

JIPE

Journal of Issues and Practice in Education

**Special Issue: The 2nd International Conference in Education, held at
Mwalimu Julius Nyerere Leadership School (MJNLS) – Kibaha (16th to
18th of October 2024)**

Host: Faculty of Education, the Open University of Tanzania

Volume 17(Special Issue) of 2025

ISSN 2961-6328 (Electronic)



The Open University of Tanzania Faculty of Education

P. O. Box 23409 Dar es Salaam

Tanzania

Email: jipe@out.ac.tz

Website: www.out.ac.tz

EDITORIAL BOARD

Chief Editor

Dr. Mohamed Msoroka: Senior Lecturer in the Department of Educational Foundations, Adult and Distance Education, Faculty of Education, the Open University of Tanzania, Tanzania

Managing Editor

Dr. Coletha Ngirwa: Senior Lecturer in the Department of Educational Policy, Planning, and Administration, Faculty of Education, the Open University of Tanzania, Tanzania

Technical Editor

Dr. Diana Amundsen: Senior Lecturer in Adult Development and Adult Learning, School of Education, University of Waikato, New Zealand

Associate Editors

Dr. Banchakarn Sameephet: Lecturer in Applied Linguistics, Faculty of Humanities and Social Sciences, KhonKaen University, Thailand

Prof. Elinami Swai: Associate Professor of Adult Education, Faculty of Education, Open University of Tanzania, Tanzania

Dr. Chandan Boodhoo: Senior Lecturer in the School of Education, Mauritius Institute of Education (MIE), Mauritius

Dr. Godlove L. Kyakwe: Senior Lecturer in the College of Education, University of Dodoma, Tanzania

Prof. Michael Ng'umbi: Associate Professor of Adult and Distance Education, the Institute of Adult Education, Tanzania

Prof. Bekalu A. Taye: Associate Professor of English Language Education, Kotebe University of Education, Ethiopia

Dr. Miswaru Bello: Senior Lecturer in Educational Psychology, Sa'adatu Rimi University of Education, Kano, Nigeria

- Dr. Rose Chikopela: Lecturer and Head of Department (Department of Primary and Secondary Education), Chalimbana University, Zambia
- Prof. Placidius Ndibalema: Associate Professor in the College of Education, University of Dodoma, Tanzania

ADVISORY BOARD

Prof. Michael A. Peters:	Distinguished Professor at Beijing Normal University, China
Prof. Wally Penetito:	Professor of Māori Education at Victoria University, New Zealand
Prof. Elifas T. Bisanda:	Professor in Material Engineering and Chairholder, Unesco Chair on Teacher Education and Curriculum, the Open University of Tanzania, Tanzania
Prof. Alex B. Makulilo:	Professor in ICT Law and Vice-Chancellor of the Open University of Tanzania, Tanzania.
Prof. Deus Ngaruko:	Professor in Economics, the Open University of Tanzania, Tanzania.
Prof. Modest D. Varisanga:	Professor in Biotechnologies, the Open University of Tanzania, Tanzania.
Prof. George Oreku:	Professor in ICT, the Open University of Tanzania, Tanzania
Dr. Josephat A. Saria:	Senior Lecturer, Environmental Chemistry, Faculty of Science, Technology and Environmental Studies, the Open University of Tanzania, Tanzania.
Dr. Athumani S. Samzugui:	Senior Lecturer in Library Studies, the Open University of Tanzania, Tanzania.

Technical Team:

Ms. Flora Nashon Nyaisa: Journal Manager

Mr. Augustine Kitulo: Website Administrator

Mr. Thomas Kilumbi: Graphics Administrator

The Journal of Issues and Practice in Education (JIPE) is a property of the Open University of Tanzania and is operated by the Faculty of Education. The journal publishes research articles that add new knowledge to the field of education.

All correspondence should be addressed to:

The Chief Editor–JIPE

The Open University of Tanzania

P.O. Box 23409

Dar es Salaam, Tanzania

Or

Email: jipe@out.ac.tz

jipeout@gmail.com

©The Open University of Tanzania, 2025

All rights reserved

Note: Opinions expressed in this journal are those of the authors and not necessarily those of the publisher- The Open University of Tanzania.

The Purpose of the Publication

The Journal of Issues and Practice in Education (JIPE) is a refereed journal produced by the Faculty of Education of the Open University of Tanzania. It is published twice a year, that is June and December. The journal is designed to inform both academics and the public on issues and practices related to the field of education.

The journal provides academics with a forum to share experiences and knowledge. It also informs the public about issues pertinent to their day-to-day educational experiences. We believe that sharing information related to education is important not only for academic, professional, and career development but also for informed policymakers and community activities in matters pertaining to the field of education.

EDITORIAL

With great honour and scholarly pride, I introduce this special issue of the Journal of Issues and Practice in Education (JIPE), a collection of peer-reviewed articles that emerged from the 2nd International Conference in Education, held in October 2024. This conference was hosted by the Faculty of Education of the Open University of Tanzania at the Mwalimu Julius Nyerere Leadership School in Kibaha. This academic event brought together researchers, education practitioners, policymakers, and students from across Africa and beyond to engage in critical discussion under the timely theme: "Promoting Basic Education for Sustainable Development."

The 2024 conference served as a platform to disseminate research findings and as a hub for policy reflection and pedagogical innovations in addressing the pressing challenges facing education systems in sub-Saharan Africa. The presentations underscored the importance of inclusive, equitable, and contextually responsive education for sustainable development, social transformation, and global citizenship.

This special issue features eleven scholarly articles, each providing fresh insight into the complex interrelations between education policy, practice, gender, inclusion, and innovation. While their thematic breadth is considerable, they all converge on one essential truth: that basic education must be continuously reimaged and supported to be truly transformative and sustainable.

The opening article, "Participation of Female Teachers in Professional Development and Capacity Building: A Case of Four Selected Provinces in Zambia," highlights the opportunities and institutional barriers facing women in the teaching profession; this is an important gender lens for understanding teacher effectiveness and development. In "The Role of Teachers in Enhancing Inclusive Education: A Case Study of Primary Schools in Zanzibar," the authors explore educators' pivotal role in fostering inclusive learning environments for children of diverse abilities.

Addressing one of the most socially sensitive challenges, "Assessing the Experiences of Teen Mothers under the Re-entry Policy in Secondary Schools" provides grounded evidence from Tabora, Tanzania, on how policy meets the lived realities of vulnerable learners. Similarly, "Barriers to Girls' Access and Participation in Secondary Education in Agro-Pastoral Communities" unpacks girls' socio-cultural and economic impediments in rural Tanzania, offering evidence-based pathways for redress.

Educational leadership, a cornerstone for quality education, is examined in "The Impact of Servant Leadership Behaviours on Students' Academic Achievement" and "The Influence of School Quality Assurance Practices on Pupils' Academic Performance." These studies reaffirm the vital role of ethical and supportive leadership in fostering academic excellence and institutional accountability.

The issue also engages with parental and community involvement in education. "Parental Collaboration in Implementing the Competency-Based Curriculum for Learners with Special Needs" in Kenya emphasises how family engagement strengthens curriculum outcomes, particularly for children with disabilities.

In the domain of higher learning, two papers address urgent gaps in access and pedagogy. "Assessing Lecturers' Teaching Strategies for Learners with Hearing Impairment" interrogates instructional responsiveness in Tanzanian universities. In contrast, "Impediments Encountered by Female Learners in Accessing Diploma Education through Open and Distance Learning" explores gendered inequalities in tertiary education delivery models.

"Bibliometric Analysis of Psychological Distress Among Higher Learning Students in Africa" takes a regional lens to the growing mental health challenges of university students – an often overlooked but increasingly critical dimension of educational sustainability. Finally, the issue closes with "Effect of Digital Media on Writing Skills Among Lower Primary Pupils in Dodoma City," offering empirical evidence into the technological shifts shaping literacy development in early years' education.

The articles provide a composite picture of the strengths, tensions, and possibilities inherent in building an education system that is inclusive, resilient, and attuned to the demands of sustainable development. As Chief Editor, I commend the authors for their contributions, the peer reviewers for their meticulous evaluations, and the conference organising team for creating a space where such impactful work could be nurtured and shared.

This special issue will stimulate further scholarly dialogue, inform evidence-based policy reforms, and inspire innovative practices that advance basic education across the region.

Dr. Mohamed Salum Msoroka

Chief Editor,

Journal of Issues and Practice in Education (JIPE)

The Open University of Tanzania

May 2025

CONTENTS

EDITORIAL BOARD.....	ii
ADVISORY BOARD	iv
EDITORIAL	viii

Participation of Female Teachers in Professional Development And Capacity Building: A Case of Four Selected Provinces in Zambia <i>Judith Lubasi Ihubala-Ziwa, Natalia Mbambo Zulu² & Muoli Ngulube.....</i>	<i>1</i>
The Role of Teachers in Enhancing Inclusive Education: A Case Study of Primary Schools in Zanzibar <i>Eugen Mtemi Philip & Abba Shafffy Mrisho</i>	<i>20</i>
Assessing the Experiences of Teen Mothers under the Re-entry Policy in Secondary Schools: A Case of Uyui District Council- Tabora, Tanzania <i>Flora Nashon Nyaisa & Juma Hashim Njowe.....</i>	<i>35</i>
The Impact of Servant Leadership Behaviours on Secondary School Students' Academic Achievement in Tanzania <i>Florence Willbroad Ngua & Winfrida Saimon Malingumu</i>	<i>51</i>
The Influence of School Quality Assurance Practices on Pupils' Academic Performance in Public Primary Schools in Moshi Municipality, Tanzania <i>Jacqueline Wilbald Tarim¹ & Karoli John Mrema</i>	<i>64</i>
Parental collaboration in implementing the competency-based curriculum for learners with special needs in primary schools: A case of Thika West Sub County, Kenya <i>Joyce Kinyua.....</i>	<i>86</i>
Bibliometric Analysis of Psychological Distress Among Higher Learning Students in Africa <i>Justine Kavindi, January Basela & Martanus Ochola Omoro</i>	<i>111</i>
Assessing Lecturers' Teaching Strategies for Learners with Hearing Impairment in Tanzanian Higher Learning Institutions <i>Pharida P. Mgwesa & Eugen Mtemi Philip</i>	<i>139</i>
Impediments Encountered by Female Learners in Access to Diploma Education Through Open and Distance Learning in Tanzania <i>Rehema Dastan Msamada & Abdallah Jacob Seni</i>	<i>158</i>
Barriers to Girls' Access and Participation in Secondary Education: A Case Study of Agro-Pastoral Communities in Tarime District, Tanzania <i>Bhoke K. Kiranga & Abdallah Jacob Seni</i>	<i>176</i>

Effect of Digital Media on Spelling Skills Among Lower Primary Pupils of
Dodoma City in Tanzania

Ambwene Nazarius Kilungeja, Janeth Kigobe & Theresia Julius

Shavega..... 205

ABOUT THE JOURNAL.....219

Participation of Female Teachers in Professional Development And Capacity Building: A Case of Four Selected Provinces in Zambia

Judith Lubasi Ilubala-Ziwa¹, Natalia Mbambo Zulu² & Muoli Ngulube³

¹University of Zambia

judith.ziwa@unza.zm

²Zambia University College of Technology

nataliazulu03@gmail.com

³Charles Lwanga College of Education

muolingulube@gmail.com

Abstract

This study aimed to identify challenges female teachers in Zambia face regarding professional development and to propose measures to overcome these obstacles. Transformative Learning Theory and a pragmatic research philosophy utilized an embedded mixed-methods design. Quantitative survey data, including correlational analysis, were the primary source of information. At the same time, qualitative interviews were conducted to provide supplementary insights. The research utilized systematic random and purposive sampling, conducted across four provinces with a sample of 1017 participants calculated using the Yamane formula. Data were collected through self-administered surveys and semi-structured interviews and analyzed quantitatively using ANOVA and qualitatively through thematic analysis. Key findings revealed that female teachers faced significant challenges, including a lack of support from school administrators, hectic work schedules, role conflicts between domestic and professional responsibilities, financial constraints, and individual factors. To combat these issues, the study recommended regular school visits by in-service officers, flexible work schedules, reduced workloads, utilizing school administrators as instructional leaders during 'Continuous Professional Development (CPD)', and providing accessible professional training for all teachers. The study recommended that school administrators implement flexible work arrangements to support female teachers' professional growth. At the same time, policymakers must ensure that training opportunities are available regardless of teaching level. In-service officers should maintain regular engagement with schools.

Keywords: Professional development, female teachers, capacity building, combating measures

Introduction

The imperative of robust teacher professional development and capacity building is widely acknowledged as a cornerstone for elevating educational quality. Globally, high-quality education is recognized as a fundamental human right (Adams & Woods, 2015), with educators serving as pivotal agents in its delivery. Empirical research consistently substantiates the positive correlation between teachers possessing specialized knowledge, high self-efficacy, deep content expertise, and refined instructional skills, and enhanced student learning outcomes (Cruz, Wilson, & Wang, 2019; Marzano, 2017; Nyangau, 2020; Perry & Bevins, 2018; Yang & Baldwin, 2020). Darling-Hammond *et al.* (2017) posit that sustained, high-quality professional development is indispensable for empowering learners, while Ronfeldt *et al.* (2015) underscore the salient impact of effective educators on student achievement.

Within the educational discourse, capacity building is a systematic process to acquire and enhance the requisite skills and resources for proficient professional performance (Kumari, 2022). This process encompasses the augmentation of individual and collective proficiencies to facilitate continuous improvement in student learning (Clark, 2017). Munyi (2024) further accentuates the significant influence of capacity building on teachers' pedagogical delivery. Fundamentally, capacity building fortifies educators' capacity to thrive within an evolving professional milieu.

Professional development, conversely, is conceptualized as a focused endeavour to refine educators' knowledge, skills, and attitudes to optimize student learning. Salo, Francisco, and Olin Almqvist (2024) characterize professional development as situated learning within and for professional practice, a perspective corroborated by Ejekwu (2022), who highlighted its positive impact on classroom success. AbdulRab (2023) observes that continuous professional development facilitates acquiring novel skills and refining existing competencies. Abakah (2023) elucidates that professional development programs expose educators to innovative pedagogical methodologies and strategies tailored to diverse learning modalities. However, Salo *et al.* (2024) also acknowledge the challenges of translating professional development learning outcomes into generalizable knowledge for policy formulation.

