frequency of harvesting some known crops like maize, cabbage, garden eggs, pepper, and carrots. It can be observed from the table that all the respondents, representing 100 %, harvested their crops twice in a farming year.

Table 31. Farmers' frequency of harvest in a farming year

| Type of Crop | Frequency of Harvest | Frequency | Percentage |
|--------------------------------------|----------------------|-----------|------------|
| Carrots, Garden eggs, Cabbage, Maize | Once | 0 | 0 |
| Carrots, Garden eggs, Cabbage, Maize | Twice | 26 | 100 |
| Total | | 26 | 100 |

Notes: n = 26, Source: Field Survey (2021)

The researcher's interactions with the respondents brought to light that their ability to harvest more than once in a farming season is attributable to the fact that the AES officials in the district encourage the formation of cooperative groups to help farmers secure some farming inputs such as water pumping equipment which enable them to engage in additional dry season farming in every farming year. In an informal interview, a respondent in Nyamebebu shared how the AES officers have influenced the frequency of harvesting his produce:

".... I could only harvest once in a farming year due to my inability to afford irrigation for dry-season vegetable farming. Thanks to the AES officials for recommending the formation of a

cooperative group to help secure water pumping equipment for uninterrupted harvesting” [Farmer Respondent 6].

The results support an assertion by Bekele (2017), that a sound agricultural recommendation is a function of a functional extension system and aims to improve the livelihood of rural and poor farmers by expanding their production capacities.

Farmers’ usage of agrochemicals in a cropping year

Table 12 presents the analysis of how the AES component of the SFP influences the foodstuffs farmers’ agrochemicals usage in a cropping year. Commonly grown crops such as maize, cabbage, garden eggs, pepper, and carrot were identified, and the frequency at which farmers applied agrochemicals in a cropping year was shown to improve their living conditions.

Table 12. Farmers’ usage of agrochemicals in a cropping year

| Frequency of Usage | Frequency | Percentage |
|----------------------------|------------------|-------------------|
| Once in a Cropping Year | 0 | 0 |
| Twice in a Cropping Year | 3 | 11.5 |
| Throughout a Cropping Year | 23 | 88.5 |
| Total | 26 | 100.0 |

Notes: n = 26, Source: Field Survey (2021)

The results indicated that 11.5 % of the respondents applied agrochemicals ‘twice’ in a cropping year while the majority, representing 88.5 %, applied agrochemicals ‘throughout’ a cropping year, as shown in Table 12. Some interactions with the majority of the respondents affirmed that “*their ability to manage large farm sizes could not have been realised if the extension officials had not introduced them to the use of agrochemicals*”. Specifically, the majority (88.5 %) of the farmers affirmed that “*the use of agrochemicals, such as weedicides, has come to increase their production capacities by reducing the use of simple farming tools such as cutlasses and hoes*”. In an informal interview, a respondent in Nyamebebu, a village in Kruwa Circuit, shared how the AES officers have influenced his decision on the use of agrochemicals:

“... Farming has been my major source of livelihood for almost 32 years. For all these years, productivity had been nothing to write home about because I was solely and unknowingly depending on family labour and simple farming tools. With the AES officials’ advice, I have shifted from sole dependency on family labour and simple farming tools to agrochemicals, and production has increased” [Farmer Respondent 7].

These results support the assertion by Dokyi et al. (2021) that extension officials have a responsibility to ensure farmers’ adoption of improved farming techniques.

Farmers’ access to credit facilities (funds)

The results presented in Table 13 depict how the AES component of the SFP influences foodstuffs farmers’ access to credit facilities in the form of funds to improve their living conditions. The study showed that the majority (76.9 %) of the farmers found access to credits in the form of funds low, while the rest (23.1 %) found it to be ‘fairly accessible’, as indicated in Table 13.

Table 13. Farmers’ access to credit facilities (funds)

| Access to Credit Facilities | Frequency | Percentage |
|------------------------------------|------------------|-------------------|
| Lowly Accessible | 20 | 76.9 |
| Fairly Accessible | 6 | 23.1 |
| Total | 26 | 100.0 |

Notes: n = 26, Source: Field Survey (2021)

During the data collection, farmers indicated that “the cause of their inability to access funds from most of the financial institutions is the lack of collateral”. It was further discovered that, though the extension officials function to provide directions to them as to where they can obtain funds, conditions attached to this loan procurement from these institutions are quite unbearable. A farmer in Anyinabrim Circuit shared his concerns on loan procurement in an informal interview:

“... I have been into green pepper production for six years. For all these years, the plan had been to commercialise the production of green pepper. Still, the collateral aspect of funds acquisition from banks has been a limiting factor” [Farmer Respondent 8].

Farmers’ access to agricultural information

Table 14 presents the analysis of how the AES component of the SFP influences foodstuffs farmers’ access to agricultural information to help improve their living conditions. It can be seen in Table 14 that agricultural information is ‘very accessible’ to the majority (80.8%) of the farmers. During the data collection, some interactions with the farmers revealed that “the AES officials in the district have been diligent in the discharge of their core duties by periodically making agricultural information available to them through their local information centres.”

Table 14. Farmers’ access to agricultural information

| Access to Agricultural Information | Frequency | Percentage |
|---|------------------|-------------------|
| Least Accessible | 1 | 3.8 |
| Lowly Accessible | 1 | 3.8 |
| Fairly Accessible | 3 | 11.5 |
| Very Accessible | 21 | 80.8 |
| Total | 26 | 100.0 |

Notes: n = 26, Source: Field Survey (2021)

A farmer, in an informal interview in Adiembra, commended the AES officers in the community as:

“... Being privy to agricultural information is important for every farmer. The AES officials in the district are seeking the welfare of their farmers by making farming information available to us” [Farmer Respondent 9].

These results support the assertion by Koutsouris (2018) that the major focus of any agricultural extension system is the delivery of informational inputs to beneficiary farmers.

Perceived effectiveness of the SFP in ensuring the safety and prompt market for local foodstuffs in the beneficiary communities

In general, the SFP’s ability to ensure the promptness and safety of the market for domestically produced foodstuffs is regarded as being minimal. The composite mean score of 2.43 suggests that farmers hold a pessimistic perception of the programme with regard to its ability to guarantee the marketability and safety of their foodstuffs. These encompass the following: dependence on domestically sourced ingredients, assurance of a dependable and readily available market, implementation of alternative procurement strategies, provision of storage facilities for perishable goods, encouragement of timely harvesting, and coordination of seminars focused on produce handling. Farmers articulate apprehensions regarding the absence of authority over their produce after transportation to regional markets. They perceive their agricultural products to be dependent on intermediaries in the marketplace, which could result in unpredictability and potentially reduced prices for their goods.

The perception of limited efficacy implies that the SFP might not sufficiently attend to the requirements of regional food producers with regard to market entry and assistance for their agricultural endeavours. This suggests that there is a discrepancy between the intended outcomes of the programme and the practical challenges faced by producers residing in the beneficiary communities. The results underscore the significance of confronting obstacles pertaining to storage infrastructure, market accessibility, and post-harvest management in order to improve the efficacy of the SFP for regional food producers. Enhancements in these domains may result in more favourable consequences for producers and bolster the programme’s overall efficacy.

Table 15. Perceived effectiveness of the SFP in ensuring the safety and prompt market for local foodstuffs in the beneficiary communities

| Perceived Effectiveness of SFP | Mean | SD |
|--|-------------|-------------|
| The SFP depends on my foodstuffs for the preparation of meals at school. | 2.38 | 0.75 |
| The SFP guarantees a reliable and ready market for my foodstuffs. | 2.46 | 0.86 |
| The SFP makes alternative arrangements for the purchasing of my foodstuffs when there are enough stocks. | 2.42 | 0.81 |
| The SFP makes provision for means of storing my perishable foodstuffs when there are enough stocks. | 2.46 | 0.86 |
| The SFP provides some kind of support to help me harvest my foodstuffs promptly. | 2.46 | 0.86 |
| The SFP organises some workshops on produce handling to help me reduce post-harvest losses. | 2.42 | 0.81 |
| Composite | 2.43 | 0.83 |

Notes: n = 26, Source: Field Survey (2021), Scale: 0 = Cannot Tell, 1 = Very Lowly Effective, 2 = Lowly Effective, 3 = Moderately Effective, 4 = Effective, 5 = Very Effective

During an informal interview with a farmer in Andoe Circuit, he shared his plight as:

“... I have four children who are fed by the programme at school, but I am compelled to sell my local rice to the middle women in the local markets. They dictate prices of my rice, and I have no option than to accept their prices because I cannot transport the produce back to my village” [Farmer Respondent 10].

It was further discovered that caterers and cooks in most of the beneficiary schools depend largely on food items from other sources instead of those from local farmers. An informal interview granted to a farmer in Assin Kumasi, a village in Nyankumasi Circuit, revealed the following:

“... I have no option than to sell my gari to the middle women for any price because caterers in our beneficiary basic schools do not patronise our foodstuffs. Some caterers do not even buy common salt from our local markets. They buy all their food items from the cities and transport them to their schools” [Farmer Respondent 11].

These results completely contradict the findings of WFP and Food and Agriculture Organization (2018) that the SFP in Brazil has effectively addressed post-harvest losses resulting from a lack of ready market among local farmers. The basis of their findings was that about 67 % of the states and municipalities in the country were using part of their school feeding budgets to procure foodstuffs from smallholder farmers as of 2012. The results do not support Miranda’s (2018) findings that a school lunch programme in Thailand effectively guaranteed a reliable market for locally produced foods. His findings were based on the fact that about 90 % of the perishable foodstuffs used in the preparation of the meals were sourced from local farmers, with the remaining 10 % from urban areas.

Farmers’ perceptions on reasons for low patronage of their foodstuffs

The researcher intended to further investigate farmers’ views and perceptions on low patronage for foodstuffs. Specifically, it was to ascertain what precisely the farmers had as reasons why caterers and cooks in the beneficiary schools did not patronise their foodstuffs. Discussions were centred on four issues as follows: *“Farmers cannot wait till caterers are paid”*, *“Farmers’ foodstuffs are of low quality”*, *“Farmers’ foodstuffs are not obtained on time”*, and *“Prices of farmers’ foodstuffs are higher.”*

Table 16 presents the voting results for the alternative reasons. It showed that in all the FGDs, the alternative highly voted for (1, 7, and 8 votes, respectively) was *“Farmers cannot wait till caterers are paid.”* At each of the focus group meetings, participants interpreted and explained the reasons for this alternative as follows:

“...Caterers do pre-finance and do their foodstuffs purchases on a credit basis. They prefer to deal with suppliers who would agree to be paid when the government pays them, which most farmers cannot wait till such a time” [Farmer Respondents in FGDs].

Table 16. Voting results for alternative reasons for non-patronage of farmers’ foodstuffs

| Alternative Reasons (Views) | 1st FGD Votes | 2nd FGD Votes | 3rd FGD Votes |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| Farmers cannot wait till caterers are paid. | 7 | 7 | 8 |
| Farmers’ foodstuffs are of low quality. | 0 | 1 | 0 |
| Farmers’ foodstuffs are not obtained on time. | 1 | 0 | 1 |
| Prices of farmers’ foodstuffs are higher. | 1 | 0 | 0 |
| Total Votes | 9 | 8 | 9 |

Source: Field Data (2021)

To obtain confirmation of the above results, further informal interviews were conducted with some caterers to ascertain their reasons for not patronising farmers’ foodstuffs. A caterer in one of the beneficiary schools shared her reasons for not patronising farmers’ local foodstuffs:

“... I can confidently say that 85% of caterers who run SFP do not make their purchases with physical cash. They make their purchases on a credit basis and pay their creditors when funds are released to them by the government. Economic conditions in rural communities are such that farmers depend on prompt sale and payment for livelihoods, and most caterers prefer purchasing from people who will understand their plights to local farmers who cannot bear these payment terms” [Caterer Respondent 1].