In the Zambian educational landscape, "capacity building" for female educators is best understood as a comprehensive process. This process aims to strengthen their ability to deliver quality education, considering the unique constraints of the Zambian system. This comprehensive process includes providing relevant and accessible professional development opportunities

that enhance pedagogical skills and subject knowledge, addressing systemic barriers such as resource limitations, cultural factors, and deployment challenges, and ensuring alignment with national education goals. Professional development activities directly contribute to individual capacity. When a group of female teachers strengthens their capacities, it collectively enhances the school's or education system's capacity to deliver quality education. Therefore, professional development is a key component of capacity building. Capacity building can be viewed as the overarching goal, while professional development is vital to achieving that goal. Within educational systems, capacity building may encompass providing resources and updated curricula. In contrast, professional development involves effectively training educators to utilize those resources and curricula.

In Zambia, while the Teaching Council of Zambia (2015) emphasizes that teaching requires specialized training and ongoing development, female teachers face numerous challenges in participating in these activities. Nakamba (2018) identified domestic responsibilities, gender inequality, time constraints, and financial limitations. OECD (2013) and Chuang (2015) also highlighted similar challenges. Nakamba (2018) further noted difficulties in leadership aspirations and collaboration with male colleagues. Therefore, this study aims to ascertain the challenges hindering female educators' participation in professional development within four selected Zambian provinces and develop evidence-based recommendations.

Several studies have examined capacity building in Zambia, revealing specific challenges and potential solutions. Notably, Chanda and Phiri (2022), Shimalungwe (2016), and Nakamba (2018) document the disproportionate burden of domestic responsibilities, significantly limiting their time and energy for professional growth. Furthermore, Chanda and Phiri (2022) and Banda (2023) highlight resource constraints and inequitable access, particularly in rural areas, hindering female educators' ability to participate in professional development activities. Gender bias and discrimination, as identified by Mpezeni (2022) and Zulu and Banda (2020), also present significant obstacles, with negative attitudes and leadership practices impacting female educators' opportunities. Adding to these challenges, Nakamba (2018) points to financial constraints as a major barrier.

Conversely, studies also offer insights into potential solutions. Mubiana (2011) and Muyunda, Yue, and Oranga (2023) demonstrate the positive impact of continuing professional development on educational quality. Addressing the digital divide through digital literacy training, as highlighted by the National Institute for Scientific and Industrial Research (2021), and utilizing open and distance learning, as proposed by Sisagali, Kamocha and

Kamboni (2023), are identified as viable strategies. As Kudo (2015) emphasized, personal incentives and motivational support, aligned with the Government of the Republic of Zambia's (2019) National Gender Policy, are crucial for fostering motivation. Equitable leadership practices, as advocated by Zulu and Banda (2020), and policy frameworks outlined in the Ministry of Education's (2023) strategic plan are also essential for creating supportive environments. However, despite these insights, a discernible research gap exists regarding female subject teachers' specific professional development and capacity-building needs within government schools in selected Zambian provinces. This gap is particularly pertinent within the Zambian context, where a nuanced understanding of the intersection between professional development and capacity building is essential. Like many developing nations, Zambia confronts persistent challenges in ensuring equitable access to quality education. As Banda (2023:48) notes, "The persistent disparities in resource allocation and teacher distribution across Zambia's provinces create significant barriers to equitable access to quality education." Consequently, targeted efforts to bolster the capacity of educators, especially female teachers who often face unique obstacles to professional growth, are imperative. Effective teacher professional development is crucial for improving student learning outcomes (Darling-Hammond *et al.*, 2017; Wamalwa, 2023). However, female teachers in Zambia face significant challenges accessing these opportunities (Shimalungwe, 2016; Nakamba, 2018). This is concerning, as women constitute most of the teaching profession (Mulawarman, 2015) and are underrepresented in leadership positions within the Ministry of Education (Syachala, 2018).

Despite numerous studies on professional development and capacity building in Zambia (Mubiana, 2011; Kudo, 2015; Nakamba, 2018; Nyangau, 2020; Sisagali, Kamocha, & Kamboni, 2023; Muyunda, Yue, & Oranga, 2023), the challenges faced by female teachers in accessing these opportunities continue to escalate. This presents a significant obstacle to achieving the goals outlined in Zambia's Vision 2030. Therefore, this paper sought to ascertain challenges hindering female educators' professional development participation in four Zambian provinces and to formulate evidence-based recommendations.

Transformative Learning Theory

Transformative learning theory, as proposed by Mezirow (1991) and Enkhtur and Yamamoto (2017), posits that learning is not merely the acquisition of knowledge but a profound transformation of one's worldview. This occurs when individuals critically examine their beliefs, attitudes, and assumptions, leading to a re-evaluation of their understanding of the world. This theory emphasizes the importance of thought-provoking experiences that foster

deep, reflective engagement with new knowledge and perspectives in education.

When female teachers participate in professional development and capacity-building activities, they can engage in transformative learning. By reflecting on their experiences, re-examining their beliefs and assumptions about teaching practices, and developing new ideas and skills, teachers can enhance their pedagogical approaches and positively impact student learning. As Hyde (2021) suggests, discussion is a crucial aspect of transformative learning, as it enables individuals to engage in critical reflection and gain new insights. Through constructive dialogue, sharing perspectives, and discussing challenging issues, teachers can expand their understanding and develop alternative ways of thinking.

As outlined by Phiri *et al.* (2024), transformative learning involves a series of phases that facilitate significant changes in adult learners' perspectives and behaviours. These phases include a disorienting dilemma that challenges existing beliefs, self-examination to recognize the limitations of one's perspectives, critical assessment of past beliefs and behaviours, planning a course of action to address identified needs, acquiring knowledge and skills, exploring and trying new roles, and building self-efficacy. By progressing through these phases, adult learners can undergo transformative learning experiences that lead to significant personal and professional growth. Furthermore, the concept of onboarding, which is often applied in the workplace, aligns with transformative learning principles. By exposing female teachers to transformative learning activities, such as professional development, organizations can facilitate their adaptation to new knowledge and skills, ultimately enhancing their long-term success. In conclusion, the transformative learning framework provides a valuable lens for analyzing female teachers' participation in professional development and capacity-building activities. By examining the strategies used to create disorienting dilemmas, understanding the challenges female teachers face, and identifying effective combating measures, this study aims to improve teacher education and professional development in Zambia.

Methodology

This paper employed a mixed-methods research design, combining quantitative and qualitative approaches. The research was conducted in four selected provinces in Zambia: Copperbelt, Luapula, Southern, and Lusaka. A sample of 1,017 female teachers was selected from a population of 33,886 female teachers working in government schools in these provinces, as per the 2023 Education Statistical Bulletin (MoE 2023).

Data was collected through self-administered questionnaires and semi-structured interviews. Quantitative data was analyzed using ANOVA, and qualitative data was analyzed thematically. Content validity was established through literature review and expert consultation to ensure the validity and reliability of the research. Additionally, ethical considerations were adhered to, such as obtaining informed consent from participants and securing permission from authorities. The following section will present the findings and discussion of this research paper.

Findings and discussion

This study aimed to ascertain challenges hindering female educators' professional development participation in four Zambian provinces and to formulate evidence-based recommendations. Descriptive statistics, ANOVA, and qualitative analysis addressed this objective. The following findings emerged:

Challenges Faced by Female Teachers in Professional Development and Capacity Building Activities

Quantitative findings revealed that 37% strongly agreed, 26% agreed, 7% were undecided, 24% disagreed, and 18% strongly disagreed that lack of support from school leadership was a significant challenge faced by female teachers in participating in professional development and capacity building activities. Additionally, 28% strongly agreed, 26% agreed, 3% were undecided, 26% disagreed, and 21% strongly disagreed that a hectic work schedule was another major challenge.

Furthermore, 32% strongly agreed, 21% agreed, 5% were undecided, 34% disagreed, and 16% strongly disagreed that role conflict between professional and domestic work hindered female teachers' participation in professional development and capacity-building activities. Lastly, 50% of the participants agreed that individuality issues were another significant challenge faced by female teachers. These findings suggest that many female teachers perceive a lack of support from school leadership, hectic work schedules, role conflict, and individuality issues as significant challenges. The data indicates variability in responses, highlighting diverse experiences. Further analysis, such as ANOVA results in Table 1, may provide additional statistical insights;

Table 1

Analysis of Variance Test Statistics (ANOVA) on Challenges facing Female Teachers as they Participate in Professional Development and Capacity Building Activities

Challenge	Source	Sum of Squares	Df	Mean Square	F	Sig
Time Constraints	Between Groups	16.68	4	3.42	3.21	.30
	Within Groups	675.28	822	1.38		
	Total	691.96	852			
Individuality Issues	Between Groups	28.35	4	6.84	5.21	< .001
	Within Groups	866.55	822	1.72		
	Total	894.90	852			
Lack of Support from School Leadership	Between Groups	18.67	4	5.67	5.20	.003
	Within Groups	445.88	822	1.30		
	Total	464.55	852			
Lack of Trained Personnel to Oversee Professional Development	Between Groups	92.76	4	2.60	3.32	< .001
	Within Groups	608.76	822	0.95		
	Total	701.52	852			
Role Conflict Between Professional and Domestic Work	Between Groups	20.39	4	23.19	18.74	.008
	Within Groups	472.43	822	1.22		
	Total	492.82	852			
Hectic Work Schedules	Between Groups	10.39	4	23.19	18.74	< .001
	Within Groups	452.43	822	1.22		
	Total	462.82	852			

Source: Research Data (2024).

Table 2 presents the results of one-way ANOVAs examining the influence of various perceived constraints on female teachers' participation in professional development and capacity-building activities. The analysis revealed that perceived time constraints did not significantly predict participation, F- value =3.21, p=.300. Conversely, several other factors demonstrated a significant impact. Perceived individuality factors significantly predicted participation,

F- value=5.21, $p<.001$. Similarly, a perceived lack of support from school leadership significantly predicted participation, F-value =5.20, $p=.003$. The perceived lack of trained personnel also significantly predicted participation, F- value =3.32, $p<.001$. Hectic work schedules significantly predict participation, F- value=18.74, $p=.008$. Finally, perceived role conflict between professional and domestic work significantly predicted participation, F- value=18.74, $p<.001$. Notably, the p-values for individuality factors, lack of support from school administrators, lack of trained personnel, hectic work schedules, and role conflict were all below .05, indicating that these perceived constraints significantly influenced female teachers' involvement in professional development and capacity-building. Qualitative data were collected through interviews with selected participants to explain these quantitative findings further.

Table: 2

Barriers to Female Teachers' Participation in Professional Development

Theme	Supporting Quote
Lack of funds	<i>"Most female teachers find it hard to pay for their education due to family responsibilities, and worse, schools do not provide financial assistance when one participates in professional development activities."</i>
Individuality challenges and role conflict	<i>"Female teachers have a poor attitude towards upgrading their qualifications, especially in our communities; women's place is considered in the kitchen."</i>
Inflexible work schedule	<i>"We spend the whole day at work even when we are not teaching on that particular day, and by the time we go home and start attending to our domestic responsibilities, we are already tired. This prevents us from having enough time to participate fully in professional development activities."</i>
Lack of trained personnel	<i>"It is so discouraging to attend professional development meetings in our school because the continuous professional development (CPD) coordinator sometimes does not know what he does. He wants to override every activity. Female teachers also lack experienced people to mentor them towards professional development and capacity building, especially regarding upgrading and CPD."</i>

Source: Research Data 2024.

This table presents qualitative responses from female teachers regarding the challenges they face in participating in professional development activities.

Hereunder, is the interpretation of the themes in Table 2:

Lack of Funds: The scarcity of financial resources, a chronic issue within Zambia's resource-constrained education system, severely restricts female teachers' access to professional development, creating a "disorienting dilemma" (Mezirow, 2000). This is particularly acute in rural areas, where schools often operate with minimal budgets, and teachers face significant personal financial challenges. Zambia's reliance on copper exports and the

resulting economic vulnerabilities exacerbates these funding issues, directly impacting educational investment (Brown, 2023; Nakamba, 2018; Shimalungwe, 2016). This lack of funds prevents teachers from engaging in experiences that could challenge their existing perspectives and foster growth, directly hindering the transformative potential of professional development. Teachers cannot undergo the critical reflection and rational discourse necessary for transformative learning without the means to participate in workshops, conferences, or further education. These findings consistently align with previous research (Brown, 2023; Nakamba, 2018; Shimalungwe, 2016), confirming that financial limitations are a persistent barrier to teacher development. This limitation reinforces existing power structures and prevents teachers from expanding their frames of reference, ultimately hindering their ability to enhance pedagogical skills and address the specific needs of Zambian learners.

Individuality Challenges and Role Conflict: "Individuality challenges" encompass the complex interplay of societal expectations, personal responsibilities, and internal barriers that female teachers face, creating significant obstacles to professional growth by limiting the time and space available for critical reflection. In the Zambian context, this is particularly pronounced, as it involves navigating cultural norms, family responsibilities, and the pervasive issue of role conflict. Societal norms often dictate that women prioritize domestic duties, creating a direct conflict between professional development and family obligations. This conflict is further intensified by the impact of the HIV/AIDS pandemic, which has left many women as heads of households, significantly increasing their caregiving responsibilities. These constraints directly impact the teacher's ability to fully participate in transformative learning, hindering their capacity to engage in reflective processes or rational discourse. Furthermore, these findings align with previous research (Brown, 2023; Nakamba, 2018; Shimalungwe, 2016), confirming that these personal challenges and the resulting role conflict are widespread and impactful within the Zambian educational landscape.