4. Limitation

The study had the following limitations: information obtained from the beneficiary basic schools was strictly provided by the head teachers of those schools. Teachers were unwilling to participate in the study when the head teachers were not present. This caused a delay in gathering the necessary data for the study because the researcher had to visit most schools several times to meet with the head teachers. Furthermore, some head teachers had recently been appointed substantive heads and were thus unaware of some of the programme’s issues. As a result, they were more likely to give incorrect answers.

5. Implication

By examining the perceived efficacy of the government intervention programme (school feeding) in enhancing the livelihoods of beneficiaries, this study contributes to social welfare theory. Understanding how social programmes influence the economic conditions and well-being of communities and individuals is beneficial. This research is consistent with the livelihoods approach, which emphasises comprehending individuals’ assets and strategies to maintain their means of subsistence. This elucidates the impact of the SFP’s provision of sustenance on its beneficiaries’ economic activities and livelihoods. Insights regarding the perceived efficacy of the SFP are uncovered through this research, which can be utilised to inform programme evaluation and monitoring initiatives. It assists programme administrators in evaluating the programme’s effectiveness, pinpointing areas that require enhancement, and formulating decisions grounded in empirical evidence. Gaining insight into the perspectives of programme beneficiaries has the potential to augment community involvement and engagement. Through the active participation of beneficiaries in the design and execution of programmes, policymakers can guarantee that interventions are sustainable, culturally sensitive, and adaptable to local requirements.

6. Conclusion and Recommendations

The SFPs have been used to alleviate the problem of malnutrition resulting from poverty and hunger for children of school-going age and as a tool for achieving the goal of Universal Primary Education (UPE) since the launch of the United Nations Development Goals in 2000 (Tagoe, 2018). The emphasis of this study was to showcase that the SFP contributes not only to the well-being of pupils but also to the community as a whole. The study focused on the perceived effectiveness of the SFP in improving the livelihood of the beneficiary communities in the Assin South District. Based on its findings, conclusions were that the headteachers generally perceived the effectiveness of the programme as 'high' in improving the employment situations of the beneficiary communities in the district. The AES component of the SFP influenced the livelihood of the local foodstuffs farmers as follows. Also, the programme led to an increase in the existing farm sizes of farmers and the adoption of improved farming practices. Additionally, local foodstuffs farmers generally perceived the effectiveness of the programme as 'lowly' in ensuring the safety and prompt market for their foodstuffs because cooks and caterers in most beneficiary basic schools in the district do not patronise their produce. However, it was brought to light that caterers pre-financed the feeding and made most of their foodstuff purchases on a credit basis, so they relied on suppliers who agreed to be paid when the government released funds.

The study recommends that to improve the employment situations in the district, the Assembly should gear its effort towards the extension of the programme to benefit more communities. This will help recruit more cooks, caterers, and other service providers. Secondly, the District Assembly, in collaboration with the SFP Coordinating Team, should ensure that local foodstuffs farmers who produce for the programme in the district are strictly registered as sole suppliers of food items. By this, cooks and caterers in the beneficiary schools will be compelled to patronise food items from these farmers, thus helping to provide a ready market for their produce. Thirdly, for the caterers to have sustained interest in patronising local farmers' foodstuffs, the district assembly should set aside a percentage of its internally generated funds (IGFs) for them. This will provide them with funds that can be used to readily purchase farmers' foodstuffs instead of purchasing on credit from outsiders due to undue delay in releasing the government's feeding funds. Again, the SFP Coordinating Team should collaborate with the District Assembly to ensure that the AES officers are provided with the needed support to help them render life-transforming services to the local foodstuff farmers. Lastly, the district's SFP Coordinating Team should ensure that registered foodstuffs farmers are not financially constrained by negotiating with the financial institutions on flexible terms and conditions to help them access loans for their farming businesses.

7. Declarations

Ethics approval and consent to participate

Before data collection began, ethical clearance was sought from the University of Cape Coast's Institutional Review Board (IRB-UCC). Ethically, the consent of research participants is critical to any research agenda. To gain respondents' consent, they were informed about the purpose of the study and the duration of their participation.

Consent for publication

Not applicable

Availability of data and materials

Data and other relevant documents to this manuscript are available upon request.

Conflict of interest statement

The authors have declared no competing interests exist.

Funding


The authors received no financial assistance from any person or organisation.

8. Acknowledgements


We acknowledge the contribution of field enumerators and colleagues who contributed to the contribution of the paper through their prayers and support.

Authors' ORCID

Daniel Adjei  <https://orcid.org/0009-0009-7685-5762>

Alexander Tetteh Kwasi Nuer  <https://orcid.org/0000-0001-6646-341X>

Selorm Omega  <https://orcid.org/0000-0001-9159-9351>

Benjamin Chris Ampimah  <https://orcid.org/0000-0003-2290-7853>

References

- Akombi et al., 2017** – Akombi, B.J., Agho, K.E., Merom, D., Renzaho, A.M., Hall, J.J. (2017). Child malnutrition in sub-Saharan Africa: A meta-analysis of demographic and health surveys (2006-2016). *PloS One*. 12(5): 1-15.
- Asmare et al., 2018** – Asmare, B., Taddele, M., Berihun, S., Wagnew, F. (2018). Nutritional status and correlation with academic performance among primary school children, northwest Ethiopia. *BMC Research Notes*. 11(1): 1-6.
- Asselt et al., 2018** – Asselt, J.V., Battista, F.D., Kolavalli, S., Udry, C., Nate, B. (2018). Performance and adoption factors for open pollinated and hybrid maize varieties: Evidence from farmers' fields in Northern Ghana (Working Paper 45). Accra, Ghana: Intl Food Policy Res Inst.
- Awojobi, 2019** – Awojobi, O.N. (2019). A Systematic Review of the Impact of Ghana's School Feeding Programme on educational and nutritional outcomes. *Journal of Tropical Agriculture, Food, Environment and Extension*. 18(2): 42-50.
- Bekele, 2017** – Bekele, A.E. (2017). Access to improved seeds and its effects on food security of poor farmers. *International Journal of Development Research*. 7(7): 13655-13663.
- Creswell, 2014** – Creswell, J.W. (2014). A concise introduction to mixed methods research. California, United States: SAGE publications.
- Dokyi et al., 2021** – Dokyi, E., Anang, B.T., Owusu, V. (2021). Impacts of improved seed maize technology adoption on productivity and technical efficiency in Northern Ghana. *Open Economics*. 4(1): 118-132.
- Donkor et al., 2016** – Donkor, E., Sekyre, E. O., Owusu, V., Jordaan, H. (2016). Impact of row-planting adoption on productivity of rice farming in Northern Ghana. *Review of Agricultural and Applied Economics*. 19(1): 19-28.
- Endalew et al., 2015** – Endalew, B., Muche, M., Tadesse, S. (2015). Assessment of food security situation in Ethiopia: A Review. *Asian Journal of Agricultural Research*. 9(2): 55-66.
- Gelli et al., 2019** – Gelli, A., Aurino, E., Folson, G., Arhinful, D., Adamba, C., Osei-Akoto, I., Alderman, H. (2019). A school meals program implemented at scale in Ghana increases height-for age during midchildhood in girls and in children from poor households: a cluster randomized trial. *The Journal of nutrition*. 149(8): 1434-1442.
- Jara-Rojas et al., 2020** – Jara-Rojas, R., Canales, R., Gil, J.M., Engler, A., Bravo-Ureta, B., Bopp, C. (2020). Technology adoption and extension strategies in mediterranean agriculture: The case of family farms in Chile. *Agronomy*. 10(5): 69-82.
- Kamaludeen, 2014** – Kamaludeen, H. (2014). The impact of the Ghana School Feeding Programme on enrollment, attendance and retention in Ga South Municipal Schools (Doctoral Dissertation, University of Ghana).
- Koutsouris, 2018** – Koutsouris, A. (2018). Role of extension in agricultural technology transfer: A critical review. *Innovation, Technology, and Knowledge Management*. 5(6): 337-359.
- Maghaireh, 2019** – Maghaireh, D.F.A. (2019). The impact of malnutrition on the academic achievement among Jordanian students in the primary schools. *Gazi Medical Journal*. 30(2): 130-132.
- Mahama, 2018** – Mahama, S. (2018). The impact of Ghana school feeding programme on female enrolment, attendance and retention in the Wa Municipality of the upper west Region of Ghana (University of Development Studies, Doctoral dissertation).
- Miranda, 2018** – Miranda, A. (2018). Public food procurement from smallholder farmers: literature review and best practices (Working Paper 176). Brasilia, Brazil: International Policy Centre for Inclusive Growth (IPC-IG).
- Serebour, 2017** – Serebour, R. (2017). Assessing the implementation of the Ghanaschool feeding program (SFP): A comparative case study of some selected schools in the Atwima Nwbiagyia district and Atwima Mponua district of Ghana (Master's thesis, The University of Bergen).
- Sarfo et al., 2022** – Sarfo, J.O., Debrah, T.P., Gbordzoe, N.I., Obeng, P. (2022). Types of sampling methods in human research: why, when and how. *Eur Res Ser A*. 13(2): 55-63.

[Sarfo et al., 2023](#) – Sarfo, J.O., Debrah, T., Gbordzoe, N.I., Afful, W.T., Obeng, P. (2021). Qualitative research designs, sample size and saturation: is enough always enough. *Journal of Advocacy, Research and Education*. 8(3): 60-65.

[Ghana Statistical Service, 2013](#) – Ghana Statistical Service. 2010 Population and Housing Census: National Analytical Report, Accra. Accra, Ghana: Ghana Statistical Service, 2013.

[Tagoe, 2018](#) – Tagoe, I. (2018). The Ghana National School Feeding Program: Peoples' perceptions about the program's impact on school enrolment, attendance and completion (Doctoral dissertation, Bowling Green State University).

[United Nations..., 2019](#) – United Nations International Children's Emergency Fund. Children, food and nutrition – Growing well in a changing world. New York, USA: United Nations International Children's Emergency Fund, 2019.

[World Food Program..., 2018](#) – World Food Program, Food and Agriculture Organization. Home-grown school feeding. Resource Framework. Technical Document. New York, USA: WFP, 2018.

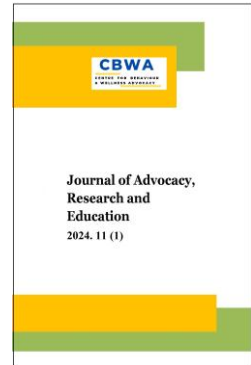
[World Food Program, 2013](#) – World Food Program. State of school feeding worldwide. New York, USA: WFP, 2013.




Publisher: Centre for Behaviour and Wellness
Advocacy, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
ISSN 2410-4981. E-ISSN 2508-1055
2024. 11(1): 138-147

DOI: 10.13187/jare.2024.1.138

Journal homepage:
<http://kadint.net/our-journal.html>



Harsh Reality of Low-Income Individuals in Acquiring Social Houses in Vietnam: Outlining Contradictions and Illogicalities of Ongoing Laws and Proposing Practical Amendments

Nguyen Thanh Luan  ^{a, *}

^a Dai Nam University, Hanoi, Vietnam

Abstract

The Vietnamese Government's law on the construction and distribution of social housing has made strides in addressing the housing needs of low-income individuals since its implementation in 2004. However, it has also faced challenges, such as a scarcity of social housing supply, high costs for low-income people, and social housing speculation by the rich. This study aims to identify these inconsistencies and propose significant recommendations for legislators to promptly amend and supplement relevant laws, thereby promoting the development of social housing, effectively resolving the housing demand of low-income classes, and enhancing social security in Vietnam. The study provides lawmakers with recommendations on how to revise and supplement the relevant laws.

Keywords: development, laws, low-income people, project, social housing, stipulation, Vietnam.

1. Introduction

Prior to 1986, Vietnam's economy followed a centrally planned and subsidized economic model similar to that of the Soviet Union and socialist countries in Eastern Europe; therefore, the state policy on the construction and distribution of housing to the people is stipulated in the constitution. However, this policy has not been realized because of the application of a centrally planned and subsidized economic model, pushing Vietnam into a severe economic and social crisis (Ronnås, Sjöberg, 1991). The State could only build a few low-quality houses to provide for a small group of public servants due to limited resources to develop and distribute houses to everyone (Thuong, 2014)

The Communist Party of Vietnam held its sixth national congress in Hanoi from December 15 to 18, 1986, and decided to implement "Doi Moi," in which the centrally planned and subsidized economic model was abandoned in favor of a "socialist-oriented market economy" to liberate the economy while remaining under State control (Tran-Nam, 2007). By this point, the State's policy of investing in housing construction and distributing it to the people had been discontinued. Instead, the State encouraged the private sector to build their own houses and encouraged the development of housing investment projects, which addressed people's housing needs according to the market mechanism.

* Corresponding author

E-mail addresses: nguyenthanhluan@dainam.edu.vn (N.T. Luan)

Received: 14 February 2024 Revised: 20 March 2024 Accepted: 21 March 2024 Published: 31 April 2024

Following more than 35 years of implementing “Doi Moi,” Vietnam has emerged from the crisis and achieved rapid economic growth, with people’s living standards significantly higher than before. Along with this, the process of urbanization and population growth is accelerating (Hong, Kim, 2022), the gap between the rich and poor in society is widening, and land for housing construction is scarce and has become extremely expensive (Luan, 2020), and the low-income group has been facing immense challenges in acquiring housing.

Vietnamese people have a traditional culture of wet rice farming; therefore, they place great importance on “an cư lạc nghiệp” (*a stable living place leads to stable life and career*) (Szymańska-Matusiewicz, 2013). Accordingly, people must have stable housing to focus on their lives and economic development. Therefore, there is an urgent need to address the need for housing to create social stability and promote the economic development of the country.

The State of Vietnam has realized the importance of addressing the nation’s housing issue in the process of realizing the strategic goals of “wealthy people, a strong country, a democratic, equitable and civilized society,” hence, special concentration has been paid to resolving the housing needs in general with the National Strategy on Housing Development (Prime Minister, 2021). The State addresses housing needs through social housing policies for the low-income group, accounting for most of society. The basic content of this policy is as follows: the State uses the budget to develop social housing projects with apartments that have an area to meet basic living needs. However, the focus is on attracting capital sources outside the state budget of private investors to participate in the construction of social housing projects with incentives and support, as well as credit support with preferential interest rates for an extended period to ensure that the poor have the opportunity to own social housing. Social housing complexes have been established throughout the country to implement this policy. This outcome has partly solved the housing needs of some low-income people. Yet, in general, their demand has been only partially solved, and they do not fulfill the previously established National Strategy on Housing Development (Lien Thuong, 2022). Unfortunately, given that social houses are built to support the low-income group, they have little chance of acquiring them.

2. Methods

This research employs a combination of qualitative research methods to explore and assess the development, management, and distribution of social housing in Vietnam. The following approaches were utilized by the researcher:

Analytical Methods:

– Legal Analysis: A thorough examination of existing legal provisions related to social housing was conducted. This involved identifying and interpreting relevant laws, regulations, and policies.

– Realities Analysis: An analysis of the current realities in Vietnam concerning social housing was undertaken to understand the practical implications and challenges faced in the field.

Synthesis of Legal Provisions:

–The study synthesized current legal provisions to identify gaps, inconsistencies, and areas needing reform. This synthesis was critical in comparing legal texts with the on-ground realities faced by low-income citizens.

Secondary Data Collection and Analysis:

– Data Sources: Secondary data were collected from reports and publications of government agencies responsible for social housing. These included statistical data, policy documents, and official assessments.

– Effectiveness Assessment: The effectiveness of current regulations was assessed using this secondary data, focusing on how well these regulations meet the actual needs of low-income citizens and the economic and social conditions of Vietnam.

Problem Identification:

– The study identified unreasonable and contradictory aspects within current laws by comparing them against real economic and social conditions and the needs of low-income populations.

3. Results

The research results show that in Vietnam today, social housing for low-income people is prioritized and promoted by the State to ensure social security. However, it is very difficult for low-income people to have the opportunity to become owners of social housing due to the scarcity of social housing supply and the very high cost of social housing, which low-income people cannot afford. The study has identified the causes of this reality in the current legal regulations on social housing development that need to be amended and supplemented, including:

First, the contradiction between legal regulations that provide land, tax, and credit incentives for social housing developers and the regulations on the profit limitation that investors may gain;

Second, regulations that make it obligatory for investors to build social housing when investing in commercial housing projects and new urban areas: It is not possible to promote the development of social housing when the economic benefits of the investor are affected, and this is also unconstitutional.

Third, the high price of social housing makes it very difficult for low-income people to access preferential credit sources as prescribed by law.

Fourth, the wealthy can easily buy social housing, taking away the opportunity for low-income earners to own such homes due to loopholes and contradictions in legal regulations.

This is the primary solution to address the harsh reality of low-income individuals acquiring social housing in Vietnam, contributing to the realization of the social security policy that Vietnam pursues.

4. Discussion

Scarcity of social housing and legal issues

According to the provisions of the current law, investors who build social housing without acquiring it from the state budget are entitled to several incentives. Firstly, they are exempt from performing financial obligations to the State concerning the land area for constructing social housing. Secondly, there is an exemption and reduction of taxes, including value-added tax: social housing projects for sale, lease, or lease-purchase have a value-added tax rate of 5 %. Enterprises investing in and trading social housing projects are entitled to a preferential corporate income tax rate of 10 %. If the investor constructs social housing for rent, the tax savings will be greater than if the investor builds social housing for sale or lease. Thirdly, according to the State's classification, investors have access to preferential credit sources regarding interest rates and loan terms at banks operating in Vietnam. If an investor builds social housing for rent, the loan interest rate will be lower, and the loan term will be longer than if the investor builds social housing for sale or lease. Fourthly, to reduce the cost of investing in housing construction and the selling price of social housing, the investor can use up to 20 % of the land designated for social housing to construct housing for business and commercial purposes at market prices. If this 20 % land area is unavailable in the social housing construction area, the investor can use 20 % of the project's floor area for business and commerce at market prices.

However, these incentives have not been effective in attracting a large number of investors to participate in social housing development, and very few social housing construction projects have been implemented (Mai, 2024). According to statistics from the Ministry of Construction, as of December 2023, there are 16 social housing projects nationwide for low-income earners and industrial zone workers, with a scale of about 9,300 apartments that have been completed and granted construction permits. Meanwhile, 29 completed projects nationwide, with approximately 13,646 apartments (Yen, 2024). Compared to the actual construction of commercial housing, it is evident that the construction and development of social housing are happening on a small and gradual scale, resulting in a nationwide shortage of social housing.

The ensuing question is why, despite the law providing many incentives for investors to participate in social housing development, they do not participate as much as expected, leading to a scarcity of supply. The contention is that these incentives are few and insignificant compared to the wishes of the investors. Thus, they cannot attract them to invest in the construction and business of social housing (Hung Vo, 2022). This is inaccurate because, unlike social housing, the law does not incentivize investors in commercial housing. Although investors must invest their capital or borrow from credit institutions at market interest rates to implement the project, they continue to participate in construction and business on a large scale, resulting in the rapid growth of

commercial housing supply. Therefore, it can be confirmed that the many incentives for social housing are not the main motivation for investors to participate in the social housing business.

Research on current legal regulations on social housing development indicates a contradiction between providing many incentives to attract investors and limiting the profits that investors gain, as set by law. When completing a social housing project, although investors decide the price of social housing, the total profit of the entire project is controlled not to exceed 10 % of the total invested cost for social housing for sale and 15 % for leasing. At the same time, the incentives granted by law to investors are not included in the prices of social housing. This is why, instead of investing in social housing, they choose to invest in commercial housing, where profits are not limited by law.

From the legislators' perspective, the imposition of a limit on the profits that investors gain when participating in social housing aims to control the price (not too high) to ensure low-income people can buy these houses. However, from the perspective of real estate investors in a market economy, high or low profits are a decisive factor in their participation in business projects (Tran, Yip, 2008). Therefore, a profit of no more than 10 % and 15 % of the total investment is not impressive enough to attract investors to participate in social housing construction. When comparing the profits from commercial housing projects, the profit earned from social housing is very small (Nguyen, 2022).

Additionally, the time to complete construction projects, real estate projects in general, and social housing, in particular, may be prolonged due to the confusion and complexity of legal procedures, further reducing the profits within the legal profit limit. Suppose investors implement a social housing project that requires up to five years to complete legal procedures, with a profit rate of 10 % and 15 % divided by five years. In that case, the average annual profit is insignificant. This is unattractive because implementing a social housing project requires huge capital, and not all investors have the financial ability to do so. For example, the Vesta project in Phu Lam ward, Ha Dong district, Hanoi city, with a total investment of 2,300 billion VND (about more than 100 million USD), invested by Hai Phat Investment Joint Stock Company (Thi, Thanh, 2020); and the Thuong Thanh Hanoi social housing project with a total investment of about 2,685 billion VND (about 115 million USD) in Thuong Thanh ward, Long Bien district (Huy, 2022). When preferential loan capital is not accessible by law, investors are forced to borrow through commercial banking systems with high interest rates (Mieu, 2022).

Another unreasonable aspect is determining the total investment cost of a social housing project to define the 10% and 15% profits investors will receive. According to the law, these expenses must have invoices and valid documents, meaning only public, transparent, and legal expenses are recognized as investment expenses. However, in the context of widespread corruption in Vietnam (Fforde, 2022), particularly in the land and construction sectors (Garrido et al., 2011), investors must pay unofficial expenses when implementing social housing projects (Pham et al., 2020). These expenses are not included in the costs invested in social housing projects to determine the profit level according to the law, further reducing investor profits and making them reluctant to participate in social housing projects.

Thus, there is an incongruence between the provisions of the law on giving incentives to attract investors to social housing projects and the provisions of the law on the limitation of housing profits, leading to investors' lack of interest in social housing businesses, eventually creating a scarcity of social housing. Therefore, Vietnamese legislators need to abolish the limits on the profits that investors gain from social housing projects. Simultaneously, it is necessary to further increase incentives, support for tax obligations, financial obligations on land, and increase preferential loans for investors, which is a solution to effectively reduce the prices of social housing (Dai, Li, 2020; Kiso, 2022).

Regulations for investors in commercial housing projects and new urban areas

Along with several incentives to attract investors to the social housing sector, the current law imposes specific legal obligations on investors. When constructing commercial housing projects and new urban projects with a total land area of two hectares or more in special-class cities or type-I cities, investors must allocate 20% of the land area for developing social housing. The same requirement applies to commercial housing projects and new urban projects with a total land area of five hectares or more in type-II and type-III cities. However, in projects with a total area less than the aforementioned thresholds, investors are not required to allocate 20 % of the land for

social housing but must pay the entire land use fee for the whole project (Government, 2021). Legislators expected this regulation to increase social housing funds alongside the rapid growth of commercial housing.

Previously, adherence to this obligation was more flexible and applied to larger commercial housing projects and new urban areas. Specifically, investors had to allocate 20 % of their land area to build social housing only in areas where commercial housing projects and urban areas were implemented, particularly in Type-III cities. For projects in new urban areas with a total area of less than 10 hectares, investors could choose from the following options: (1) set aside 20 % of the land area for social housing construction; (2) hand over a built housing area equal to the value of 20% of the land area for social housing construction to be used for social housing; or (3) pay an amount equivalent to 20% of the land area for social housing into the local state budget to create capital for the social housing fund (Government, 2015). In practice, most investors chose the third option to avoid building social housing in commercial housing projects and new urban areas (Son, n.d.), which led to a decrease in the number of social housing projects. Consequently, the State amended the law, eliminating options (2) and (3), to compel investors to follow option (1). Despite this amendment, the outcome has not met expectations, with investors in commercial housing projects and new urban regions in central areas of large cities failing to allocate 20 % of their land for social housing (Hoa, 2022).