Inflexible Work Schedule: The rigid structure of the teaching profession in Zambia, coupled with heavy workloads and administrative duties, creates an "inflexible work schedule" that severely limits opportunities for professional development. This is particularly problematic in Zambia, where teacher shortages and overcrowded classrooms are common, especially in rural schools. Long travel times to these rural schools further exacerbate the issue, compounding the strain on teachers' schedules. The need to balance professional responsibilities with family commitments, as highlighted by Sultana *et al.* (2024), is further intensified in the Zambian context due to cultural expectations and limited support systems. This lack of flexibility

directly contradicts the principles of transformative learning, which emphasize the importance of critical reflection, rational discourse, and ongoing learning. Teachers cannot deeply reflect on their assumptions and practices when their schedules are overloaded. Similarly, Sultana *et al.* (2024) found that many female teachers struggled to balance family and professional commitments due to frequent after-hours meetings. This demonstrates the strain of inflexible schedules on teachers' ability to participate in meaningful professional development and engage in the transformative process.

Lack of Trained Personnel: The absence of adequately trained personnel to conduct professional development activities severely compounds the challenges faced by female teachers in Zambia, limiting access to effective mentorship and guidance, both of which are key to transformative learning. This shortage restricts the availability of effective training programs and hinders the dissemination of transformative teaching practices. Without skilled facilitators, teachers cannot receive the necessary guidance and support to challenge their existing frames of reference and develop new perspectives. Furthermore, this lack of trained personnel inhibits opportunities for teachers to engage in rational discourse with knowledgeable individuals, a vital component of the transformative process. These findings align with previous research (Brown, 2023; Nakamba, 2018; Shimalungwe, 2016), consistently confirming that a lack of trained professionals is a major hindrance to teacher development. Critically, this shortage underscores the urgent need for local capacity building within Zambia's education sector. Relying on external consultants is often unsustainable and prohibitively expensive. Therefore, training local Zambian teachers to lead professional development initiatives directly aligns with the nation's goal of empowering its educators and promoting sustainable development, ensuring that transformative learning practices are embedded within the Zambian educational context (Brown, 2023; Nakamba, 2018; Shimalungwe, 2016).

It is important to note that quantitative and qualitative findings consistently highlighted several challenges female teachers face in participating in professional development and capacity-building activities: lack of funds, individual challenges, hectic work schedules, and a lack of trained personnel. These findings align with previous research (Brown, 2023; Nakamba, 2018; Shimalungwe, 2016). Specifically, quantitative data revealed that substantial proportions of female teachers perceived a lack of support from school leadership, hectic work schedules, and role conflict between professional and domestic responsibilities as major challenges. Similarly, Sultana *et al.* (2024) found that many female teachers struggled to balance family and professional commitments due to frequent after-hours meetings, supporting the qualitative insights.

Addressing these challenges necessitates a multi-faceted approach that considers the specific context of Zambia's education system. In alignment with the research objective of understanding the challenges and providing solutions, the researchers proposed the combating measures presented in the preceding subheadings.

The Combating Measures to the Challenges facing Female Teachers' Participation in Professional Development and Capacity Building

Quantitative findings indicated that 29% strongly agreed, 40% agreed, 13% were undecided, 16% disagreed, and 13% strongly disagreed that regular school visits by in-service education officers could help address the challenges faced by female teachers. Similarly, 40% strongly agreed, 24% agreed, 10% were undecided, 10% disagreed, and 18% strongly disagreed that flexible work schedules could be beneficial. Furthermore, 69% of the participants strongly agreed that providing professional training at all levels of education could be an effective strategy to combat the challenges female teachers face in professional development. These findings were supported by ANOVA results presented in Table 3.

Table 3

Analysis of variance test statistics (ANOVA) on combating measure on challenges faced by female teachers as they participate in professional development and capacity building activities

ANOVA		Sum of Squares	Df	Mean Square	F	Sig.
In-service officers should visit schools regularly	Between Groups	17.676	4	4.419	4.211	.003
	Within Groups	685.279	822	1.376		
	Total	702.954	852			
Provision of professional training at all levels	Between Groups	23.353	4	5.838	5.223	.000
	Within Groups	856.547	822	1.720		
	Total	879.901	852			
Flexible working schedules	Between Groups	18.666	4	4.666	5.212	.000
	Within Groups	445.879	822	.895		
	Total	464.545	852			
Promoting female teachers with lesser qualifications to those of higher ones	Between Groups	92.757	4	2.597	3.321	0.50
	Within Groups	608.762	822	.949		
	Total	701.519	852			
Using school leaders as instructional leaders in professional development and capacity building activities.	Between Groups	10.387	4	23.189	18.737	.008
	Within Groups	472.433	822	1.222		
	Total	482.819	852			

Source: Research Data (2024).

Five one-way analyses of variance (ANOVAs) were conducted to examine differences in opinions among groups of female teachers (N = 852) regarding strategies to address challenges in professional development. Results indicated statistically significant differences in opinions for four of the five strategies. Specifically, regarding the perception that in-service officers should visit schools regularly, a significant difference was found, $F\text{-value} = 4.211, p = .003$. Similarly, the provision of professional training at all levels of education demonstrated a highly significant difference, $F\text{-value} = 5.223, p < .001$, as implemented flexible working schedules, $F\text{-value} = 5.212, p < .001$. Using school leaders as instructional leaders in professional development also showed a statistically significant difference, $F\text{-value} = 18.737, p = .008$. Borderline statistical significance was observed regarding the promotion of female teachers with lesser qualifications to those with higher ones, $F\text{-value} = 3.321, p = .050$. To further explore these findings and gain deeper insights into these perceptions, interviews were conducted with several participants, and the results are presented in Table 4.

Table 4
Strategies to Address Challenges in Professional Development

Theme	<i>Illustrative Quotes</i>
Continuous Mentorship & Guidance	<i>"Poor attitude towards professional development is a syndrome among women in our career because many factors contribute. Therefore, proper mentorship and guidance are the only way to help them."</i>
Workload Reduction	<i>"We need relief in terms of workload. Let more teachers be sent to our schools so that we can study and attend in-service training."</i>
Continuous Learning	<i>"Female teachers consistently desire to continue participating in professional development and capacity-building activities; however, access to training centres, particularly in rural schools, is essential for realizing this goal."</i>
Improved Teacher Allocation & Duty Distribution	<i>"High student enrolment creates excessive workload for teachers, particularly women with domestic responsibilities. Workload adjustments are needed to allow female teachers time for professional development."</i>
Motivational Talks & Encouragement	<i>"Motivational talks delivered by female professionals who have achieved academic success while managing domestic responsibilities can benefit female teachers' participation in professional development and capacity-building activities."</i>

Source: Research Data (2024).

Several strategic interventions are crucial to facilitate professional development for Zambian female educators, as discussed in the preceding paragraphs.

Continuous Mentorship & Guidance: The concept of "ubuntu," emphasising community and mutual support, is deeply embedded in Zambian culture, making mentorship a particularly powerful tool. Mentors can provide professional guidance and vital cultural insights, aiding female educators in navigating societal expectations that might otherwise hinder their advancement. In rural areas, where isolation can be challenging, mentorship programs can create essential support networks, build confidence, and reduce feelings of isolation. Furthermore, mentors can help female educators navigate the specific challenges within the Zambian education system, such as resource constraints and cultural sensitivities in the classroom. Importantly, the relationship should foster top-down and peer-to-peer mentorship, enabling female educators to support each other (Ministry of Education, 2023).

Workload Reduction: The traditional division of labour in Zambian households often places a disproportionate burden of domestic responsibilities on women, significantly affecting their time and energy for professional development. Addressing this requires a multifaceted approach, encompassing advocacy for gender equality in domestic responsibilities and practical measures such as flexible work schedules and childcare support. School administrators must be trained in equitable duty distribution within the school setting, as female teachers are often assigned more non-teaching duties than their male counterparts. Reducing workload also necessitates streamlining administrative tasks and ensuring access to adequate resources, which can be particularly challenging in underfunded rural schools (Chanda & Phiri, 2022).

Continuous Learning: In a rapidly evolving world, continuous learning is essential for educators to remain abreast of best practices and new technologies. In Zambia, this necessitates bridging the digital divide by providing access to online resources and training in digital literacy. Creating opportunities for educators to engage in collaborative learning, such as through teacher networks and professional learning communities, is also crucial. The Ministry of Education must also ensure access to up-to-date and relevant learning materials. Critically, learning initiatives should incorporate local languages to ensure effective application within local communities (National Institute for Scientific and Industrial Research, 2021).

Improved Teacher Allocation and Duty Distribution: Gender bias can significantly influence teacher allocation and duty distribution, often assigning female educators less prestigious or challenging roles. Implementing transparent and objective criteria for teacher allocation is essential to ensure fairness and equity. School administrators require training in gender-sensitive leadership practices to mitigate unconscious bias in their

decision-making. Furthermore, teacher placement should consider local knowledge and language proficiency to maximise effectiveness (Zulu & Banda, 2020).

Motivational Talks and Encouragement: In a context where female educators frequently face significant challenges, motivational talks and encouragement are powerful tools for building confidence and resilience. Sharing success stories of female educators who have overcome obstacles can inspire others to pursue their professional goals. Cultivating a culture of recognition and celebration for female educators' achievements can also boost morale and encourage continued professional growth. To ensure maximum comprehension and impact, these motivational talks should be delivered in local languages (Government of the Republic of Zambia, 2019).

It is imperative to note that Transformative learning theory, which emphasises critical reflection and perspective shifts, provides a powerful framework for understanding how professional development can empower female Zambian educators. By implementing strategies like continuous mentorship that prompts critical examination of societal norms, workload reduction that creates space for reflective practice, continuous learning that encourages inquiry and collaborative meaning-making, equitable teacher allocation that challenges power dynamics, and motivational support that builds self-efficacy, educators are guided through a process of questioning existing beliefs, experiencing "disorienting dilemmas," and ultimately constructing new, more empowering perspectives on their roles and capabilities, leading to profound personal and professional transformation (Mezirow, 2000).

Conclusion

This study, conducted across four Zambian provinces, demonstrated that perceived deficiencies in institutional financial support, demanding work schedules, role conflict arising from competing professional and domestic responsibilities, and individual-level challenges significantly constrained participation. Qualitative data derived from semi-structured interviews corroborated these findings, elucidating the lived experiences of female educators and highlighting the detrimental impact of financial constraints, sociocultural expectations, inflexible institutional structures, and a paucity of qualified personnel. Conversely, the study identified potential ameliorative strategies, with quantitative data demonstrating significant support for interventions such as regular in-service officer visits, comprehensive professional training initiatives, flexible work arrangements, and integrating school leaders as instructional facilitators. Qualitative insights further emphasized the importance of sustained mentorship, workload reduction,

continuous learning opportunities, equitable duty allocation, and motivational support. These findings, consistent with existing scholarship, underscore the necessity for targeted, context-sensitive interventions to mitigate systemic barriers and foster equitable professional growth among female educators in Zambia.

Recommendations

In order to optimize female teachers' engagement in professional development, a comprehensive, multi-faceted strategy is imperative. The Ministry of Education (MoE) should implement and enforce a national policy mandating equitable distribution of professional development resources, prioritizing female educators, especially in rural areas; the Ministry should also provide access to continuous mentorship and revise teacher allocation and duty distribution policies to ensure gender equity prevails. It should further provide training for school administrators on gender-sensitive leadership. School administrators should implement flexible work schedules, provide childcare support during professional development activities, and enhance opportunities for female educators to take on leadership roles. In-Service Education Officers should conduct regular school visits to enhance on-site support and guidance for female educators and act as mentors and facilitators, promoting critical reflection and transformative learning among female educators (Mezirow, 2000).

Furthermore, teacher training institutions should integrate gender-sensitive pedagogy and leadership training into teacher education programs to equip teacher trainees with gender-sensitive leadership skills. Continuing professional development programs, including online and distance learning options, should also be accessible to female educators. Community Leaders and Families should also promote the value of female educators' professional development and support their participation in learning activities. Finally, to further advance the scholarly understanding of this phenomenon, future research should systematically employ longitudinal research designs to assess the long-term effects of these interventions on female teachers' career trajectories and student achievement. Future research should also investigate the mediating mechanisms through which mentorship and flexible work arrangements influence female teachers' engagement in professional development.

Acknowledgements

We sincerely thank all teachers and school administrators who participated in this study. We also thank the Permanent Secretary of Education Services for permitting this research. Without their invaluable contributions, this study would not have been possible.