This situation arises because the profits of investors are adversely affected. Even when building social housing within a commercial housing project or new urban area using their own capital, investors must sell social housing at a low price regulated by the State. Thus, they are forced to increase the prices of commercial real estate products to compensate for their investment costs. As a result, commercial real estate products become more expensive, slowing investors' liquidity and reducing profits. Additionally, real estate investors face construction, space, and landscape design challenges when implementing projects. After construction, managing, operating, and providing utilities in projects with social housing for low-income and commercial housing for higher-income groups pose further challenges.

When comparing the provisions of the Constitution, Civil Code, Law on Investment, and the current Enterprise Law, contradictions become evident. The conflict lies between the right to freely conduct business and the obligation for investors to construct social housing within commercial housing projects and new urban areas. According to the right to freely conduct business, investors who have invested their capital have the right to carry out business projects according to their will, provided such activities do not violate the law (Dang et al., 2019). The State should not interfere in investors' business activities. The compulsory construction of social housing within commercial housing projects infringes on investors' freedom in business, which is inconsistent with Vietnam's goal of building a market economy integrated into the world economy (Barai et al., 2017).

In conclusion, the legal obligation for investors to construct social housing when implementing commercial housing projects and new urban areas fails to address the shortage of social housing or increase its supply alongside commercial housing growth. Moreover, this stipulation is unconstitutional. Therefore, we suggest removing this provision.

Price of social housing, low-income people, and the law

Under current law, people with low incomes are defined as those who do not have to pay personal income tax (Ministry of Construction, 2015). Therefore, individuals with an income of over 11 million VND per month (approximately 460 USD) without dependents are required to pay personal income tax (Standing Committee). Those with income below this level or who have dependents are exempt from paying personal income tax. However, this income level makes it very difficult for low-income individuals to own social housing because completed projects have very high prices. According to statistics, an employee under 30 with an average income of about 15 million VND/month (approximately 625 USD) is left with about 6 million VND (approximately 250 USD) after covering basic necessities in big cities like Ho Chi Minh City or Hanoi. It would take at least 20 years to accumulate 1.5 billion VND (approximately 62,000 USD). Furthermore, even those earning 20–30 million VND/month (approximately 833–1250 USD) would need to save for 10–15 years to buy an apartment valued at 1.5 billion VND. The average selling price of social housing is currently 15 million VND/m², and in some areas, this can rise to 21–25 million VND/m² or higher (Anh Tu, 2022).

The research indicates that one of the reasons for the high prices of social housing completed in the 2016–2020 period is that investors in social housing projects could not access preferential loans with favorable interest rates and terms from designated banks such as the Vietnam Bank for Social Policies and four state-owned commercial banks. These banks include the Joint Stock Commercial Bank for Foreign Trade of Vietnam, the Joint Stock Commercial Bank for Investment and Development of Vietnam, the Vietnam Joint Stock Commercial Bank for Industry and Trade, and the Vietnam Bank for Agriculture and Rural Development. Instead, investors had to borrow from commercial banks at high interest rates because the state budget law did not allocate priority capital sources for social housing development to refinance or provide interest compensation to these banks. This indicates that the state budget's arrangement and use provisions nullified the legal provisions intended to incentivize investors in social housing development.

The high price of social housing implies that low-income individuals must save for an extended period or rely on family financial assistance, which is often not feasible. Consequently, the dream of owning a home has become increasingly unattainable for low-income citizens (Binh Nguyen, 2022). Providing low-income individuals with low-interest, long-term loans from the Vietnam Bank for Social Policies and designated commercial banks is a legal alternative to facilitate social housing ownership. This solution proved effective between June 1, 2013, and December 31, 2016, when a 30,000 billion VND credit package from the state budget was disbursed to assist people in purchasing homes, enabling many low-income individuals to become homeowners (Government, 2013). However, once this credit package expired in the 2016–2020 period, low-income individuals could no longer access preferential loans and had to borrow at market interest rates from commercial banks, as social housing investors were similarly unable to obtain preferential credit from the Vietnam Bank for Social Policies and the four state-owned commercial banks.

Despite Vietnam's commendable performance in controlling and preventing the COVID-19 epidemic (Ngoc Anh, 2022), the negative impact on its economic and social stability and development is inevitable (Ngoc Hong et al., 2022). Consequently, on January 11, 2022, the National Assembly of Vietnam approved a fiscal plan for economic and social recovery and development following the COVID-19 pandemic, valid until December 31, 2023. Based on the National Assembly's proposal, the Government arranged a 15,000 billion VND credit package from the state budget for low-income individuals to borrow preferential loans to buy, rent, build, or renovate social housing (Government, 2022). However, as described earlier, the challenge lies in the shortage of social housing, making the current supply insufficient to meet the needs of the low-income group. This shortage implies that credit packages cannot be effectively disbursed. Even if investors receive preferential loans from this credit package to construct new social housing projects, completing these projects within the short timeframe from January 11, 2022, to December 31, 2023, is challenging. Moreover, according to the Governor of the State Bank of Vietnam's regulations, from January 20, 2022, only the Vietnam Bank for Social Policies will provide preferential loans to low-income individuals for buying social housing. Preferential loans from the four state-owned commercial banks are no longer available, making it more difficult for low-income individuals to access these loans.

Based on this analysis, Vietnamese legislators should consider supplementing regulations to allocate state budget capital for prioritizing social housing development. This would ensure that the Vietnam Bank for Social Policies and the four designated commercial banks can provide preferential loans to investors, reducing social housing prices. Legislators also need to consider extending the validity of the 15,000 billion VND credit package for at least five years beyond December 31, 2023, to improve the social housing supply. Only in this manner will the credit package be effective.

Difficulties for low-income groups to own a house

A common aspect across the country is that while it is difficult for low-income groups to own a house, the rich (who are not allowed to own social housing according to the law) find it easy to own some and turn it into an investment channel. For instance, in early 2020, when the Da Nang City Inspectorate announced the inspection results of the An Trung 2 social housing project, it was discovered that in a project with 324 apartments, 80 apartments (accounting for nearly 25 % of the total number of apartments) were handed over to people who were not eligible to buy social housing. The owners of the 40 apartments are subject to personal income tax (Huu Long, 2021).

Through this research, the author identified two basic reasons for this situation: First, while social housing is expensive for low-income individuals, it is an easy investment for the wealthy. The law stipulates that the owner may sell the property within five years of signing a contract to purchase social housing. However, even when it reaches the full five years, and they begin selling, the wealthy continue to earn higher profits, as it is safer than investing in other fields. Furthermore, during this time, they can still rent out the apartments. Because they do not need to wait the required amount of time to be allowed to sell social housing according to regulations, they can gain a large profit by selling immediately to people in urgent need and those who dare to take legal risks (Thanh Nguyen, 2020).

Second, although the current law has specific regulations and a full process for approving people to own social housing, social housing project investors are directly involved in receiving the dossiers of people in need, making a list of qualified people, and sending it to the Department of Construction in the region. This provision of the law is unreasonable, as it creates opportunities for investors to place people who are not allowed to own social housing on the list sent to the Department of Construction. Investors are motivated to do this because they spend a large amount of capital to implement projects; thus, they want to recover capital and profits quickly (Phuong Duy, 2021).

Another important issue that prompts investors to break the law when selling social housing to those not qualified is the current administrative sanction for this violation, which is insignificant compared to the return on capital and profits. Specifically, investors will be fined from 40,000,000 to 60,000,000 VND, equivalent to approximately 1,600 to 2,500 USD, if violations are detected (Government, 2022). Consequently, the fact that rich individuals easily own social housing is a profit-seeking strategy that undermines the State's policy and deprives low-income individuals of the meager opportunity to own social housing.

Therefore, lawmakers should consider the following recommendations to prevent this situation: First, do not allow social housing investors to participate directly in the process of approving people to purchase social housing. This process must be carried out by an independent agency with the participation of citizen representatives and the press. Second, the law should be amended to increase the amount of time that buyers of social housing are allowed to sell to others, extending it to 10 to 15 years instead of the current 5-year rule to prevent the wealthy from profiting from social housing sales. Third, the law should be amended to increase the administrative sanctions for intentionally selling subsidized housing to unqualified people. The level of sanctions should be determined based on the value of the sales contract. Accordingly, a penalty of 10-20 % of the value of the sale contract should be considered, which will be very high and force investors to consider this cost before committing violations.

5. Conclusion

Addressing the housing needs of low-income individuals through the development of social housing is a fitting solution for Vietnam's current socioeconomic conditions. It also underscores the Vietnamese Government's commitment to enhancing the quality of life for low-income citizens. Initially successful, the social housing development policy has encountered numerous challenges. The study identifies these challenges as stemming from legal provisions containing contradictions and inconsistencies in social housing development and distribution:

1. Contradictions between laws offering incentives to attract investors in social housing while simultaneously limiting their profits, discouraging their participation and leading to a scarcity of social housing supply.

2. Requirements for investors to build social housing alongside commercial projects and new urban developments have proven ineffective due to economic disincentives, rendering the practice unconstitutional.

3. High prices for social housing make it difficult for low-income individuals to access the preferential loans mandated by law.

4. Legal loopholes allow affluent individuals to acquire social housing for profit easily.

Vietnamese legislators must critically review and revise current regulations to effectively address these issues and promote social housing development. Therefore, Vietnamese legislators must pay attention to and adjust the current regulations to solve the abovementioned challenges and promote social housing development.

6. Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Availability of data and materials

Not applicable.

Conflict of interest statement

The author reports no conflicts of interest.


Funding

Not applicable.

7. Acknowledgements

We thank the Centre for Behaviour and Wellness Advocacy for their free professional editing services following the acceptance of this paper.

Author's ORCID

Nguyen Thanh Luan  <https://orcid.org/0000-0002-5095-3251>

References

- Anh Tu, 2022** – *Anh Tu*. (2022). 25 triệu đồng/m²: Người nghèo khó mua nhà ở xã hội [25 million VND/m²: Poor people have difficulty buying social housing]. [Electronic resource]. URL: <https://vietnamnet.vn/15-25-trieu-dong-m2-nguoi-ngheo-kho-mua-nha-o-xa-hoi-2019144.html> [in Vietnamese]
- Barai et al., 2017** – *Barai, M.K., Le, T.A.L., Nguyen, N.H.* (2017). Vietnam: achievements and challenges for emerging as a FTA hub. 9(2): 51-65. DOI: <https://doi.org/10.1080/19186444.2017.1326716>
- Binh Nguyen, 2022** – *Binh Nguyen* (2022). Tốc độ tăng giá nhà ở xã hội tại Việt Nam nhanh như... Singapore! [The rate of increase in social housing prices in Vietnam is as fast as... Singapore!]. [Electronic resource]. URL: <https://sohuutritue.net.vn/toc-do-tang-gia-nha-o-xa-hoi-tai-viet-nam-nhanh-nhu-singapore-d149010.html>
- Dai, Li, 2020** – *Dai, J., Li, X.* (2020). How does subsidy change a firm's market power? The case of China's rice processing industry. 23(1): 372-384. DOI: <https://doi.org/10.1080/15140326.2020.1776976>
- Fforde, 2022** – *Fforde, A.* (2022). Vietnamese patterns of corruption and accumulation: research puzzles. DOI: <https://doi.org/10.1080/00472336.2022.2037010>
- Garrido et al., 2011** – *Garrido, A., Delfina, M., Anderson, James, Davidsen, Soren, Vo, D.H., Dinh, D.N., TranLan, H.T.* (2011). Recognizing and reducing corruption risks in land management in Vietnam. [Electronic resource]. URL: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/918551468322441320/recognizing-and-reducing-corruption-risks-in-land-management-in-vietnam>
- Government, 2022** – Government. Nghị định 16/2022/NĐ-CP quy định xử phạt vi phạm hành chính về xây dựng [Decree 16/2022/ND-CP regulates penalties for administrative violations in construction]. 2022. [Electronic resource]. URL: <https://thuvienphapluat.vn/van-ban/Vi-pham-hanh-chinh/Nghi-dinh-16-2022-ND-CP-quy-dinh-xu-phat-vi-pham-hanh-chinh-ve-xay-dung-502065.aspx> (date of access: 01.11.2022). [in Vietnamese]
- Government, 2013** – Government. Nghị quyết 02/NQ-CP 2013 giải pháp tháo gỡ khó khăn sản xuất kinh doanh hỗ trợ thị trường nợ xấu. 2013. [Electronic resource]. URL: <https://thuvienphapluat.vn/van-ban/Doanh-nghiep/Nghi-quyet-02-NQ-CP-2013-giai-phap-thao-go-kho-khan-san-xuat-kinh-doanh-ho-tro-thi-truong-no-xau-163775.aspx> [in Vietnamese]
- Government, 2015** – Government. Nghị định 100/2015/NĐ-CP phát triển quản lý nhà ở xã hội. 2015. [Electronic resource]. URL: <https://thuvienphapluat.vn/van-ban/bat-dong-san/nghi-dinh-100-2015-nd-cp-phat-trien-quan-ly-nha-o-xa-hoi-295027.aspx>
- Government, 2021** – Government. Nghị định 49/2021/NĐ-CP sửa đổi Nghị định 100/2015/NĐ-CP phát triển quản lý nhà ở xã hội [Electronic resource]. URL: <https://thuvienphapluat.vn/van-ban/bat-dong-san/nghi-dinh-49-2021-nd-cp-sua-doi-nghi-dinh-100-2015-nd-cp-phat-trien-quan-ly-nha-o-xa-hoi-295027.aspx>

ban/Bat-dong-san/Nghi-dinh-49-2021-ND-CP-sua-doi-Nghi-dinh-100-2015-ND-CP-phat-trien-quan-ly-nha-o-xa-hoi-469476.aspx [in Vietnamese]

Government, 2022 – Government. Nghị quyết 11/NQ-CP 2022 Chương trình phục hồi kinh tế xã hội Nghị quyết 43/2022/QH15. 2022. [Electronic resource]. URL: https://thuvienphapluat.vn/van-ban/Thuong-mai/Nghi-quyet-11-NQ-CP-2022-Chuong-trinh-phuc-hoi-kinh-te-xa-hoi-Nghi-quyet-43-2022-QH15-502069.aspx?anchor=diem_c_3_2 [in Vietnamese]

Hoa, 2022 – Hoa, V. (2022). Doanh nghiệp kêu khó vì quy định 20% quỹ đất làm nhà ở xã hội [Businesses complain about difficulties because of the regulation that 20% of the land fund is used for social housing]. [Electronic resource]. URL: <https://plo.vn/doanh-nghiep-keu-kho-vi-quy-dinh-20-quy-dat-lam-nha-o-xa-hoi-post671224.html> [in Vietnamese]

Hong, Kim, 2022 – Hong, N., Kim, S. (2022). Beyond Desakota: the urbanization process and spatial restructuring in contemporary Vietnam. *Urban Research & Practice*. 16(4): 582-604. DOI: <https://doi.org/10.1080/17535069.2022.2055971>

Dang et al., 2019 – Dang, H.D., Thanh, L.N., Thi, N.H., Xuan, T.N. (2019). The Right to Freely Conduct Business in the Legal System of Vietnam Nowadays. *European Researcher. Series A*. 10(2): 86-93. DOI: <https://doi.org/10.13187/ER.2019.2.86>

Hung Vo, 2022 – Hung Vo (2022). Gập ghenh phát triển nhà ở xã hội: Cần gỡ “nút thắt” bằng cơ chế mở [Bumpy social housing development: Need to remove the "bottleneck" with an open mechanism]. *Bất động sản. Vietnam+ (VietnamPlus)*. [Electronic resource]. URL: <https://www.vietnamplus.vn/gap-gheh-phat-trien-nha-o-xa-hoi-can-go-nut-that-bang-co-che-mo/784569.vnp>

Huu Long, 2021 – Huu Long (2021). Phát hiện sai phạm bố trí nhà ở xã hội ở Đà Nẵng, hơn 1 năm vẫn chưa xử lý [Detected violations of social housing arrangement in Da Nang, more than 1 year still unresolved]. [Electronic resource]. URL: <https://laodong.vn/bat-dong-san/phat-hien-sai-pham-bo-tri-nha-o-xa-hoi-o-da-nang-hon-1-nam-van-chua-xu-ly-873111.ldov> [in Vietnamese]

Huy, 2022 – Huy, G. (2022). Dự án nhà ở xã hội Thượng Thanh sau nhiều năm vẫn là bãi đất trống [Thuong Thanh social housing project after many years is still an empty lot]. [Electronic resource]. URL: <https://vietnamfinance.vn/du-an-nha-o-xa-hoi-thuong-thanh-sau-nhieu-nam-van-la-bai-dat-trong-20180504224264314.htm> [in Vietnamese]

Kiso, 2022 – Kiso, T. (2022). A subsidy that is inversely related to the product price. *The Economic Journal*. 132(646): 2173-2206. DOI: <https://doi.org/10.1093/EJ/UEAC002>

Lien Thuong, 2022 – Lien Thuong. (2022). Bất cập phát triển nhà ở xã hội [Inadequacies in social housing development]. [Electronic resource]. URL: <https://realtimes.vn/bat-cap-phat-trien-nha-o-xa-hoi-20201224000012014.html> [in Vietnamese]

Luan, 2020 – Luan, N.T. (2020). Proposals to amend the law on land prices in Vietnam today. In D. K. Bataev (Ed.). *Social and cultural transformations in the context of modern globalism» Dedicated to the 80th Anniversary of Turkayev Hassan Vakhitovich, vol 92*. European Proceedings of Social and Behavioural Sciences (pp. 643-649). European Publisher. DOI: <https://doi.org/10.15405/epsbs.2020.10.05.86>

Mai, 2024 – Mai Nguyen (2024). Bộ Xây dựng: Năm 2023, cả nước triển khai 44 dự án nhà ở xã hội [Ministry of Construction: In 2023, the country will deploy 44 social housing projects]. *Tạp chí Xây dựng*. [Electronic resource]. URL: <https://tapchixaydung.vn/bo-xay-dung-nam-2023-ca-nuoc-trien-khai-44-du-an-nha-o-xa-hoi--20201224000021563.html>

Mieu, 2022 – Mieu, G. (2022). Làm dự án bất động sản ngán nhất là thời gian làm thủ tục pháp lý [The most boring thing about working on a real estate project is the time spent doing legal procedures]. [Electronic resource]. URL: <https://laodong.vn/bat-dong-san/lam-du-an-bat-dong-san-ngan-nhat-la-thoi-gian-lam-thu-tuc-phap-ly-1060189.ldo> [in Vietnamese]

Ministry of Construction, 2015 – Ministry of Construction. Công văn 395/BXD-QLN 2015 hướng dẫn triển khai cho vay hỗ trợ nhà ở theo Thông tư 17/2014/TT-BXD. 2015. [Electronic resource]. URL: <https://thuvienphapluat.vn/cong-van/Tai-chinh-nha-nuoc/Cong-van-395-BXD-QLN-2015-huong-dan-trien-khai-cho-vay-ho-tro-nha-o-theo-Thong-tu-17-2014-TT-BXD-267492.aspx> [in Vietnamese]

Ngoc Anh, 2022 – Ngoc Anh, N. (2022). The people-based, state-led approach in containing COVID-19 in Vietnam. *Asian Affairs*. 53(4): 852-872. DOI: <https://doi.org/10.1080/03068374.2022.2123132>

Ngoc Hong et al., 2022 – Ngoc Hong, N., Vu, N.T., Tran, Q., Tran, T., Vo, D.H. (2022). Market performance and volatility during the Covid-19 pandemic in Vietnam: A sector-based

analysis. *Cogent Business & Management*. 9(1): 2119681. DOI: <https://doi.org/10.1080/23311975.2022.2119681>

Nguyen, 2022 – *Nguyen, L.T.* (2021). Prohibiting an activity when it cannot be managed by law: Legislative trends toward complex and sensitive economic and social activities in Vietnam today. *Onati Socio-Legal Series*. 11(6S): S254–S267. DOI: <https://doi.org/10.35295/OSLS.IISL/0000-0000-0000-1222>

Nguyen, 2022 – *Nguyen, L.T.* (2022). Evaluation of Vietnam's Current Legal Provisions on State Land Acquisition: Amending the Law to Combat Corruption and Promote Socioeconomic Development. *Passagens: Revista Internacional de História Política e Cultura Jurídica*. 14(1): 24-42. DOI: <https://doi.org/10.15175/1984-2503-202214102>.

Pham et al., 2020 – *Pham, N.C., Shi, J., Fogel, J., Li, Y., Pham, H.H.* (2020). Motivations for bribery and bribery in business: Vietnam past and present. *Asia Pacific Business Review*. 27(4): 528-558. DOI: <https://doi.org/10.1080/13602381.2020.1820721>

Phuong Duy, 2021 – *Phuong Duy.* (2021). Trục lợi nhà ở xã hội: Mua để bán lại thu lời, chủ đầu tư còn tiếp tay? [Social housing profiteering: Buying to resell for profit, investors still help?]. [Electronic resource]. URL: <https://laodong.vn/bat-dong-san/truc-loi-nha-o-xa-hoi-mua-de-ban-lai-thu-loi-chu-dau-tu-con-tiep-tay-896778.lido> [in Vietnamese]

Prime Minister, 2021 – Prime Minister. Quyết định 2161/QĐ-TTg 2021 phê duyệt Chiến lược phát triển nhà ở quốc gia 2021 2030 [Decision 2161/QĐ-TTg 2021 approving the National Housing Development Strategy 2021 2030]. 2021. [Electronic resource]. URL: <https://thuvienphapluat.vn/van-ban/Bat-dong-san/Quyết-dinh-2161-QĐ-TTg-2021-phe-duyet-Chien-luoc-phat-trien-nha-o-quoc-gia-2021-2030-498373.aspx> [in Vietnamese]

Ronnås, Sjöberg, 1991 – *Ronnås, P., Sjöberg, Ö.* (1991). Economic reform in Vietnam: Dismantling the centrally planned economy. *Journal of Communist Studies*. 7(1): 7-19. DOI: <https://doi.org/10.1080/13523279108415069>

Standing committee..., 2020 – Standing committee of the National Assembly. Nghị quyết 954/2020/UBTVQH14 điều chỉnh mức giảm trừ gia cảnh của thuế thu nhập cá nhân. 2020. [Electronic resource]. URL: <https://thuvienphapluat.vn/van-ban/Thue-Phi-Le-Phi/Nghi-quyet-954-2020-UBTVQH14-dieu-chinh-muc-giam-tru-gia-can-h-cua-thue-thu-nhap-ca-nhan-444106.aspx>

Szymańska-Matusiewicz, 2013 – *Szymańska-Matusiewicz, G.* (2013). Is ancestor worship a Vietnamese tradition? *Asian Anthropology*. 12(2): 156-171. DOI: <https://doi.org/10.1080/1683478X.2013.833041>

Thanh Nguyen, 2020 – *Thanh Nguyen* (2020). Góc khuất mua bán nhà ở xã hội: Sôi động giao dịch ngầm [Hidden corner of social housing buying and selling: Exciting underground transactions]. [Electronic resource]. URL: <https://baodautu.vn/batdongsan/goc-khuat-mua-ban-nha-o-xa-hoi-soi-dong-giao-dich-ngam-d128423.html> [in Vietnamese]

Thi, Thanh, 2020 – *Thi, K., Thanh, T.* (2020). Hà Nội: Hải Phát Invest và những sai phạm tại Dự án The Vesta [Hanoi: Hai Phat Invest and violations at The Vesta Project]. *Bản đọc*. [Electronic resource]. URL: <https://baoxaydung.com.vn/ha-noi-hai-phat-invest-va-nhung-sai-pham-tai-du-an-the-vesta-293198.htm> [in Vietnamese]

Thuong, 2014 – *Thuong, P.C.* (2014). Đời sống thời bao cấp (Bài 3): Nhà tập thể [Life during the subsidy period (Lesson 3): Group home]. *TTVH Online*. Sports & Culture Newspapers. [Electronic resource]. URL: <https://thethaovanhoa.vn/van-hoa/doi-song-thoi-bao-cap-bai-3-nha-tap-the-n20140508151612478.htm> [in Vietnamese]

Tran-Nam, 2007 – *Tran-Nam, B.* (2007). Economic liberalization and Vietnam's long-term growth prospects. *Journal of the Asia Pacific Economy*. 4(2): 233-257. DOI: <https://doi.org/10.1080/13547869908724681>

Tran, Yip, 2008 – *Tran, H.-A., Yip, N.-M.* (2008). Caught between plan and market: Vietnam's housing reform in the transition to a market economy. *Urban Policy and Research*. 26(3): 309-323. DOI: <https://doi.org/10.1080/08111140802301765>.