References

- AbdulRab, H. (2023). Teacher professional development in the 21st century. *African Journal of Education and Practice*, 9(4), 39–50.
<https://doi.org/10.47604/ajep.2237>
- Adams, B. L., & Woods, A. (2015). A model for recruiting and retaining teachers in Alaska's rural K–12 schools. *Peabody Journal of Education*, 90, 250–262.
- Alam, M. S. (2014). Women in teaching profession: Impacts and challenges. *International Journal of Social, Education, Economics and Management Engineering*, 8(6).
- Banda, L. M. (2023). Educational disparities in Zambia. *Journal of Zambian Education*, 10(2), 45–60.
- Brown, M. (2023). Navigating the challenges: Female teachers in South Africa, igniting change. *DE&I Speaker. Publisher: Daily Maverick*.
- Cadero-Smith, L. A. (2020). Teacher professional development challenges faced by rural superintendents. In I. Sahin & P. Vu (Eds.), *ISTES Organization*.
- Chanda, M., & Phiri, L. (2022). *Gender disparities in Zambian education: A critical analysis*. University of Zambia Press.
- Cojorn, K., & Sonsupap, K. (2024). A collaborative professional development and its impact on teachers' ability to foster higher order thinking. *Journal of Education and Learning (EduLearn)*, 18(2), 561–569.
- Chuang, S. (2015). Deterrents to women's participation in continuing professional development. *Sage Journals*, 27(2).
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development* (Report). Learning Policy Institute. Retrieved from <https://learningpolicyinstitute.org/product/effective-teacher-professional-developmentreport>
- Ejekwu, P. O. (2022). Capacity building and teachers' effectiveness in public schools in Rivers
- East Senatorial District of Rivers State. Retrieved from <https://www.researchgate.net/publication/35757539>
- Enkhtur, A., & Yamamoto, B. N. (2017). Transformative learning theory and its application in higher education settings: A review paper. *Osaka University*, 43, 193–214.
- Government of the Republic of Zambia. (2019). *National gender policy*. Ministry of Gender.
- Hyde, B. (2021). Critical discourse and critical reflection in Mezirow's theory of transformative learning: A dialectic between ontology and epistemology (and a subtext of reflexivity mirroring my own onto-

- epistemological movement). *Adult Education Quarterly*, 71(4), 373–388.
- Jarvis, P. (1987). *Adult learning in the social context*. Croom Helm.
- Klentschy, M. P. (2005). Designing professional development opportunities for teachers that foster collaboration, capacity building and reflective practice. *14*(1), 1–8.
- Kudo, K. (2015). *Building capacity to transform Zambia: What motivates government officials to learn planning-related skills?* UCLA Electronic Theses and Dissertations.
- Kumari, S. (2022, February). Teacher's views on training and capacity building in education. *International Journal of Advanced Research in Science Communication and Technology*, 2(1).
<https://doi.org/10.48175/IJARSCT-2545>
- Marzano, R. J. (2017). *The new art and science of teaching*. Solution Tree Press.
- Mezirow, J. (2000). *Learning to think like an adult: Core concepts of transformation theory*. In J.
- Mezirow & Associates (Eds.), *Learning as transformation: Critical perspectives on a theory in progress* (pp. 3–33). Jossey-Bass.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. Jossey-Bass.
- Mezirow, J. (1997). Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education*, 74, 5–12
<https://onlinelibrary.wiley.com/doi/abs/10.1002/ace.7401>
- Ministry of Education. (2023). *Education Statistics Bulletin*. Government Printers
- Ministry of Education. (2023). *Strategic Plan 2023-2027*. Government Printers.
- Mpezeni, P. (2020). *Challenges facing female head teachers in management of public primary schools: A case of selected primary schools in Lusaka district of Zambia*. UNZA.
- Mubiana, A. (2011). *The effects of continuing professional development of rural basic school teachers on the quality of education: The case of selected basic schools of Mongu district*. UNZA Repository.
- Mulawarman, W. G. (2015). *Career development prospects of women teachers in the schools of Samarinda City*. David Publishing.
- Munyi, M. W. (2024). Enhancing educational excellence: An analysis of teacher capacity building and its impact on instructional delivery in public secondary schools in Kenya. *World Journal of Advanced Research and Reviews*, 21(3), 995–1002.
<https://doi.org/10.30574/wjarr.2024.21.3.0268>

- Muyunda, G., Yue, L., & Oranga, J. (2023). Teachers' professional development in Zambia: Perceptions and practices. *International Journal of Social Learning (IJSL)*, 10(7), 222–233.
- Nakamba, P. (2018). *Factors affecting female teachers in career progression in public secondary schools in Chingola district of Zambia*. UNZA-ZOU.
- National Institute for Scientific and Industrial Research. (2021). *Digital literacy and teacher training in Zambia*. NISIR Publications.
- Nyangau, J. Z. (2020). Faculty engagement in internationalization: The role of personal agency beliefs. *International Journal of Research in Education and Science (IJRES)*, 6(1), 74–85.
- Phiri, D., Haambokoma, N. M., Kalinde, B., Nalube, P. P., & Muleya, G. (2024). Transformative pedagogies and practices the potential of the school based in service teacher training model in transforming teaching and learning in Zambia. *Journal of the Educational Research Association of Zambia*, 1(1), 60–85.
- Poueriet, A. (2023). The role of mentorship in professional development. *LinkedIn Pulse*. <https://linkrdin.com/pulse/role-mentorship-professional-development>
- Ronfeldt, M., Farmer, S. O., McQueen, K., & Grissom, J. A. (2015). Teacher collaboration in instructional teams and student achievement. *American Educational Research Journal*, 52(3), 475–514.
- Salo, P., Francisco, S., & Olin Almqvist, A. (2024). Understanding professional learning in and for practice. *Professional Development in Education*, 50(3), 444–459.
<https://doi.org/10.1080/19415257.2024.2311108>
- Shephard, B., Brown, J., & Dibbon, D. (2009). Professional development and capacity building. In *School district leadership matters. Studies in educational leadership*, 8, 85–100.
- Shimalungwe, B. K. (2016). *Challenges faced by female teachers in the management of secondary schools: A case study of selected schools in Luanshya district*. University of Zambia.
- Sisagali, L. A., Kamocha, H., & Kamboni, L. (2023). Capacity building through open and distance learning, a response to society needs: A case study of Kwame Nkrumah University in Kabwe, Zambia. In *The 3rd ZAPUC International Conference* (Radisson Blue Hotel, Livingstone, Zambia, June 7–9, 2023).
- Sultana, A. M., Norhirdawati, Zahir, M., Nolzaran, & Yaacob, B. (2014). Women in the teaching profession: Impacts and challenges. *International Journal for Social, Education, Economics and Management Engineering*, 8(6).

- Syachala, Z. P. (2018). Gender issues in education in the fifty years of Zambia's independence. In G. Masaiti (Ed.), *Education in Zambia at fifty years of independence and beyond. History, current status and contemporary issues* (pp. 134–155). UNZA Press.
- Syed Muhammad Sajjid Kabir. (2016). *Basic guidelines for research: An introductory approach to all disciplines*. Zone Publication.
- UNESCAP. (2010). *Women in Asia and Pacific: Challenges and Priorities*. Datasheet.<http://www.unescap.org/sdd/publications/womendatasheet/datasheet>
- Wamalwa, P. (2023). Challenges Facing Implementation of Effective Teacher Professional Development Programmes in Kenya.
- Yang, D. & Baldwin, S.J. (2020). Using Technology to Support Student Learning in an Integrated STEM Learning environment. *International Journal of Technology in Education and Science (IJTES)*, 4(1), 1-11.
- Zulu, A., & Banda, K. (2020). *Equitable leadership in Zambian schools*. Educational Research Journal, 15(2), 123-140
- Zulu, N (2016) *Exploring the Effect of Non- Financial Incentives on Job Satisfaction on Teachers at Lubuto and Kayele Secondary School in Ndola District*. Lusaka; UNZA-ZOU
- .

The Role of Teachers in Enhancing Inclusive Education: A Case Study of Primary Schools in Zanzibar

Eugen Mtemi Philip¹ & Abila Shaffy Mrisho²

¹Archbishop Mihayo University College of Tabora-AMUCTA (A Constituent College of St. Augustine University of Tanzania).

Department of Special Needs Education

eugenphilip@gmail.com

ORCID: <https://orcid.org/0000-0002-8642-1994>

²Abdulrahman Al-Sumait University, Zanzibar-Tanzania.

Department of Education

ablashaffy4@gmail.com

Abstract

The study aimed to investigate the role of teachers in promoting inclusive education in primary schools in Zanzibar. Using a case study design to gain in-depth insights, the study employed a qualitative research approach. Data were collected through semi-structured interviews, classroom observations, and focus group discussions (FGDs) involving 45 respondents selected through purposive and convenience sampling techniques. FGDs included primary school students from various classes, contributing diverse perspectives on inclusivity. The study was guided by Vygotsky's Sociocultural Theory (SCT), which provided a framework for understanding how teachers facilitate inclusive learning environments that support students with disabilities. The findings indicated that primary school teachers in Zanzibar possessed a positive attitude toward inclusive education and demonstrated awareness of its principles. However, the study also identified several challenges hindering effective implementation. These included a lack of appropriate equipment for learners with disabilities, insufficient teaching and learning resources, and inadequate infrastructure. These limitations significantly constrained teachers' ability to deliver inclusive instruction. Based on these findings, the study recommends that the government increase funding allocations to promote inclusive education, invest in adequate teaching and learning materials, and improve school infrastructure to support the diverse needs of all learners.

Keywords: *Inclusive education, Primary school teachers, perception, awareness*

Introduction

The importance of inclusive education has been underscored by several international declarations and conventions, including the Universal

Declaration of Human Rights (1948), the Salamanca Statement and Framework for Action on Special Needs Education (1994), and the Convention on the Rights of Persons with Disabilities (2006) (Dass, 2022; Mariga *et al.*, 2014). These global frameworks advocate for the right of every child to receive education in an inclusive environment, emphasising the necessity of well-trained teachers, effective pedagogical strategies, and adequate educational resources (Chinhara & Kuyayama, 2024; Shuali *et al.*, 2020). Inclusive education is defined as an approach that ensures every child, regardless of race, religion, ethnicity, gender, or ability, feels valued, respected, and safe. It fosters a learning environment where students can embrace their unique identities and succeed academically and personally (Zabeli, 2020). This form of education prioritises students' presence in school, active participation in classroom activities, and long-term educational outcomes (Possi & Milinga, 2017; UNESCO, 2017).

Primary education, also called elementary education, is the first stage of formal education, coming after preschool/kindergarten and before secondary school (González-Moreira *et al.*, 2021; O'Kane, 2016). It takes place in primary schools or elementary levels. It provides students with fundamental skills in reading, writing and mathematics, as well as core areas of knowledge and personal development. Primary education usually begins at about age 5 to 7 years and ends at about 11 to 13 (Ökmen *et al.*, 2020). In Tanzania, primary education typically begins at the age of six and continues until the age of twelve (URT, 2023; 2014). This stage of education is widely recognised as the cornerstone of national development. At the primary level, children acquire foundational skills essential for life, work, and active citizenship (O'Kane, 2016). Primary education is crucial in empowering children and youth, promoting their health and well-being, and breaking intergenerational cycles of poverty. It also contributes to broader national outcomes by fostering economic growth and social cohesion. As Shevchenko (2020) noted, primary education supports not only academic learning but also children's social and emotional development. Therefore, it is the essential groundwork for all future learning within the formal education system.

To enhance effective inclusive education for primary schools, primary school teachers are a critical aspect to the successful adoption of inclusive education since they dedicate themselves and their talents to ensuring that it becomes a reality for each student that they have the privilege of serving (UNESCO, 2017; Zabeli *et al.*, 2020). Teachers are critical in establishing inclusive classrooms that accommodate individual differences and promote student tolerance and mutual understanding. To support diverse learning styles and needs, they employ a range of instructional methodologies,

including differentiated instruction (Xue *et al.*, 2023; Ferreira, 2022). These approaches enable educators to tailor their teaching to all students' abilities, interests, and learning preferences. Moreover, teachers often engage in advocacy and leadership roles within their schools, helping to transform inclusive education from a theoretical concept into a practical and lived reality. Their active involvement in shaping inclusive policies and practices is essential to creating equitable learning environments for all learners. Furthermore, teachers provide essential forms of emotional and social support, relationship building, and building a sense of community among students (Woodcock, 2022). So, their involvement has a significant impact on the academic performance of students at the primary level.

Some studies have revealed the roles of primary school teachers in enhancing inclusive education in most developed nations like America, the United Kingdom, and South Africa. The findings inform us that most teachers play a crucial role in inclusive education by creating supportive learning environments, differentiating instruction, and advocating for all students, including those with diverse needs (Walton & Engelbrecht, 2024; Romero *et al.*, 2021; Soyegbe, 2020; Mitchell & Sutherland, 2020). Furthermore, the results indicated that inclusive education is widely regarded as a desirable and beneficial practice. Teachers have made deliberate efforts to ensure that all learners, including those with disabilities, are accommodated within regular classrooms where they are shown love, care, and acceptance. The findings also underscore the importance of teachers' capacity to implement inclusive education effectively. In light of this, the study recommends integrating inclusive education into pre-service and in-service teacher training programs to equip educators with the necessary skills, knowledge, and attitudes (Mitchell & Sutherland, 2020; Soyegbe, 2020).

Teachers in developing countries such as Nigeria, Malawi, Kenya, and Uganda play a pivotal role in advancing inclusive education in primary schools. They adapt their teaching strategies to accommodate diverse learning needs and foster inclusive classroom environments by cultivating a culture of acceptance and reducing stigma through awareness and sensitisation efforts (Le Fanu *et al.*, 2022; Mugisha, 2022). Additionally, teachers collaborate with parents, caregivers, and specialists to support learners with disabilities and other special needs. They also advocate for essential resources, including accessible learning materials and appropriate infrastructure, which are critical for the effective implementation of inclusive education. However, their effectiveness depends on adequate training, government support, and access to inclusive education policies and resources (Le Fanu *et al.*, 2022; Mugisha, 2022).

Despite ongoing efforts to promote inclusive education, several barriers hinder its effective implementation in Nigeria, Malawi, Kenya, and Uganda. Key challenges include inadequate infrastructure, a shortage of trained teachers, and limited educational resources, particularly in rural areas (Zabeli *et al.*, 2020). In addition to these institutional constraints, socio-cultural barriers also persist. These include deep-rooted stigma and discriminatory attitudes toward children with disabilities and other marginalised groups, which further restrict their access to education (Mugisha, 2022). While support from international organisations such as UNICEF and the World Bank has contributed to progress in this area, significant gaps remain. As Le Fanu *et al.* (2022) highlight, greater investment and comprehensive systemic reforms are essential to achieving truly equitable and inclusive learning environments for all children in these countries. In Tanzania, some studies have indicated that primary school teachers implement inclusive teaching and learning strategies, such as creating accessible learning environments, adapting instructional methods to meet diverse student needs, and engaging parents and communities in the educational process (Zubeda, 2020; Maphie, 2023). However, challenges such as inadequate teaching and learning materials, overcrowded classrooms, and a general lack of teacher training in inclusive practices have been identified as major obstacles to effective implementation (Maphie, 2023).

In the context of Zanzibar, much of the existing research has focused on teachers' attitudes and perceptions toward inclusive education. These studies have revealed widespread misconceptions and limited understanding of inclusive education among teachers (Hamad, 2015; Juma & Lehtomäki, 2015). Moreover, negative attitudes toward learners with special needs continue to persist among some educators, further hindering progress in inclusive education (Hamad, 2015). Despite this, there remains a significant gap in the literature regarding primary school teachers' specific actions and strategies to enhance inclusive education in Zanzibar. The present study aims to address this gap by investigating the role of teachers in fostering inclusive practices within primary school settings in the region.