Yen, 2024 – *Yen, H.* (2024). Bộ Xây dựng: Giá chung cư có xu hướng tăng [Ministry of Construction: Apartment prices tend to increase]. *Thời báo Ngân hàng*. [Electronic resource]. URL: <https://thoibaonghanh.vn/bo-xay-dung-gia-chung-cu-co-xu-huong-tang-148370.html>

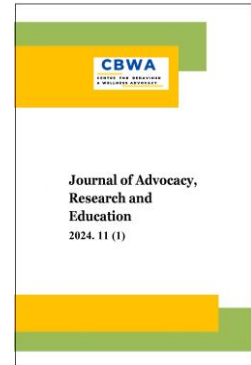


Publisher: Centre for Behaviour and Wellness
Advocacy, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
ISSN 2410-4981. E-ISSN 2508-1055
2024. 11(1): 148-156











DOI: 10.13187/jare.2024.1.148

Journal homepage:

<http://kadint.net/our-journal.html>



Changes in Haematological and Clinical Parameters in Sickle Cell Disease Patients on Hydroxyurea: A Before and After Non-Experimental Retrospective Study

Akosua Asante-Offei ^{a, b}, Abdul Gafaru Mohammed ^a, Issah Sumaila ^c,
William Ghunney ^b, Abdul Gafaru Mohammed ^a, Dwomoh Duah ^a, Irene A. Kretchy ^d,
Andrew Adjei Druye ^{e, *}, Edeghonghon Olayemi ^{d, e}, Harriet Affran Bonful ^a

^a School of Public Health, University of Ghana, Legon, Accra, Ghana

^b Ghana Institute of Clinical Genetics, Korle-Bu, Accra, Ghana

^c Kintampo Municipal Hospital, Kintampo, Ghana

^d School of Pharmacy, University of Ghana, Legon, Accra, Ghana

^e School of Nursing and Midwifery, University of Cape Coast, Cape Coast, Ghana

^f University of Ghana Medical School, Legon, Accra, Ghana

Abstract

Sickle cell disease (SCD) poses a significant health burden globally, particularly in Africa, where prevalence rates are notably high. Hydroxyurea has emerged as a promising therapeutic agent for managing SCD, yet its effects on clinical outcomes in the Ghanaian context remain understudied. This retrospective study aimed to investigate changes in clinical and haematological parameters associated with hydroxyurea use in adolescents and adult patients living with sickle cell disease. A three-level retrospective review was conducted among 105 patients with sickle cell disease at the Ghana Institute of Clinical Genetics, Korle-Bu Teaching Hospital. Clinical and haematological information was retrieved six months before treatment, six months and 12 months after hydroxyurea therapy. A paired t-test was used to determine changes in haematological parameters before and after hydroxyurea therapy. The findings showed a significant increase in haemoglobin (Hb) and mean corpuscular volume (MCV) at six months. Only Hb increased significantly at 12 months. A significant reduction was observed in white cell count (WBC), platelet and retic count in the 6th month, but the changes from the 6th month to the 12th month were insignificant. An increase in foetal haemoglobin was observed in one patient at six months. Hydroxyurea significantly reduced the frequency of vaso-occlusive crises and hospitalisation. Clinicians should educate and recommend hydroxyurea to patients due to its positive clinical outcome.

Keywords: Sickle Cell Disease, Hydroxyurea, Clinical Outcomes, Haematological Parameters, Ghana.

1. Introduction

Sickle cell disease (SCD) is a global public health problem and the most predominant severe genetic haemoglobinopathy worldwide (Modell, Darlison, 2008; Piel et al., 2013). In Africa, where the burden is particularly high, over 200,000 children are born annually with the disease (Diallo,

* Corresponding author

E-mail addresses: andrews.druye@ucc.edu.gh (A.A. Druye)

Received: 02 April 2024 Revised: 20 April 2024 Accepted: 23 April 2024 Published: 31 April 2024

Tchernia, 2002; Olowoyeye, Okwundu, 2020). In Ghana alone, SCD affects approximately 2 % of newborns, with 25 % to 30 % of the population being carriers of the gene (Edwin et al., 2011). It is characterised by frequent painful vaso-occlusive crises, haemolytic anaemia, and numerous complications such as acute chest syndrome, avascular necrosis, leg ulcers, renal damage, retinopathy, and stroke (Wankhade et al., 2013). Although haematopoietic stem cell transplantation offers a curative option, its limited availability and high cost render it inaccessible for many (Ikawa et al., 2019). Therefore, the management of SCD primarily relies on supportive measures, encompassing both pharmacological and non-pharmacological interventions to alleviate symptoms and mitigate complications (Asnani et al., 2019).

Hydroxyurea (HU) has emerged as a cornerstone medication for modifying the pathology of SCD, ameliorating clinical symptoms, and improving patient outcomes (Alvarez et al., 2012; Nevitt et al., 2017). Clinically, HU has demonstrated efficacy in reducing vaso-occlusive crises, hospital admissions, blood transfusions, acute chest syndrome, and organ damage (Silva-Pinto et al., 2013). Patients receiving HU exhibit haematological improvements, including increased foetal haemoglobin (HbF) levels, haemoglobin (Hb) levels, and mean corpuscular volume (MCV), along with decreased white cell count (WBC), platelet count, and reticulocyte count (Adewoyin et al., 2017). Moreover, the use of HU has been associated with enhanced quality of life, particularly in terms of physical functioning and emotional well-being among SCD patients (Badawy et al., 2017; Nwenyi et al., 2014; Thornburg et al., 2011). Despite its established efficacy, concerns have been raised regarding the accessibility, affordability, and safety of HU in low-resource settings, particularly in Africa (Yawn et al., 2014). However, research trials in Sub-Saharan Africa have demonstrated the safety, feasibility, and benefits of HU for SCD treatment (Tshilolo et al., 2019; Opoka et al., 2017).

Furthermore, HU was approved by Ghana's Food and Drugs Authority in 2018, and by 2023, more than 4,400 SCD patients had received HU. Notably, HU is now covered by Ghana's National Health Insurance Scheme (Nyonator et al., 2023). The adolescent and adult Sickle Cell Clinic at the Ghana Institute of Clinical Genetics, Korle-Bu, began utilising HU for SCD management in 2015. Despite the growing global interest in HU therapy for SCD management, there remains a notable gap in research specific to clinical and haematological parameters among adult SCD patients in Ghana. While studies from other regions have shown promising outcomes associated with HU use (Tarazi et al., 2021; Yang et al., 2022), extrapolating these findings to the Ghanaian population may not be appropriate due to variations in genetic backgrounds, environmental factors, and healthcare infrastructure. Therefore, this retrospective study of patients' clinical records was designed to investigate the changes in clinical and haematological parameters associated with HU use in adolescents and adults living with SCD. This study contributes to the global body of knowledge on HU therapy in SCD patients, particularly in resource-limited settings.

2. Materials and Methods

Study Design and Setting

This study was a retrospective review conducted among adolescent and adult SCD patients on HU at the Adolescent and Adult Sickle Cell Clinic, Ghana Institute of Clinical Genetics (GICG), Korle-Bu. The SCD clinic at GICG has over 25,000 registered patients. It is a day clinic that renders treatment services to SCD patients ages 13 years and older. Moreover, HU is one of the drugs used in clinics to manage sickle cell patients.

Study eligibility and sampling

Patients living with SCD aged 15 years and older enrolled on HU with at least six months of haematological and clinical records before starting HU therapy and who had completed 12 months of therapy with HU were included in the study. Patients who experienced side effects and were withdrawn from the medication before 12 months were excluded from the study.

Data collection

The Korle-Bu Teaching Hospital Institutional Review Board (KBTH-IRB) approved the study with ID number STC/IRB/000102/2021. Permission for data extraction was sought from the adult sickle cell clinic. Data were extracted devoid of personal identifiers. Data were extracted from the hospital records of patients who met the inclusion criteria using a data extraction tool. Data were collected at three-time points: six months before treatment with HU, six months, and 12 months post-HU treatment. The data extracted included patients' demographic characteristics, maximum

prescribed HU dosage, clinical (vaso-occlusive crisis, acute chest syndrome, blood transfusion and hospitalisation) and haematological parameters (Hb, HbF, WBC, mean corpuscular volume (MCV), platelet and reticulocyte count).

Data Analysis

Data were cleaned and cross-checked for completeness. Data were analysed using Stata version 16.0 statistical software. Continuous variables such as Hb, HbF, WBC, MCV, platelet and reticulocyte counts were summarised as means and standard deviation (SD). Categorical variables, such as clinical characteristics, were summarised as frequencies and percentages. To assess changes in haematological parameters, a paired t-test was used to compare differences in means of changes in haematological parameters before and after treatment with HU (Table 2). Furthermore, differences in proportions for clinical parameters, including the frequency of vaso-occlusive crises, acute chest syndrome, blood transfusion, and hospitalisation, were estimated using the z-test of proportions. This statistical test enabled the comparison of proportions between two-time points: before and after treatment with HU (Table 3). A significance level of 5% was adopted to determine statistical significance.

3. Results

Demographic characteristics of participants

Over the study period, there were 270 SCD patients who had been put on HU therapy. Out of the total 270 folders, 105 met the inclusion criteria. Hence, a total of 105 were finally selected for the study. The study flowchart is presented (Figure 1).

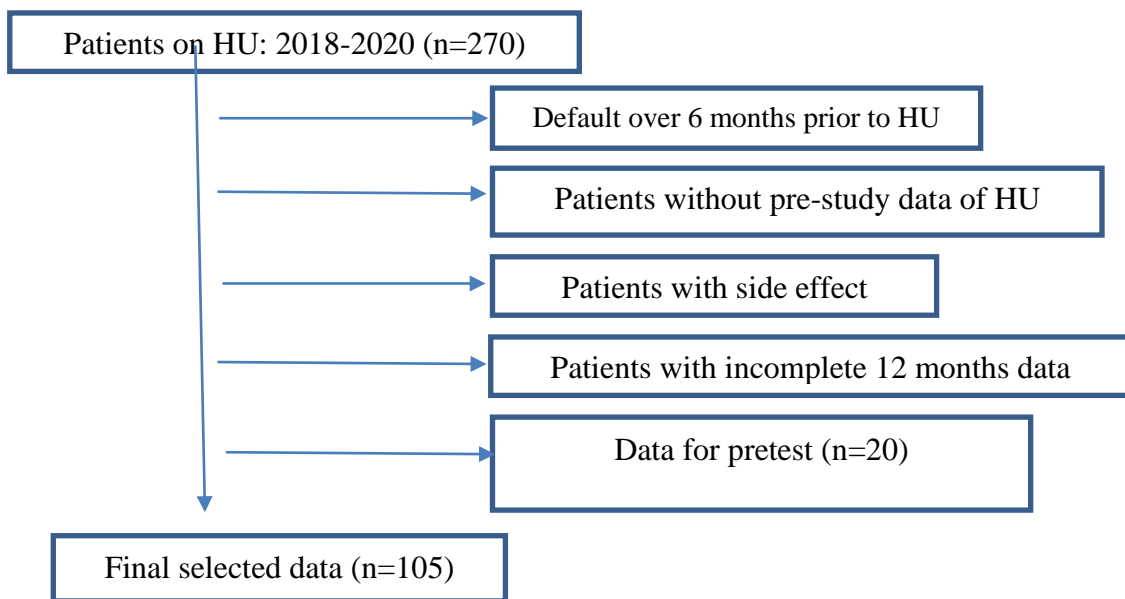


Fig. 1. A chart of the study flow

Out of the 105 patients included in the study, 56(53.8%) were females. Approximately two-thirds, 66(62.9%) of the study patients were between 20 and 39 years. Regarding the phenotype of patients, the majority, 94(89.5%) were HbSS. The average weight of the patients was 55.1 ± 12.5 kg. However, the mean weights of the adolescents and adults were respectively 46.2 ± 9.1 and 60.2 ± 11.3 (Table 1).

Table 1. Demographic Characteristics of SCD patients

| Variables | Frequency (N) | Percentage (%) |
|------------|---------------|----------------|
| Age | | |
| <20 | 32 | 30.4 |
| 20-39 | 66 | 62.9 |

| Variables | Frequency (N) | Percentage (%) |
|-------------------------------|---------------|----------------|
| 40-59 | 7 | 6.7 |
| Subtotal | 105 | 100.0 |
| Sex | | |
| Female | 56 | 53.84 |
| Male | 49 | 47.15 |
| Subtotal | 105 | 100.0 |
| Genotype | | |
| Hb-Sβ-THAL | 2 | 1.9 |
| Hb-SC | 9 | 8.6 |
| Hb-SS | 94 | 89.5 |
| Subtotal | 105 | 100.0 |
| Total weight (mean±SD) | | |
| Adolescents (≤ 19 years) | 46.2 ± 9.1 | |
| Adults (≥ 20 years) | 60.2 ± 11.3 | |

Changes in selected haematological parameters (Mean Hb, WBC, MCV, PLT and RET) after treatment with HU

The Hb concentration increased by 0.71g/dl from baseline to the sixth month, which was statistically significant at ($p < 0.001$). The WBC count decreased by -1.79 from baseline to 6 months post-treatment (Table 2). This drop was significant at $p < 0.001$. However, the WBC increased from the sixth month to 12 months post-treatment by $0.58 \times 10^3/\text{mm}^3$. This difference was, however, not statistically significant ($p = 0.183$). Platelet count decreased from baseline to the sixth month by $-32.91 \times 10^3/\text{mm}^3$. This change was significant ($p = 0.031$). However, an increase of $16.54 \times 10^3/\text{mm}^3$ was observed in the platelet count from the sixth to twelfth months. This change was not significant ($p = 0.338$).

MCV increased from the baseline to the sixth month by $9.38 \mu\text{m}^3$. This increment was statistically significant ($p < 0.001$). There was, however, a slight decrease of $0.40 \mu\text{m}^3$ in MCV from the sixth to the twelfth month. The change was not statistically significant ($p = 0.084$). Reticulocyte count decreased by -1.71% in the sixth month, which was significant ($p < 0.001$). However, a drop of 0.34% from the sixth to 12 months was not statistically significant.

Table 2. Haematological Parameters of Sickle cell patients at Pre-test, six- and 12-months Post HU Treatment (Paired t-test)

| Variables | Pre-test (mean±SD) | 6 M (mean±SD) | Change 0-6M | p-value | 12 M (mean±SD) | Change 6M-12M | p-value |
|----------------------------|--------------------|---------------|-------------|---------|----------------|---------------|--------------|
| Hb (g/dL) | 8.40±1.52 | 9.11±1.55 | 0.71 | <0.001 | 9.31± 1.47 | 0.20 | 0.021 |
| WBC ($10^3/\text{mm}^3$) | 11.48±3.92 | 9.68±4.13 | -1.79 | <0.001 | 10.26±5.50 | 0.58 | 0.183 |
| MCV (μm^3) | 85.38±9.96 | 94.77±12.41 | 9.38 | <0.001 | 94.36±11.87 | -0.40 | 0.612 |
| PLT ($10^3/\text{mm}^3$) | 426.28±158.82 | 393.36±162.74 | -32.91 | 0.031 | 409.90±196.35 | 16.54 | 0.338 |
| Retic | 8.76±5.43 | 7.05± 2.77 | -1.71 | <0.001 | 6.70±2.69 | -0.34 | 0.112 |

Notes: Abbreviations: Hb – haemoglobin; WBC – white blood cells; MCV – mean cell volume; PLT – platelets.

Clinical parameters of SCD patients before and after treatment with HU

Out of the 105 sickle cell patients on HU, 68 (64.8 %) experienced a vaso-occlusive crisis at baseline, but this reduced to 20 (19.0 %) after treatment with HU at six months. This change was significant ($p < 0.001$). Acute chest syndrome reduced from 4 (3.8 %) at baseline to 1 (1.0 %) at six months after treatment. This change was not significant ($p = 0.174$). The frequency of blood transfusion reduced from 7 (6.7 %) pre-intervention to 3 (2.9 %) post-intervention at six months. This was also not statistically significant ($p = 0.195$). Hospitalisation also reduced from 38 (36.2 %) at baseline to 10 (9.5 %) at six months. This change was statistically significant at $P < 0.001$ (Table 3).

Table 3. Clinical Manifestations of SCD patients before and after treatment with HU (z-Test of Proportions)

| Variables | Treatment with HU | | Total | P-value |
|------------------------------|-------------------|-----------------|-------|---------|
| | Pre-test N (%) | Post-test N (%) | | |
| Vaso-occlusive crises | | | 45.07 | <0.001 |
| No | 37 (35.2) | 85 (81.0) | | |
| Yes | 68 (64.8) | 20 (19.0) | | |
| Acute chest syndrome | | | 1.84 | 0.174 |
| No | 101 (96.2) | 104 (99.0) | | |
| Yes | 4 (3.8) | 1 (1.0) | | |
| Blood transfusion | | | 1.68 | 0.195 |
| No | 98 (93.3) | 102 (97.1) | | |
| Yes | 7 (6.7) | 3 (2.9) | | |
| Hospitalised | | | 21.23 | <0.001 |
| No | 67 (63.8) | 94 (90.5) | | |
| Yes | 38 (36.2) | 10 (9.5) | | |

4. Discussion

This study aimed to evaluate the effect of HU on clinical outcomes among adolescents and adult SCD patients in Ghana. The study assessed the effect of HU on clinical and haematological outcomes among patients in the largest adolescent and adult SCD Clinic in Ghana. The sample size employed ($n=105$) is comparatively higher than most other studies on SCD and HU with sample sizes ranging between 24 and 128 (Adewoyin et al., 2017; Akingbola et al., 2019; Neves et al., 2012; Nwenyi et al., 2014; Pradhan et al., 2018; Sethy et al., 2018; Silva-Pinto et al., 2013; Singh et al., 2010; Yahouédéhou et al., 2018). This study demonstrates beneficial effects in both haematological and clinical parameters following HU use. HU increased Hb level, MCV, reduced WBC, Reticulocyte, and Platelet counts at six months and 12 months. This finding is similar to previous studies (Adewoyin et al., 2017; Akingbola et al., 2019; Neves et al., 2012; Pradhan et al., 2018; Sethy et al., 2018; Silva-Pinto et al., 2013; Singh et al., 2010; Yahouédéhou et al., 2018) in which HU significantly increased Hb level, MCV and reduced WBC, PLT count at 12 months.

At six months of HU therapy, the patients presented with a significant increase in Hb and MCV, along with a reduction in WBC and platelet counts. These findings are similar to previous studies in India and Brazil (Di Maggio et al., 2018; Singh et al., 2010b). However, reticulocyte counts were not reported by these authors. In our study, reticulocyte counts were reduced significantly at six months and maintained at 12 months. There was no significant difference in the white cell counts, platelet count and MCV at 6 and 12 months, similar to a study by Singh et al. (2010), suggesting that the changes seen in these parameters were maintained. This is not surprising since most patients were maintained on a fixed dose of HU. Only the Hb level increased significantly at 12 months, which was in agreement with most studies (Pradhan et al., 2018; Sethy

et al., 2018; Silva-Pinto et al., 2013). On the contrary, Singh et al. (2010) reported no significant increase in Hb after a year with a sample size of 24 patients.

A study in India and Greece (Singh et al., 2010; Voskaridou et al., 2010) reported a highly significant increase in MCV. Due to the relatively high cost of high-performance liquid chromatography (HPLC) for Hb quantification, most of the patients in this study could not pay for it. Only one patient performed a pre- and post-HPLC for HbF quantification, and this showed an increase in HbF levels after HU treatment. However, increased HbF concentration is only one mechanism of HU action in SCD. This finding is supported by Singh et al. (2010), indicating an excellent response to HU even without a significant change in HbF.

The frequency of vaso-occlusive crisis and hospitalisation was reduced significantly in this study. This was similar to a study conducted in India (Pradhan et al., 2018) that observed that the frequency of blood transfusion and acute chest syndrome was reduced by HU in this study, but these reductions were not statistically significant. This might be a result of very few patients who experienced acute chest syndrome or who received transfusion before they were started on HU.

5. Conclusion and Limitations

HU treatment resulted in a beneficial reduction in WBC, Platelet and Reticulocyte count and increased Hb level and MCV among the patients. Clinically, HU reduced the frequency of vaso-occlusive crises, acute chest syndrome, blood transfusion and hospitalisation. HU was generally safe in our cohort of patients.

The study's retrospective nature posed a limitation, as not all patients had complete data for all parameters, particularly for reticulocyte counts, potentially affecting the generalisability of the findings. Additionally, the study did not analyse the results based on the doses HU patients received or differentiate between the types of SCD. These variables are known to influence treatment response and clinical outcomes.

6. Implications

This study supports the continued use of HU therapy for treating SCD in Ghana by demonstrating its efficacy in improving haematological parameters and clinical outcomes among adolescent and adult patients. These findings may inform policy decisions and guidelines for managing SCD at national and regional levels.

Future research should consider stratifying analyses based on the doses of HU administered and differentiating between the various subtypes of SCD. Future research should also adopt a prospective study design with longitudinal follow-up to ensure sustained treatment effects over time in Ghana and other countries with similar health systems.

7. Declarations

Ethics approval and consent to participate

The KBTH-IRB granted ethics approval for the study (STC/IRB/000102/2021).

Consent for publication

All authors read and approved the final version of the manuscript for publication and agree to be accountable for all aspects of the work, ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Availability of data and materials

The data supporting this study will be made available upon reasonable request to the corresponding author (andrews.druye@ucc.edu.gh).

Conflict of interest statement

The authors do not have any personal or financial interest in this study.

Funding

The study was funded by the West Africa Genetics Medicine Center.










Authors' contributions

AAO and HAB conceptualised the study. AAO and HAB designed the study with input from DD, AAD and IAK. AAO extracted data from patient folders. IS, DD, AAD and HAB analysed and interpreted the data. AGM, AAO and HAB drafted the initial manuscript. EO, WG, AAD and IAK contributed to the revision and finalisation of the manuscript. All authors read and approved the final version of the manuscript.

8. Acknowledgements

This study was supported in part by a Postgraduate Fellowship from the West African Genetics Medicine Centre (WAGMC). We acknowledge Akosua Nyarko Kissi, the Records Staff of GICG, and Mr. Kwame Asante for assisting in data extraction.