Given the identified gaps in existing research, particularly the lack of studies exploring what primary school teachers actively do to promote inclusive education in Zanzibar, this study investigated the role of schools in enhancing inclusive education in Zanzibar's primary schools. Specifically, the study aimed to assess the level of awareness among primary school teachers regarding inclusive education and to examine how inclusive education is being implemented within these schools. These objectives

respond directly to the limited understanding, persistent misconceptions, and attitudinal barriers revealed in prior studies and seek to provide practical insights into how inclusive practices are enacted on the ground.

Theoretical Framework

This study was guided by Vygotsky's Sociocultural Theory (SCT). The SCT accentuates the significant role of social interaction, culture, and language in cognitive development (Abtahi, 2017). Vygotsky argues that interaction with knowledgeable others is required for a learner to develop cognitive abilities. The knowledgeable others are the ones who have higher skills than a child or a learner. These include parents, teachers, and peers (Berk, 1994).

Another aspect of SCT is the Zone of Proximal Development. (ZPD). The ZPD is concerned with how learners can perform a task independently and what they can do with guidance and support from teachers or parents. The central argument in ZPD is that learners should initially be allowed to engage with tasks independently, allowing them to explore and develop their skills autonomously. Support from teachers or parents should be provided only when necessary, enabling the learners to take ownership of their learning process. In this context, learners must be presented with appropriately challenging activities that promote growth. Assistance from teachers should then be offered selectively to help learners overcome difficulties and succeed. This approach aligns with constructivist and sociocultural learning theories, emphasising the importance of guided learning within a learner's zone of proximal development. (Hausfather, 1996). Vygotsky's SCT emphasises the importance of scaffolding in learning. Scaffolding entails the conditions supporting the child's learning to move from what they already know to new knowledge and abilities. This role is done by a teacher or a parent (Eun, 2010).

The Sociocultural Theory (SCT) is highly relevant to this study as it emphasises the critical role of teachers in facilitating inclusive classrooms. According to SCT, learning is a social process, and teachers play a key role in supporting students by scaffolding their learning experiences. In inclusive settings, this means providing individualised support that meets the diverse learning needs of all students and ensuring meaningful engagement with the curriculum. Teachers can achieve this by employing various inclusive strategies, such as visual aids, encouraging peer support, integrating adaptive technologies, and applying differentiated instruction. These approaches help create an environment where all learners, regardless of ability, can actively participate in the learning process and reach their full potential.

Methodology

This study employed a qualitative research approach, utilising a case study design. A case study is appropriate for collecting in-depth information about a specific phenomenon within its real-life context (Crowe *et al.*, 2011; Stake, 2010). According to Yin (2018), a case study design is particularly relevant when the research seeks to answer questions such as "when," "how," "why," and "what" regarding the issue under investigation. In this study, the case study approach was suitable for examining the role of teachers in enhancing inclusive education in Zanzibar's primary schools.

A combination of convenience and purposive sampling techniques was applied for the sampling procedures. Convenience sampling was used to select 30 pupils from five primary schools, allowing access to participants who could provide the necessary data. In parallel, purposive sampling was employed to select five head teachers, five school counsellors, and 15 classroom teachers across the same schools. These participants were chosen based on their roles and experience implementing inclusive education practices.

Data collection methods included focus group discussions and interviews, both of which facilitated the generation of rich, qualitative data regarding the role of teachers in fostering inclusive practices. In addition, the study employed observation to capture information in a naturalistic setting. Observations focused on the physical infrastructure of schools, the availability and use of educational materials, instructional approaches, and the interactions between teachers and pupils during classroom instruction.

The qualitative data were analysed using thematic analysis, following the six-step framework proposed by Braun and Clarke (2012). These steps included familiarisation with the data, transcription, generation of initial codes, identification and clustering of themes, defining and naming themes, and finally, producing a report that interprets the findings about the emerging themes.

Results

This study examined the role of schools in promoting inclusive education in Zanzibar primary schools. The study was guided by two objectives: to assess the awareness and perceptions of primary school teachers in Zanzibar of inclusive education and to examine the implementation of inclusive education in Zanzibar's primary schools. Based on these objectives, data analysis generated different themes, as can be elaborated in the subsequent sections below.

Awareness of Primary School Teachers in Zanzibar of Inclusive Education

In relation to this objective, data collected through interviews and focus group discussions (FGDs) revealed that head teachers, school counsellors, class teachers, and pupils demonstrated an adequate understanding of inclusive education. Participants articulated the importance of accommodating learners with diverse needs and highlighted various inclusive practices implemented within their schools. Pupils with disabilities were reported to receive substantial support, including extended time during examinations, the use of adapted instructional materials, access to counselling services, and opportunities for social skills development. Notably, pupils themselves actively contributed to fostering inclusivity by offering academic support and peer collaboration to classmates with disabilities. During FGD, one of the pupils noted:

In inclusive education, pupils without disabilities study, eat, and play together with other pupils with disabilities without regard to their backgrounds and abilities (P.1)

Furthermore, another pupil added:

Discrimination has no chance in our class. Since every student cooperates with each other for class works as well as extra-curricular activities (P.2)

These first-hand accounts underscore the existence of a positive school culture where acceptance, mutual respect, and collaborative learning are prioritized. Such a culture not only benefits students with disabilities but also enhances social cohesion and empathy among all learners. The findings reinforce the idea that inclusive education is most effective when embraced collectively by educators, students, and the wider school community.

Similarly, during observation in school A, the researchers noted that teachers were very close to the pupils and the pupils were helping each other during classroom learning and extra-curriculum activities such as cleaning of school compounds and watering flowers. The results showed that teachers were knowledgeable about inclusive education, as indicated by their reference to the Zanzibar Education Policy of 2006. This policy allows children with disabilities to attend local schools and receive quality education alongside their non-disabled peers.

During the interview, teacher 1 said: “I am aware that the 2006 Zanzibar education policy mentioned the issue of inclusive education. (T.1).” The head teachers demonstrated a thorough comprehension of the inclusive education demands. According to them, this type of education requires that all pupils should have equal access to learning opportunities in classrooms, irrespective of their backgrounds, abilities, or disabilities. Despite common

misconceptions, inclusive education is not limited to accommodating pupils with visible disabilities such as those who are deaf, visually impaired, or physically handicapped. Rather, it encompasses a broader commitment to providing equal learning opportunities for all pupils, regardless of their abilities, disabilities, or socio-cultural backgrounds. During the interview, one head of school said:

Many people mistakenly believe that inclusive education involves the participation of pupils with disabilities, such as deaf, dumb, visually impaired, and handicapped, where discrimination may prevail. However, inclusive education is a form of education that ensures equal opportunities for all pupils, regardless of their abilities, disabilities, or backgrounds, to learn and engage in educational activities (HoS. 4).

This perspective reflects a deeper understanding of the principles of inclusion and demonstrates a shift away from deficit-based thinking. The positive attitudes and comprehensive understanding of inclusive education exhibited by head teachers, classroom teachers, school counsellors, and pupils provide strong evidence that the efforts made by the government and international organizations are yielding promising outcomes. These findings suggest that advocacy, policy initiatives, and awareness campaigns are effectively contributing to the cultivation of inclusive values within Zanzibar's primary education system.

Implementation of Inclusive Education in Primary Schools in Zanzibar

Head teachers, school counsellors, and classroom teachers affirmed that their schools provided a secure and structured learning environment for all pupils, including those with disabilities—an essential factor in facilitating the successful implementation of inclusive education. By fostering a supportive classroom atmosphere, teachers encouraged collaborative learning, allowing pupils to work in groups and support one another. This cooperative learning environment helped promote social inclusion and academic engagement among all students. During an interview, one of the school heads commented:

My school does a good job of implementing inclusive education. The school has a teacher who underwent inclusive education training, effectively supervising inclusive education. There are equal opportunities available to every pupil. Other teachers also used to incorporate the idea of inclusive education into their lessons as part of our school's efforts to raise pupils' awareness (HoS3).

These insights highlight the commitment of school leadership and staff to embedding inclusive practices into the school culture. In terms of physical infrastructure, researchers observed that many schools had made efforts to improve the learning environment, such as by providing separate, clean, and

safe toilet facilities for boys and girls, which offered adequate privacy. Such infrastructure considerations contribute to the overall sense of dignity and safety, which are crucial components of an inclusive educational setting.

Discussion

This study examined participants' awareness and implementation of inclusive education in primary schools in Zanzibar. The findings revealed several key insights. Firstly, many participants demonstrated a strong awareness of inclusive education. Many head teachers and school counsellors understood the concept clearly and comprehensively. For these participants, inclusive education was defined as ensuring equal learning opportunities for all pupils, regardless of their abilities, disabilities, or socio-cultural backgrounds. They emphasized that inclusive education involves creating enabling environments that support participation and learning for every child.

Classroom teachers also demonstrated familiarity with inclusive education principles. Many referenced the Zanzibar Education Policy 2006, which advocates for including pupils with disabilities in mainstream schools where they can access quality education alongside their peers. This level of awareness among teachers and administrator's contrasts with the findings of Revelian and Tibategeza (2022), who reported that many teachers in Tanzania lack awareness and understanding of inclusive education principles.

Regarding practical implementation, the study found that teachers actively accommodated the learning needs of pupils with disabilities. This was achieved through various support strategies, including allowing extra time during examinations, adapting instructional materials, and offering counselling and social skills training. These efforts reflect a commitment to fostering equitable and inclusive learning environments. The findings align with previous research by UNESCO (2017) and Zabeli *et al.* (2020), which emphasize the critical role of teachers in advancing inclusive practices within schools.

Correspondingly, Xue *et al.* (2023) and Ferreira (2022) emphasize the role of teachers in applying methodologies which cater for the learning styles of children with disabilities in inclusive classrooms. Regarding implementing inclusive education, findings indicated that schools accommodated pupils with disabilities well. In addition, many schools effectively collaborated with parents, community members, and local government officials, such as Shehas, to ensure equal opportunity for pupils with disabilities and their counterparts without impairments. These results concur with that of Ummah *et al.* (2024), who observed a positive relationship between

inclusive education with school administrators, teachers, pupils, friends at home, school friends, relatives, parents of regular children, neighbours, special guidance teachers, and parents of pupils with disabilities yielded positive results in the implementation of inclusive education.

However, the findings by Bakari and Paul (2022) revealed that in some schools, parents and other community members had limited involvement in the implementation of inclusive education. This lack of community engagement presents a barrier to creating a fully supportive and inclusive learning environment. Despite this, the present study found that nearly half of the schools included in the research had head teachers who had received training in inclusive education. These head teachers demonstrated positive attitudes toward implementing inclusive practices, which significantly contributed to successfully integrating pupils with disabilities into mainstream classrooms. These findings are consistent with the study by Krohn-Nydal (2008), who reported that teachers who had undergone training in inclusive education expressed greater satisfaction and enthusiasm in supporting learners with disabilities. Professional development plays a crucial role in shaping educators' perceptions and practices, enhancing inclusive education's effectiveness.

Furthermore, findings showed that the teachers were highly committed to promoting diversity by implementing inclusive pedagogy in their classroom sessions through group discussions, songs, games, sports drafts, question-and-answer methods, and quizzes, which incorporate pupils with disabilities. This suggests that schools provide a conducive atmosphere for pupils with disabilities. These findings concur with Pushpa *et al.* (2018), who found that many teachers used drawing, peer tutoring, small group exercises, role plays, storytelling, question and answer, and locally available and low-cost materials to enhance teaching and learning.

On the other hand, a few teachers reported challenges in integrating inclusive education practices during classroom instruction. These difficulties were often attributed to limited training and a lack of exposure to teaching methods suited for inclusive classroom environments. This finding is consistent with Shalbayeva *et al.* (2021), who observed that some teachers had insufficient professional development to implement inclusive education effectively and lacked access to appropriate pedagogical strategies tailored to diverse learning needs. Despite these challenges, the study also found that many school counsellors, teachers, and family members expressed positive attitudes toward pupils with disabilities. This collective goodwill contributed to more inclusive and supportive school environments. These findings align with those of Omar (2015) and Krohn-Nydal (2008), which

revealed that in certain school contexts, there was a strong exchange of ideas and effective communication among peers, as well as between teachers and learners with disabilities. Such interactions foster a culture of inclusion and play a critical role in the successful implementation of inclusive education.

Conclusion

The study investigated the current state of inclusive education in primary schools in Zanzibar. Findings revealed that many educators, particularly head teachers, demonstrated a positive understanding of inclusive education and its importance in ensuring equal learning opportunities for all pupils. However, despite this awareness, several factors continued to hinder the effective implementation of inclusive education. These included inadequate infrastructure, limited compliance with disability rights standards, and a lack of teacher preparedness for inclusive classroom instruction. While some schools had made commendable progress in accommodating learners with disabilities, persistent challenges remained, such as insufficient teacher training, difficulty integrating inclusive practices into everyday teaching, unsafe physical environments, resource shortages, and limited staffing. In light of these findings, the study recommends that the Revolutionary Government of Zanzibar allocate adequate resources to improve school infrastructure, ensuring full accessibility and accommodation for pupils with disabilities. This includes constructing accessible ramps, pathways, and facilities that comply with universal design standards, thus enabling all pupils to engage fully in school activities.

References

- Abtahi, Y., Graven, M. & Lerman, S. (2017). Conceptualising the more Knowledgeable other within a Multi-directional ZPD. *Research in Mathematics Education*, 20(3):1-13. DOI:10.1080/14794802.2017.1390691.
- Bakari, A. M., & Paul, D. M. (2022). The Contribution of Government to the Sustainability of Inclusive Education: A Case of Urban District (Zanzibar). *International Journal for Creative Thoughts (IJCRT)*, 10(11), ISSN: 2320-2882.
- Berk, L. E. (1994). Vygotsky's theory: The importance of make-believe play. *Young Children*, 50(1), 30-39.
- Braun, V., & Clarke, V. (2012). "Thematic analysis": *Handbook of research methods in psychology*: Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological. Vol. 2. pp. 57–71.
- Chinhara, H., & Kuyayama, A. (2024). Challenges to the provisioning of equitable quality education opportunities in inclusive early childhood development classes attached to primary schools: A case of one

- district in Zimbabwe. *Social Sciences & Humanities Open*, 10, 100957. <https://doi.org/10.1016/j.ssaho.2023.100957>
- Crowe, S., Creswell, K., Robertson, A., Hubby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC Medical Research Methodology*, 11, 100.
- Dass, A. (2022). The value of international declaration in field of inclusive education: Salamanca statement and framework for action.
- Eun, B. (2010). From learning to development: A sociocultural approach to instruction. *Cambridge Journal of Education*, 40(4), 401-418.
- Ferreira, M. (2022). A theoretical essay about inclusion and the role of teachers in building an inclusive education. *European Journal of Education and Pedagogy*, 3(3), 97–104. <https://doi.org/10.24018/ejedu.2022.3.3.352>.
- González-Moreira, A., Ferreira, C., & Vidal, J. (2021). Comparative analysis of the transition from early childhood education to primary education: Factors affecting continuity between stages. *European Journal of Educational Research*, 10(1), 441–454. <https://doi.org/10.12973/eu-jer.10.1.441>.
- Haji, M. H. (2018). Perception of Teachers on Physically Impaired Primary School Pupils within Inclusive Education in Tanzania: (A Case Study Zanzibar Island). *International Journal of Academic and Applied Research (IJAAAR)*, 2(9), 14-22. ISSN: 2000-005X.
- Hamad, H. O. (2015). Teachers attitudes towards the provision of inclusive education in Chake Chake District, Zanzibar. Unpublished PhD Dissertation. The Open University of Tanzania.
- Hausfather, S. J. (1996). Vygotsky and Schooling: Creating a Social Contest for learning. *Action in Teacher Education*, 18, 1-10.
- Jardeleza, M. (2023). Access to Education: Protecting Students with Disabilities by Decriminalizing Behavior. *Human Rights Brief*, 27(1), Article 5. Retrieved from <https://digitalcommons.wcl.american.edu/hrbrief/vol27/iss1/55>
- Juma, S., & Lehtomäki, E. (2015). Moving towards inclusion: how Zanzibar succeeds in transforming its education system? *International Journal of Inclusive Education*, 20(6), 673–684. <https://doi.org/10.1080/13603116.2015.11114422>
- Krohn-Nydal, A. (2008). The Development of Inclusive Education in the Tanzanian Primary School (Master's thesis, Universitetet I Oslo, Institute for Educational Research).
- Le Fanu, G., Schmidt, E., & Virendrakumar, B. (2022). Inclusive education for children with visual impairments in sub-Saharan Africa: Realising the promise of the convention on the rights of persons with disabilities. *International Journal of Educational Development*, 91, 102574. <https://doi.org/10.1016/j.ijedudev.2022.102574>.

- Maphie, E. I. (2023). Implementation of Inclusive Education in Secondary Schools in Tanzania: A Breather for the Students with Disabilities? *International Journal of Whole Schooling*, 19(2), 37-65.
- Mariga, L., McConkey, R. & Myezwa, H. (2014). *Inclusive Education in Low-Income Countries: A Resource Book for Teacher Educators, Parent Trainers and Community Development Workers*. Cape Town: Atlas Alliance and Disability Innovations Africa.
- Mitchell, D., & Sutherland, D. (2020). *What really works in special and inclusive education: Using evidence-based teaching strategies* (3rd ed.). Routledge.
- Mugisha, A. A. (2022). *Special education teacher work challenges and burnout in Sub-Saharan Africa: An integrative research review*. Mumbai. New Age International.
- O'Kane, M. (2016). *Transition from preschool to primary school*. Dublin: National Council for Curriculum and Assessment.
- Okendo, E. O. (2018). School Infrastructural Preparedness towards Management of Inclusive Education in Primary Schools in Nyamira County, Kenya. *Cradle of Knowledge African Journal of Educational and Social Science Research*, 6(1), 1-9.
- Ökmen, B., Şahin, Ş., & Kılıç, A. (2020). A critical view to the primary school teaching. *International Journal of Contemporary Educational Research*, 7(1), 54–70.
<https://doi.org/10.33200/ijcer.706044>
- Omar, N. I. (2015). Assessment of the Implementation of Zanzibar Education Policy on Education for Learners with Special Needs: A Case of Urban West Region Schools. Master's Thesis, Mzumbe University.
- Possi, M. K., Milinga, J. R. (2017). Special and Inclusive Education in Tanzania: Reminiscing the Past, Building the Future. *Educational Process. International Journal*, 6(4), 55-73.
<http://dx.doi.org/10.22521/edupij.2017.64.4>
- Pushpa, K. S., Kavitha Maithly, S., & Umapathi, N. (2018). The Teaching Methods Adopted by the Teachers in Teaching Inclusive Education. *UGC Approved Journal* No. 48514, 7(11), 2249-894X.
- Revelian, S., & Tibategeza, E. R. (2022). Effective Implementation of Inclusive Education in Enhancing Quality Education in Public Primary Schools in Tanzania: Teachers Awareness. *Direct Research Journal of Education and Vocational Studies*, 4(1), 54-61. <https://doi.org/10.26765/DRJEVS20848400>
- Romero, L. D. C. E., Alcedo, J. M. G., Asprilla, J. Y. M., & Turriago, J. E. R. (2021). Good practices in inclusive education: Review of the role of the teacher during the decade 2010–2020. *Turkish*

- Journal of Computer and Mathematics Education*, 12(13), 3071–3081.
- Rugambwa, A., & Thomas, M. A. M. (2011). Equity, power, and capabilities: Constructions of gender in Tanzanian secondary school. *Feminist Formations*, 23. 10.1353/ff.2011
- Shalbayeva, D. K., Zhetpisbayeva, B. A., Akbayeva, G. N., & Assanova, D. N. (2021). Organizational and Pedagogical Conditions for the Educational Process Implementation within the Inclusive Education in the Republic of Kazakhstan. *European Journal of Contemporary Education*, 10(3), 711-725. <https://doi.org/10.13187/ejced.2021.3.711>
- Shevchenko, Y. M., Dubiaha, S. M., Melash, V. D., Fefilova, T. V., & Saenko, Y. O. (2020). The role of teachers in the organization of inclusive education of primary school pupils. *International Journal of Higher Education*, 9(7), 207–216. <https://doi.org/10.5430/ijhe.v9n7p207>
- Shuali Trachtenberg, T., Tenreiro Rodríguez, V., Neubauer, A., Bar Cendón, A. and Centeno, C.(Eds). (2023). *Addressing Educational needs of teachers in the EU for inclusive education in a context of diversity. Volume 5 - Implementation Guidelines for Intercultural and Democratic Competences Development in Teacher Education*. Publications Office of the European Union, Luxembourg, doi:10.2760/951080, JRC133175.
- Soyege, F. (2020). Exploring the Roles of Parents and Teachers in Intervention for Inclusive Education of Children in Need of Support in Low Income Countries of the Southern Regions of Africa. M. A Dissertation. Jönköping University.
- Stake, R. E. (2010). *The Art of Case Study Research*. SAGE.
- Ummah, U. S., Tahar, M. M., Yasin, M. H. M., Hashim, H. U. B., & Ediyanto, E. (2024). Driving Factors of Inclusive Education for Primary School in Indonesia. *Pegem Journal of Education and Instruction*, 14(2), 86-93.
- UNESCO (2017). *A guide for Ensuring Inclusion and Equity in Education*. UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000248254>
- URT. (2014). *Educational Training Policy*. Government Printer.
- URT. (2023). *Education and Training Policy*. Government Printer.
- Walton, E., & Engelbrecht, P. (2024). Inclusive education in South Africa: Path dependencies and emergences. *International Journal of Inclusive Education*, 28(10), 2138–2156. <https://doi.org/10.1080/13603116.2022.2041952>
- Woodcock, S., Sharma, U., Subban, P., & Hitches, E. (2022). Teacher self-efficacy and inclusive education practices: Rethinking teachers' engagement with inclusive practices. *Teaching and Teacher Education*, 117, 103802. <https://doi.org/10.1016/j.tate.2022.103802>

- Xue, R., Chai, H., Yao, L., & Fu, W. (2023). The influence of school inclusive education climate on physical education teachers' inclusive education competency: The mediating role of teachers' agency. *Frontiers in Psychology*, 14, 1079853. <https://doi.org/10.3389/fpsyg.2023.1079853>
- Yin, R. K. (2018). *Case Study Research and Applications: Designs and Methods*. (6th ed.). SAGE.
- Zabeli, N., Gjelaç, M., & Ewing, B. F. (2020). Preschool teacher's awareness, attitudes, and challenges towards inclusive early childhood education: A qualitative study. *Cogent Education*, 7(1). <https://doi.org/10.1080/2331186X.2020.1791560>
- Zubeda, M. (2020). Teachers perceptions on the implementation of inclusive education in public primary schools in Tanzania: A case of Njombe Town Council. Doctoral Dissertation. The Open University of Tanzania.

Assessing the Experiences of Teen Mothers under the Re-entry Policy in Secondary Schools: A Case of Uyui District Council- Tabora, Tanzania

Flora Nashon Nyaisa & Juma Hashim Njowele

The Open University of Tanzania

*Corresponding Author: hashimjuma255@gmail.com

Abstract

This study aimed to assess the experiences of teen mothers re-entering secondary schools under the re-entry policy in Uyui District. Guided by Max Horkheimer's Critical Theory, the study adopted a case study design appropriate for examining social realities within their natural contexts. A purposive sample of ten teen mothers who had returned to school was selected, and data were gathered through unstructured interviews. Thematic content analysis was used to interpret the data. Findings revealed significant barriers to successful reintegration, including financial hardship, psychological distress, and limited participation in social activities. The study recommends that the government and educational stakeholders implement targeted awareness campaigns in schools and communities to reduce stigma. These could include workshops, seminars, and public service announcements. Additionally, further research is recommended to examine how the implementation of the re-entry policy affects teen mothers' academic performance.

Keywords: *Teen mothers, re-entry policy, psychological distress, discrimination, re-entry programme*

Introduction

Teen motherhood has increasingly emerged as a global public health concern, affecting an estimated 16 million individuals aged 15 to 19 each year. According to the World Health Organization (WHO, 2021), approximately two million girls under the age of 15 give birth annually, with 90% of these cases occurring in low- and middle-income countries. Nyangarika and Nombo (2020) identified several key factors contributing to adolescent pregnancy within secondary schools, including financial constraints, peer pressure, sociocultural taboos and norms, limited access to reproductive health information, and incidents of sexual assault. In the global effort to achieve Sustainable Development Goal 4, ensuring inclusive, equitable, and quality education for all, many countries face challenges in implementing effective re-entry policies. These policies are vital to supporting teen mothers' educational and professional aspirations and ensuring their reintegration into the learning environment. Despite advancements in technology and improved

access to reproductive health services and information, teenage pregnancy remains a persistent issue in several European countries, including Bulgaria and the United Kingdom. According to UNESCO (2014), Bulgaria recorded a teenage pregnancy rate of 9.99%, while the United Kingdom reported a rate of 2.6%. Contributing factors to teenage pregnancy in Europe include socio-economic hardship and low levels of educational attainment. In response to the growing number of adolescent mothers, countries such as the UK and Bulgaria have implemented re-entry policies to support young mothers in continuing their education and pursuing career aspirations (Imbosa *et al.*, 2022). These policies aim to promote inclusion and reduce the long-term socio-economic disadvantages associated with early motherhood. According to statistics published by Elflein (2023), the birth rate in the United States among teenagers and young adult women aged 15-19 has declined from 61.8% in 1991 to 13.9% in 2021. This reduction in teenage pregnancy rates in the United States is largely attributed to effective preventive measures implemented by the government. These measures have led to increased contraceptive use among both male and female adolescents. Furthermore, the establishment of publicly funded family planning clinics has played a critical role by providing low-cost or free reproductive health services to adolescents. These clinics are part of broader initiatives designed to reduce teenage pregnancy and promote informed decision-making among young people.

Statistics indicate that infants born to adolescent mothers are more prone to prematurity and low birth weight. In contrast, adolescent moms frequently encounter prenatal hypertension and anaemia (ibid). Schools are forbidden from excluding an expecting mother from attendance, as mandated by medical regulations in the USA. The re-entry policy mandates that schools accommodate the unique needs of teen mothers by anticipating periods of absenteeism due to clinic visits, childbirth, and recovery. Upon returning to school, adolescent mothers are to be reinstated to the same academic and extracurricular status they held before their leave.

Additionally, schools must allow these students to make up any missed assignments, ensuring that their temporary absence does not hinder their educational progress. This provision aims to promote educational continuity and equity for young mothers. Additional support includes providing larger desks, private breastfeeding facilities, and daycare services near schools (Dowden & Grey, 2017).

In many African countries, particularly in Sub-Saharan Africa, teenage pregnancy remains alarmingly prevalent among adolescent girls, often reflecting a substantial unmet need for family planning services. In Zambia, this issue is further compounded by the exclusion of pregnant schoolgirls

from the education system. This practice frequently leads to early marriage. Cultural and traditional norms often pressure these young women into marital unions, perpetuating cycles of gender inequality. Consequently, this trend exacerbates poverty and undermines the socio-economic prospects of teen mothers, limiting their opportunities for personal and educational advancement. Following the 1995 conference organised by the Zambia Association of University Women, a proposal was made to the government advocating for the re-admission of all pregnant girls to school, contingent upon the assurance of child care (Moonga, 2014). The Zambia Association of University Women Conference successfully implemented the proposed agenda regarding teen mothers. In 1997, the Zambian government permitted these girls to take maternity leave and continue their education post-delivery. The implementation of the re-entry policy has faced significant challenges. Although 23% of students dropped out, only a small proportion of teen mothers returned to school, largely due to the stigma and ridicule they encountered from teachers, peers, and broader community members (Imbosa, 2022).