Authors' ORCID

Akosua Asante-Offei  <https://orcid.org/0009-0002-9183-8310>
 Abdul Gafaru Mohammed  <https://orcid.org/0000-0003-4119-0464>
 Issah Sumaila  <https://orcid.org/0000-0003-3332-1305>
 William Ghunney  <https://orcid.org/0000-0002-6119-1950>
 Dwomoh Duah  <https://orcid.org/0000-0002-2726-9929>
 Irene A. Kretchy  <https://orcid.org/0000-0001-6811-5937>
 Andrew Adjei Druye  <https://orcid.org/0000-0002-1614-6579>
 Edeghonghon Olayemi  <https://orcid.org/0000-0002-1646-4470>
 Harriet Affran Bonful  <https://orcid.org/0000-0003-0069-3241>

References

- [Adewoyin et al., 2017](#) – Adewoyin, A.S., Oghuwu, O.S., Awodu, O.A. (2017). Hydroxyurea therapy in adult Nigerian sickle cell disease: A monocentric survey on pattern of use, clinical effects and patient's compliance. *African Health Sciences*. 17(1): 255-261. DOI: <https://doi.org/10.4314/ahs.v17i1.31>
- [Akingbola et al., 2019](#) – Akingbola, T.S., Tayo, B.O., Ezekekwa, C.A., Sonubi, O., Zhang, X., Saraf, S.L., ... Gordeuk, V.R (2019). "Maximum tolerated dose" vs "fixed low-dose" hydroxyurea for treatment of adults with sickle cell anemia. *American Journal of Hematology*. 94(4): E112-E115. DOI: <https://doi.org/https://doi.org/10.1002/ajh.25412>.
- [Alvarez et al., 2012](#) – Alvarez, O., Miller, S.T., Wang, W.C., Luo, Z., McCarville, M. B., Schwartz, G.J., ... BABY HUG Investigators. (2012). Effect of hydroxyurea treatment on renal function parameters: results from the multi-center placebo-controlled BABY HUG clinical trial for infants with sickle cell anemia. *Pediatric Blood & Cancer*. 59(4): 668-674. DOI: <https://doi.org/10.1002/pbc.24100>.
- [Asnani et al., 2019](#) – Asnani, M.R., Francis, D.K., Brandow, A.M., Hammond Gabbadon, C.E., Ali, A. (2019). Interventions for treating neuropathic pain in people with sickle cell disease. *The Cochrane Database of Systematic Reviews*. 7(7): CD012943. DOI: <https://doi.org/10.1002/14651858.CD012943.pub2>.
- [Badawy et al., 2017](#) – Badawy, S.M., Thompson, A.A., Penedo, F.J., Lai, J.-S., Rychlik, K., Liem, R.I. (2017). Barriers to hydroxyurea adherence and health-related quality of life in adolescents and young adults with sickle cell disease. *European Journal of Haematology*. 98(6): 608-614. DOI: <https://doi.org/10.1111/ejh.12878>
- [Di Maggio et al., 2018](#) – Di Maggio, R., Hsieh, M. M., Zhao, X., Calvaruso, G., Rigano, P., Renda, D., ... Maggio, A. (2018). Chronic administration of hydroxyurea (HU) benefits caucasian patients with sickle-beta thalassemia. *International Journal of Molecular Sciences*. 19(3): 681. DOI: <https://doi.org/https://doi.org/10.3390/ijms19030681>
- [Diallo, Tchernia, 2002](#) – Diallo, D., Tchernia, G. (2002). Sickle cell disease in Africa. *Current Opinion in Hematology*. 9(2): 111-116. DOI: <https://doi.org/10.1097/00062752-200203000-00005>
- [Edwin et al., 2011](#) – Edwin, A.K., Edwin, F., Etwire, V. (2011). Controlling sickle cell disease in Ghana ethics and options. *Pan African Medical Journal*. 10: 1-9. DOI: <https://doi.org/10.4314/pamj.v10i0.72223>
- [Ikawa et al., 2019](#) – Ikawa, Y., Miccio, A., Magrin, E., Kwiatkowski, J. L., Rivella, S., Cavazzana, M. (2019). Gene therapy of hemoglobinopathies: Progress and future challenges. *Human Molecular Genetics*. 28(R1): R24–R30. DOI: <https://doi.org/10.1093/hmg/ddz172>
- [Modell, Darlison, 2008](#) – Modell, B., Darlison, M. (2008). Global epidemiology of haemoglobin disorders and derived service indicators. *Bulletin of the World Health Organization*. 86(6), 480-487. DOI: <https://doi.org/https://doi.org/10.2471/blt.06.036673>.
- [Neves et al., 2012](#) – Neves, F., Menezes Neto, O.A., Polis, L.B., Bassi, S.C., Brunetta, D.M., Silva-Pinto, A.C., Angulo, I.L. (2012). Hematological differences between patients with different

- subtypes of sickle cell disease on hydroxyurea treatment. *Revista Brasileira de Hematologia e Hemoterapia*. 34(6): 426-429. DOI: <https://doi.org/https://doi.org/10.5581/1516-8484.20120107>
- [Nevitt et al., 2017](#) – *Nevitt, S.J., Jones, A.P., Howard, J.* (2017). Hydroxyurea (hydroxycarbamide) for sickle cell disease. *The Cochrane Database of Systematic Reviews*. 4(4): CD002202. DOI: <https://doi.org/10.1002/14651858.CD002202.pub2>
- [Nwenyi et al., 2014](#) – *Nwenyi, E., Leafman, J., Mathieson, K., Ezeobah, N.* (2014). Differences in quality of life between pediatric sickle cell patients who used hydroxyurea and those who did not. *International Journal of Health Care Quality Assurance*. 27(6): 468-481. DOI: <https://doi.org/10.1108/IJHCQA-01-2013-0008>.
- [Nyonator et al., 2023](#) – *Nyonator, C., Amoah, E., Addo, E.F., Mukanga, M., Asubonteng, A. K., Ohene-Frempong, K., ... , Ofori-Acquah, S.F.* (2023). Access to essential therapy for sickle cell disease in Africa: Experience from a national program in Ghana. In *Seminars in Hematology*. WB Saunders.
- [Olowoyeye, Okwundu 2020](#) – *Olowoyeye, A., Okwundu, C.I.* (2020). Gene therapy for sickle cell disease. *Cochrane Database of Systematic Reviews*. 2020(11). DOI: <https://doi.org/10.1002/14651858.CD007652.pub7>.
- [Opoka et al., 2017](#) – *Opoka, R.O., Ndugwa, C.M., Latham, T.S., Lane, A., Hume, H.A., Kasirye, P., ... John, C.C.* (2017). Novel use of Hydroxyurea in an African Region with Malaria (NOHARM): a trial for children with sickle cell anemia. *Blood, The Journal of the American Society of Hematology*. 130(24): 2585-2593.
- [Piel et al., 2013](#) – *Piel, F.B., Patil, A.P., Howes, R.E., Nyangiri, O.A., Gething, P.W., Dewi, M., ... Hay, S.I.* (2013). Global epidemiology of Sickle haemoglobin in neonates: A contemporary geostatistical model-based map and population estimates. *The Lancet*. 381(9861): 142-151. DOI: [https://doi.org/10.1016/S0140-6736\(12\)61229-X](https://doi.org/10.1016/S0140-6736(12)61229-X).
- [Pradhan et al., 2018](#) – *Pradhan, B., Kullu, B.K., Tripathy, S., Patel, N.K.* (2018). Low dose oral hydroxyurea prophylaxis improves all clinico: haematological parameters among sickle cell disease patients. *International Journal of Research in Medical Sciences*. 6(6): 1950. DOI: <https://doi.org/10.18203/2320-6012.ijrms20182017>.
- [Sethy et al., 2018](#) – *Sethy, S., Panda, T., Jena, R.K.* (2018). Beneficial Effect of Low Fixed Dose of Hydroxyurea in Vaso-occlusive Crisis and Transfusion Requirements in Adult HbSS Patients: A Prospective Study in a Tertiary Care Center. *Indian Journal of Hematology & Blood Transfusion*. 34(2): 294-298. DOI: <https://doi.org/10.1007/S12288-017-0869-X>.
- [Silva-Pinto et al., 2013](#) – *Silva-Pinto, A.C., Angulo, I.L., Brunetta, D.M., Neves, F.I.R., Bassi, S.C., Santis, G.C.D., Covas, D.T.* (2013). Clinical and hematological effects of hydroxyurea therapy in sickle cell patients: a single-center experience in Brazil. *São Paulo Medical Journal*. 131: 238-243. DOI: <https://doi.org/https://doi.org/10.1590/1516-3180.2013.1314467>.
- [Singh et al., 2010](#) – *Singh, H., Dulhani, N., Kumar, B. N., Singh, P., Tiwari, P.* (2010). Effective control of sickle cell disease with hydroxyurea therapy. *Indian journal of pharmacology*, 42(1), 32-35. DOI: <https://doi.org/https://doi.org/10.4103/0253-7613.62409>.
- [Tarazi et al., 2021](#) – *Tarazi, R.A., Patrick, K.E., Iampietro, M., Apollonsky, N.* (2021). Hydroxyurea use associated with nonverbal and executive skills in sickle cell anemia. *Journal of Pediatric Psychology*. 46(6): 710-718.
- [Thornburg et al., 2011](#) – *Thornburg, C.D., Calatroni, A., Panepinto, J.A.* (2011). Differences in health-related quality of life in children with sickle cell disease receiving hydroxyurea. *Journal of Pediatric Hematology/Oncology*. 33(4): 251-254. DOI: <https://doi.org/10.1097/MPH.ob013e3182114c54>
- [Tshilolo et al., 2019](#) – *Tshilolo, L., Tomlinson, G., Williams, T. N., Santos, B., Olupot-Olupot, P., Lane, A., ... Ware, R.E.* (2019). Hydroxyurea for children with sickle cell anemia in sub-Saharan Africa. *New England Journal of Medicine*. 380(2): 121-131.
- [Voskaridou et al., 2010](#) – *Voskaridou, E., Christoulas, D., Bilalis, A., Plata, E., Varvagiannis, K., Stamatopoulos, G., ... Terpos, E.* (2010). The effect of prolonged administration of hydroxyurea on morbidity and mortality in adult patients with sickle cell syndromes: results of a 17-year, single-center trial (LaSHS). *Blood, The Journal of the American Society of Hematology*. 115(12): 2354-2363. DOI: <https://doi.org/https://doi.org/10.1182/blood-2009-05-221333>
- [Wankhade et al., 2013](#) – *Wankhade, V., Andhale, R.B., Lodha, S.* (2013). Diverse clinical manifestations in sickle cell anemia: Study in district Amravati, MS India. *Journal of Blood Disorders and Transfusion*. 4: 136.

[Yahouédéhou et al., 2018](#) – *Yahouédéhou, S.C.M.A., Carvalho, M.O.S., Oliveira, R.M., Santiago, R.P., da Guarda, C.C., Carvalho, S.P., ... , de Souza Gonçalves, M.* (2018). Sickle Cell Anemia Patients in Use of Hydroxyurea: Association between Polymorphisms in Genes Encoding Metabolizing Drug Enzymes and Laboratory Parameters. *Disease Markers*. 2018: 1-11. DOI: <https://doi.org/10.1155/2018/6105691>

[Yang et al., 2022](#) – *Yang, M., Elmuti, L., Badawy, S.M.* (2022). Health-related quality of life and adherence to hydroxyurea and other disease-modifying therapies among individuals with sickle cell disease: a systematic review. *BioMed Research International*. 2122056. DOI: <https://doi.org/10.1155/2022/2122056>

[Yawn et al., 2014](#) – *Yawn, B.P., Buchanan, G.R., Afenyi-Annan, A.N., Ballas, S.K., Hassell, K.L., James, A.H., ... , John-Sowah, J.* (2014). Management of sickle cell disease: summary of the 2014 evidence-based report by expert panel members. *JAMA*. 312(10): 1033-1048. DOI: <https://doi.org/10.1001/jama.2014.10517>