By EFA and SDG commitments, the Kenyan government formulated additional guidelines and legislation to enhance the re-entry policy, ensuring that expectant girls and teenage mothers can pursue their education with minimal disruption (Imbosa, 2022). The policy promotes the awareness of teachers, learners, and the broader community to support reintegrated adolescent learners. The Kenyan government's re-entry policy encountered several implementation challenges. Conversely, most principals were aware of the policy's existence yet lacked tangible evidence within the schools. The policy stated that learners who become pregnant shall be re-admitted unconditionally to the same class or grade they were in before leaving school for childbirth. The policy stipulates that if a learner desires to transfer to another school, the school head will assist her, in collaboration with the sub-country Director of Education, to facilitate her admission into a different institution. The Ministry of Education is responsible for developing and strengthening the capabilities of school leadership, educators, and the broader school community (Government of Kenya, 2013).

The Ministry of Education, Science and Technology in Tanzania mainland issued Education Circular number 2 of 2021, emphasising the government's commitment to promoting quality education for all. The re-entry policy is a step towards leaving no one behind. Moreover, in 2022, the government, through the Ministry of Education, Science and Technology, issued a Guideline to reinstate students who dropped out of primary and secondary education for various reasons, reflecting the provision. Before the policy change, an estimated 6550-15000 Tanzanian girls and adolescents were

forced out of school each year due to pregnancy. At the same time, thousands more were subjected to coercive pregnancy testing. According to the 2022 Demographic and Health Survey and Malaria Indicator Survey, 24.9% of schoolgirls in Tanzania dropped out of school due to teenage pregnancy. While the national percentage of teen mothers has declined from 29.1% in 2005, the Tabora region continues to experience a rise in teen pregnancies, with a rate of 38%, making it the second-highest region in the country for teenage motherhood in 2022. A significant number of teen mothers who return to school eventually withdraw again or choose to continue their education through informal learning centres located within their communities. In light of this context, the present study aimed to explore the experiences of teen mothers who returned to school in Uyui District, Tabora Region.

Literature Review

Teen mothers face many obstacles when attempting to return to school, often resulting in high dropout rates due to the inability to manage these challenges effectively. This section reviews relevant literature from various countries to examine the experiences of teen mothers under re-entry policies and the factors influencing their reintegration into the education system. Additionally, the review explores the study's theoretical foundation, focusing on Critical Theory as the guiding framework. This theory offers insight into the structural and societal forces that shape the educational experiences of adolescent mothers and supports the study's goal of advocating for more equitable and supportive learning environments.

Financial Challenges

Financial constraints hinder teen mothers' experiences in attaining their educational needs when returning to school. The study done by Hugo and Olvera (2024) revealed that in Brazil, teen mothers are faced with financial constraints, leading to poor maternal and infant health. Scholars have portrayed that many teen mothers come from low-income families, which made them struggle to afford food, medication, childcare and educational expenses (Asumini & Mwila, 2024; Mmasy, 2023; Mgunda, Kano & Sungwa, 2023; Timothy & Juhudi, 2023). Moreover, Marende (2022) added that the school lacks sufficient financial support to effectively implement the re-entry policy. Marende's study mentioned the need to allocate a budget for counselling the teen mothers who have returned to school, fee waivers and bursary support. Timothy and Juhudi (2023) added that teen mothers are getting minimal support from their parents and guardians, leading them to leave school and never return due to their inability to manage the logistics and finances of mothering and schooling effectively.

Stigmatisation and Discrimination

The teen mothers who returned to school are being faced with social challenges, including stigmatisation and discrimination from their peers and teachers. These situations create significant barriers to education and further affect their academic performance. For instance, the study by Mgunda *et al.* (2023) revealed that teen mothers experience negative attitudes and stereotypes from their peers and teachers, leading to social exclusion in various school activities and events. Fallis (2013) cemented that the cultural context of teen mothers may influence the degree of stigmatisation and discrimination that they experience. Thompson (2017) asserts that teen mothers who experience stigmatisation and discrimination are more likely to suffer from low self-esteem, as well as feelings of shame and unworthiness. These emotional effects significantly hinder their ability to engage confidently in academic and social environments. Supporting this view, Niboye (2018), Mmassy (2023), Asumini and Mwila (2024), and Morgan *et al.* along with Anima, Wadei and Katey (2024) emphasise that stigma and discrimination from peers and community members have a detrimental impact on teen mothers' confidence and motivation to continue their education. This societal rejection not only isolates them but also perpetuates a cycle of marginalisation, making it more difficult for them to thrive academically and emotionally. Thus, the study explores how teen mothers accommodated stigmatisation and discrimination when they returned to school.

Furthermore, research carried out by Onyango *et al.* (2015) and Okondo (2018) in Kenya indicated that adverse perceptions from the community constitute one of the obstacles encountered by adolescent mothers upon their reintegration into the educational system. Timothy and Juhudi (2023) noted that the stigma associated with teen motherhood often results in some young mothers discontinuing their education post-delivery, which compels them to remain at home or seek alternative educational opportunities. The research conducted by Mmasy (2023) highlighted that the stigma and discrimination faced by teen mothers compel them to seek re-enrollment in nearby open schools affiliated with the Institute of Adult Education, which does not require school uniforms, irrespective of their identity.

Childcare Responsibilities

Gatsinzi (2021) highlights that the responsibilities placed on teen mothers have intensified, leaving them with limited time to manage their multifaceted roles effectively. A teenage mother is often expected to care for her child, handle household duties, and simultaneously meet the academic demands imposed by educational institutions. These compounded responsibilities significantly impact their academic performance. Similarly, studies by

Mgunda, Kano, and Sungwa (2023) and Niboye (2018) emphasize that adolescent mothers face considerable challenges in balancing motherhood and student life, which in turn may negatively affect their psychological well-being. Mmassy (2023) also notes that the inability to balance childcare and schooling, exacerbated by limited access to reliable childcare services, often leads to school absenteeism or dropout among teen mothers. Furthermore, Nguyen (2016) asserts that inadequate childcare and insufficient parental support hinder the well-being of teen mothers and the development of their children, who may lack the nurturing environment essential for healthy growth.

Emotional Problems

Furthermore, the study done by Mgunga, Kano and Sungwa (2023) added that teen mothers are at a high risk of facing emotional problems, including stress, anxiety and depression, compared to their non-pregnant peers. Life experiences such as financial hardship, social isolation, and a lack of adequate support in managing the responsibilities of motherhood contribute significantly to the stress, anxiety, and depression experienced by teen mothers. These challenges often become overwhelming, leading many to eventually drop out of school (Asumini & Mwila, 2024). Additionally, many teen mothers face emotional distress related to the father of the child. Some fathers deny paternity or refuse to provide financial support, even when they acknowledge the child. This lack of paternal involvement further exacerbates the mothers' psychological burden. Supporting these findings, Okondo (2018) highlighted that teen mothers experience considerable emotional and psychological distress due to the overwhelming nature of their responsibilities, most of which require financial resources to manage. These pressures collectively hinder their academic progress and compromise their overall well-being. Their family members are disowning most of them after discovering that they are pregnant. Moreover, the stigmatisation and discrimination that teen mothers face, leading them to be emotionally disturbed, make them feel unwanted and accepted in the school community and the home environment (*ibid*).

Theoretical framework

This study employed Critical Theory, originally developed by Max Horkheimer in 1937. The Theory is grounded in the objective of critiquing and transforming society by integrating normative ideals with empirically based analyses of social conflicts, contradictions, and systemic tendencies (Harney, 2012). Critical Theory aims to uncover domination, control, and suppression that often masquerade as neutral, progressive, or necessary (*ibid*). In the context of this study, the Theory is used to critically examine the implementation of the re-entry policy for teen mothers in secondary schools.

It enables the exploration of how existing societal norms and institutional practices may hinder rather than support the reintegration of adolescent mothers into formal education. Through such critique, the study aims to challenge and ultimately transform prevailing cultural attitudes and beliefs, advocating for more meaningful support structures that promote teen mothers' academic and professional advancement. Moreover, the Theory applies to the study as it helps inform the educational stakeholders on the needs of teen mothers, such as financial support and employment opportunities that can help accommodate home responsibilities. Furthermore, the Theory is applicable in the study as it criticises the re-entry policy and its implications within the school environment by identifying the challenges that teen mothers encounter caused by the school management, peers, community members, and policymakers.

Methodology

This study adopted a qualitative research approach, which enabled the researcher to understand the lived experiences of teen mothers returning to school (Creswell & Creswell, 2018; Cohen, Manion, & Morrison, 2018). The qualitative approach was particularly suited to exploring intangible variables such as cultural norms, socio-economic status, gender roles, ethnicity, and religion that directly influence implementing the re-entry policy for adolescent mothers. Within this approach, a case study design was employed to facilitate an in-depth exploration of the challenges faced by teen mothers during their reintegration into the school environment. The study used purposive sampling, selecting participants based on specific characteristics relevant to the research questions. In this case, the sample consisted of ten teen mothers who had returned to school following childbirth. This criterion ensured that the collected data reflected authentic and relevant insights into their lived experiences, contributing to a richer understanding of the re-entry policy's complexities. The selected teen mothers participated in semi-structured interviews lasting approximately 30 minutes each. This format allowed participants to express their experiences about the study's focus. The data collected were analyzed using content analysis. This method allowed the researcher to identify and categorize recurring themes, including insufficient financial resources, psychological challenges, and limited participation in social activities. These thematic categories were derived through valid inference and interpretation of the participants' narratives. According to Creswell (2018), content analysis is a flexible and rigorous method of analyzing qualitative data, enabling inductive and deductive reasoning to draw meaningful insights. Ethical considerations were strictly adhered to throughout the study. This included obtaining formal approval for data collection, securing voluntary participation through informed consent, and ensuring the confidentiality and anonymity of all participants.

Findings and Discussion

During the semi-structured interviews, the participants raised a range of concerns regarding the challenges associated with implementing the re-entry policy for teen mothers in the Tabora region. These concerns reflect adolescent mothers' complex realities and lived experiences as they attempt to reintegrate into the formal education system. The qualitative nature of the study allowed for an in-depth exploration of these experiences, revealing both personal and systemic barriers to successful school re-entry. Based on the analysis of the interview data, the findings have been categorized into three overarching themes, representing the most salient and recurring issues identified by the participants. These themes are presented and discussed in detail in the subsequent sections.

Lack of full participation in social activities

The findings from this study revealed that teen mothers are faced with challenges related to social isolation within the school compound. Teen mothers are being isolated from participating in various school activities, such as attending sports and game activities, debates and other activities within the school compound. The study shows that social isolation is associated with loneliness, emotional distress and depression symptoms among teen mothers, which sometimes may result in school drop-out. One of the interviewed teen mothers added that;

I typically feel isolated when I am at the school compound; before this situation, I used to participate in playing netball and attending various inter-school activities; the situation changed after giving birth and none of the activities I was included in. Again, sometimes, it isn't easy to attend school activities due to the responsibilities I have as a mother. Most of the school activities are practised outside of class hours; I used that time to return home to take care of my newborn (Interview with the 2nd teen mother, 13th March 2024).

Another teen mother added that:

Mhh! Being a mother at the school age actually changes the lifestyle of the teen mother; for instance, I don't prefer participating in the after-school activities that are being performed after class hours. I would rather prefer to use that time to complete the assignment given by the school and return home to take care of the child (Interview with the 5th teen mother on 14th March 2024).

The narratives above suggest that teen mothers experience limited participation in social activities within the school environment, primarily due to the dual responsibilities of motherhood and academic engagement. Participants consistently emphasized that their priority is the well-being and development of their children, which often takes precedence over engaging in extracurricular or peer-related activities. Many of the interviewed teen

mothers expressed a strong desire to participate in school-based social events, such as clubs, games, and group discussions, but cited time constraints and caregiving demands as major barriers. The findings further indicate that the lack of structured childcare support significantly contributes to their social exclusion. These results align with the findings of Mgunda, Kano, and Sungwa (2023), who reported that adolescent mothers struggle to participate fully in school life due to the absence of reliable childcare arrangements. Their study similarly highlighted that teen mothers often face the challenge of not knowing who to entrust with their child's care during school hours, which limits their ability to integrate socially within the school community. This lack of social participation not only isolates them but may also impact their emotional well-being and sense of belonging in the educational setting.

Moreover, the study by Kanana *et al.* (2021) revealed that teen mothers had limited time to participate in various co-curricular activities around the school compound; their study clearly shows that the presence of numerous responsibilities among teen mothers limits them from attending the co-curricular activities. Additionally, Niboye (2018) added that teen mothers encounter the challenge of insufficient time to fulfil all of their duties and responsibilities as mothers and students, which creates a limitation for them in participating in various school social activities. Similarly, Mgunda *et al.* (2023) added that most teen mothers tend to isolate themselves from their peer friends. This tension stems from feelings of shame about their action, which negatively affects their academic, social and emotional achievement.

The findings of this study align with the principles of Critical Theory, which served as a valuable lens for uncovering the hidden forms of marginalisation that teen mothers experience within the school setting. The theory was instrumental in revealing how the school environment, while appearing neutral and inclusive, often fails to accommodate the unique needs of adolescent mothers—particularly in relation to their participation in social activities. Although such activities are vital for personal development, emotional well-being, and the cultivation of talents, teen mothers are frequently excluded due to their caregiving responsibilities and lack of institutional support. Critical Theory emphasises the importance of challenging social structures that inhibit equitable participation and calls for transformative change to ensure that all learners, including teen mothers, can access opportunities for holistic development. In this context, the theory advocates for the creation of more inclusive school practices that enable teen mothers to engage in social activities and thereby realize their full potential.

Psychological Problem

The findings from this study revealed that teen mothers experience significant psychological challenges as a result of the life circumstances

surrounding their pregnancies and return to school. All ten participants reported that psychological distress began from the moment they discovered their pregnancies and continued throughout their reintegration into the school environment. These emotional struggles were often exacerbated by the negative treatment they received from key social groups, including members of the community, their parents, peers, and even teachers. Feelings of shame, isolation, anxiety, and low self-esteem were commonly cited among the participants. These psychological burdens not only hinder their academic performance but also affect their overall well-being and motivation to persist in their education. The findings suggest a critical need for psychosocial support mechanisms within schools to ensure that teen mothers are emotionally supported as they navigate their dual roles as students and parents. Being isolated from community activities, such as church services, creates depression among teen mothers. For instance, one of the interviewed teen mothers pointed out that:

My life is full of stress and depression; most of the time, I think about the welfare of my child since my family provides little support for the child's well-being. I don't know how my child will grow, and his father did not provide any financial support to raise our baby. Lack of financial support has been leading to depression, thinking about the activities that I can engage in to acquire the money that will help to solve my problems (Interview with 6th teen mother, on 15th March 2024)

Moreover, another teen mother added that:

I have been suffering from psychological problems, which I think it is caused by the responsibilities and duties I have as a teen mother. Since I returned to school, my grades have decreased, and sometimes, I fail to complete the assigned homework due to the responsibilities I have after class hours. Sometimes, I miss the classes due to the parenting responsibilities of taking care of the baby, like going to the clinic, ...I sometimes fail to sleep during the night... the parenting issue is very stressful (Interview with the 4th teen mother on 13th March 2024)

The findings above highlight the psychological toll of systematic discrimination, aligning with Critical theory's emphasis on the need for structural change to address these inequalities. The findings revealed that life experiences, lack of social and financial support, and burden of activities have been linked as the factors that lead to psychological problems among teen mothers. The study revealed that teen mothers are faced with psychological problems starting from the moment their pregnancy is disclosed, and this situation persists even after they return to school. The most suffering students from psychological problems are those from lower-income families. The life experiences they encounter create challenges towards attaining their goals. For instance, participants in this study indicated that the life experiences they face—such as early motherhood, social stigma, and lack

of support—intensify their susceptibility to depression. This emotional burden directly affects their ability to focus and perform academically. Many of the teen mothers expressed that the psychological strain they endure hampers their concentration, motivation, and participation in school activities, ultimately leading to poor academic outcomes. These findings are in line with the study conducted by Mgunda, Kani, and Sungwa (2023), which revealed that teen mothers are at a significantly higher risk of experiencing stress, anxiety, and depression due to the multifaceted challenges they encounter, particularly within unsupportive school and community environments. Such mental health struggles not only impact academic achievement but also pose long-term risks to the overall well-being of adolescent mothers. This is due to the stigmatisation and discrimination within their community and school settings.

Moreover, Muthelo *et al.* (2024) added that teen mothers find it difficult to deal with parenting-related problems, which may result in feelings of low self-esteem and various mental health problems such as stress, anxiety, fear, depression and suicidal thoughts. Furthermore, Dahmen *et al.* (2019) added that depressed and anxious mothers may develop strong feelings of annoyance, which make it difficult for them to care for their newborns. Niboye (2018) added that teen mothers are not given breastfeeding breaks, which leads to their milk leaking from their breasts and staining their uniforms, which psychologically affects teen mothers. In relation to Critical Theory, its critique of societal structures and lived experiences helps illuminate how teen mothers are subjected to conditions that contribute to low self-esteem and mental health challenges. The theory exposes the underlying power dynamics and social stigmas that often go unquestioned, yet deeply affect the psychological well-being of these young women. The findings of this study clearly underscore the urgent need to integrate life skills education, along with guidance and counselling services, into school programs for teen mothers. Such interventions are essential in empowering them to cope with the emotional and psychological difficulties they face, and in fostering resilience, confidence, and a sense of belonging within the school environment. By addressing these needs, the education system can move toward a more inclusive and supportive framework that aligns with the transformative goals of Critical Theory.

Insufficient funds

The findings revealed that teen mothers face significant financial constraints, which stem largely from the increased responsibilities associated with both caregiving and academic demands. Many participants reported a decline in financial support from their parents or guardians upon becoming mothers. This lack of support made it difficult for them to afford essential school-

related expenses, including the purchase of learning materials, uniforms, and fees for remedial sessions. Some teen mothers noted that they were unable to obtain key school documents due to financial limitations. Additionally, the study uncovered that some parents refused to provide even basic necessities, arguing that they should not be responsible for supporting both their daughter and her child. As a result, teen mothers were often compelled to seek financial assistance from the child's father, a situation that further strained their emotional well-being and sense of independence. These financial challenges contributed to feelings of isolation and hindered their ability to fully participate in learning activities, ultimately jeopardizing their academic success. One participant shared that;

I am facing difficulty in buying the school materials; this is due to the fact that soon after delivery, my parents had me choose whom my parents need to take care of between me and my child. In this case, I opted for my child to be under the hands of my parents and use other time to find money that would help me complete my schooling. Due to poverty within our family, my parents fail to support two people at once (Interview with the 4th teen mother on 14th March 2024).

The finding suggests that poverty is among the factors that affect the implementation of re-entry policy among teen mothers in secondary schools. In implementing the re-entry policy, teen mothers noted difficulties in affording school materials, and paying for remedial sessions, which made them miss important lessons, especially those students who are in the national examination year. In relation to the critical theory, the findings from this study identified lack of sufficient funds as the negative factor that affects the implementation and practices of re-entry policy.

Furthermore, the findings of this study align with those of Timothy and Juhudi (2023), who found that financial constraints represent a major barrier to educational attainment for teen mothers. Their research highlighted that teen mothers are often forced into a difficult position of having to choose whether financial support from parents should be directed toward themselves or their children. This dilemma not only places an emotional burden on the mothers but also contributes to long-term psychological trauma. As a coping mechanism, some teen mothers consider taking on part-time jobs to meet their personal and academic needs. Similarly, Onyango (2015) emphasizes that teen mothers struggle to manage the logistical and financial demands of both parenting and schooling. From the perspective of Critical Theory, these findings point to the need for systemic transformation. The theory critiques the social and institutional structures that marginalize vulnerable groups, such as teen mothers, and calls upon educational stakeholders to implement targeted interventions. This includes the provision of financial assistance, as well as flexible employment or income-generating opportunities, to help teen

mothers meet their educational and caregiving responsibilities more effectively.

Conclusion and implication of the study

The findings of this study highlight significant challenges in the implementation of the re-entry policy aimed at promoting Sustainable Development Goal 4—ensuring inclusive and equitable quality education for all. Despite the policy's intent to support teen mothers in continuing their education, its implementation in the Tanzanian context remains fraught with barriers. The study identified insufficient financial support, psychological distress, and limited participation in school social activities as the primary obstacles hindering the effective reintegration of teen mothers into the formal education system. Moreover, these challenges are often exacerbated by the attitudes and actions of key stakeholders in the implementation process, including teachers, parents, and peer students. In response to these findings, the study recommends that the government and educational stakeholders intensify community education and awareness campaigns to transform negative attitudes toward teen mothers. Reducing stigma and discrimination is essential for creating an inclusive and supportive school environment that prioritizes the emotional and academic well-being of adolescent mothers. Furthermore, the study emphasizes the need for clearer policy guidance and stronger monitoring mechanisms to ensure the consistent and effective application of the re-entry policy across schools. Without practical follow-ups and accountability structures, the policy risks remaining symbolic rather than transformative. Given the financial vulnerabilities highlighted, the study also calls for the provision of targeted financial support to teen mothers, whose responsibilities and needs have doubled with the presence of a newborn. Financial instability not only compromises their academic performance but also increases the risk of them relapsing into the same challenges that led to school dropout in the first place.

Additionally, there is a critical need for the establishment of structured guidance and counselling services in schools. These services should be tailored to address the specific emotional and psychological challenges that teen mothers face, thereby promoting resilience and long-term educational engagement. Finally, the study recommends further research into how the re-entry policy is being implemented in practice, particularly its impact on the academic performance and future prospects of teen mothers. Such research would contribute to a deeper understanding of policy effectiveness and inform more nuanced and inclusive educational reforms.

References

- Asumini, S. & Mwila, P. M. (2024). Prospects and challenges of teenage mothers' re-entry into secondary schooling at Chisalu Folk Development College, Tanzania: *Journal of Educational and Management Studies*, 14(1): 16-26.
- Cohen, L., Manion, L., & Morrison, K. (2019). *Research Methods in Education* (8th ed). Routledge.
- Creswell, J. W. (2018). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). Thousand Oaks. Sage.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design*. Sage.
- Dahmen, B., Konrad, K., Jahnen, L., Herpertz-Dahlmann, B & Firk, C. (2019). Mental health of teenage mothers: impact on the next generation. *Nervenarzt*, 90(3), 243-250.
- Dowden, A. & Gray, K. (2017). *A phenomenological analysis of the impact of teen pregnancy on educational attainment: implications for school counsellors*. North Carolina: North Carolina State University.
- Elflein, J. (2023). *Birth rate for teenagers aged 15-19 years 1991-2021*: Retrieved from: <https://www.statista.com/statistics/259518/birth-rate-among-us-teenagers/> Accessed on: 23rd January 2024.
- Fallis, A. (2013). The challenges experienced by teenage mothers in secondary schools: the case of Hlanganani South Circuit. *Journal of Chemical Information and Modeling*, 53(9), 1689-1699.
- Frost, D. M. (2011). Social stigma and its consequences for the socially stigmatised. *Social and Personality Psychology Compass*, 5(11), 824-839. DOI: 10.1111/j.1751-9004.2011.00394.x.
- Gatsinzi, P. (2021). Case study of the out of school teenage mothers' lived experiences and perceptions on education in Rusororo Sexctor, Rwanda: *A Back to School Framework*. 17(3): 120-130
- Government of Kenya. (2013). *Basic Education Act 2013*. Nairobi: Government Printer
- Harney, B. (2012). *The Critical Theory 3rd Edition*, Encyclopedia of Management: Wiley Publisher.
- Hugo, V., & Olvera, O. (2024). *The Nerds, the Cool and the Central: Peer Education and Teen Pregnancy in Brazil*. Retrieved from: <https://healtheducationresources.unesco.org/library/documents/nerds-cool-and-central-peer-education-and-teen-pregnancy-brazil> , Accessed on 4th Aug 2024
- Imbosa, L., Majanga, E., & Ouda, J. (2022). Re-entry Policy and Retention of Expectant Students and Teen Mothers in Public Secondary Schools in Vihiga Sub-Country, Kenya: *International Journal of Education and Research*, 1(2): 1-16
- Kanana, K. R., Obonyo, J., & Wambu, C. K. (2021). Challenges, coping mechanisms and the support accorded to student-mothers in academic

- pursuit: a case study of Egerton University, Nakuru Country: *Advances in Sciences and Humanities*, 7(3): 93-101
- Marende, J. (2022). *School Re-entry Policy and Its Effects on the Participation of Teenage Mothers in Public Secondary School, Naroki-Kenya*: Kenyatta University
- Mgunda, T. P., Kano, E., & Sungwa, R. (2023). Challenges Facing Teenage Mothers Re-Entry into Secondary Schools in Tanzania: A Qualitative Phenomenological Study: *Journal of Issues and Practice in Education*, 15(2): 179-196.
- Morgan, A. K., Anima, P. A., Wadei, B., & Katey, D. (2024). Addressing Stigma and Discrimination Towards School Re-entry of Teenage Mothers in Ghana: *International Journal of Adolescence and Youth*, 30(1), Retrieved from: <https://www.tandfonline.com/doi/full/10.1080/02673843.2024.2441322>, Accessed on 07th May 2025
- Muthelo, L., Mbombi, M. O., Mphhekgwana, P., Mabila, L. N., Dhau, I., Tlouyamma, J., Mashaba, R. G., Mothapo, K., Ntimane, C. B., Seakamela, K. P., Nemuramba, R., Maimela, E. & Sodi, T. (2024). Exploring mental health problems and support needs among pregnant and parenting teenagers in rural areas of Limpopo, South Africa. *BMC Women's Health*, 24, 236. <https://doi.org/10.1186/s12905-024-03040-z>.
- Nguyen, M. (2016). Cultural influences on teenage mothers' educational attainment: Insights from non-formal education programs. *Culture, Health and Sexuality*, 18(6), 523-536
- Niboye, E. P. (2018). Back to school after delivery, the plight of teenage mothers in Zanzibar: Experiences from Mjini Magharibi's Urban and West Districts in Unguja: *International Journal of Humanities Social Sciences and Education*, 5(3): 54-67
- Nyengarika, A. & Nombo, N. M. (2020). Teen pregnancies among day government secondary school students in Ruvuma Region Tanzania: *International Journal of Advance Research and Innovative Ideas in Education*, 6(4): 157-166
- Okondo, M. A. (2018). *Experiences of teenage mothers in secondary schools in Bondo Sub-Country, Kenya*. University of Nairobi. Retrieved from: https://erepository.uonbi.ac.ke/bitstream/handle/11295/161979/Okondo%20M_Experience%20of%20Teenage%20Mothers%20in%20Secondary%20Schools%20in%20Bondo%20Sub-country%20C%20Kenya.pdf?sequence=1&isAllowed=y, Accessed on 7th May 2025
- Onyango, G., Kioli, F. N., & Erick, O. N. (2015). *Challenges of school re-entry among teenage mothers in primary schools in Muhoroni District, Western Kenya*. Retrieved on:

- https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2546761 ,
Accessed on 3rd Aug 2024
- Sykes, G., Schneider, B., & Plank, D. N. (2009). *Handbook of Education Policy Research*. New York: Routledge.
- Thompson, R. (2017). The influence of peer support on teenage mothers' educational outcomes: A meta-analysis. *Journal of Youth and Adolescence*, 55(3), 521-634.
- Timothy, J., & Juhudi, C. (2023). Exploration of teenage mother students' challenges in secondary schools in Tanzania: A case of Ifakara, Morogoro: *Journal of Research Innovation and Implications in Education*, 7(4): 724-735
- UN (2023). *UN sustainable development group. Leave no one behind*. Retrieved from <https://unsdg.un.org/2030-agenda/universal-values/leave-no-one-behind> Accessed on 27th January 2024.
- UNESCO (2014). *Developing and education sector response to early and unintended pregnancy*. Retrieved on: <https://healtheducationresources.unesco.org/library/documents/re-entry-school-after-giving-birth-evaluation-process-used-design-and-implement> Accessed on 24th January 2024.
- URT (2022). *Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS)*. Retrieved from <https://microdata.worldbank.org/index.php/catalog/6102#:~:text=Specifically%2C%20the%202022%20TDHS%20DMIS,%2C%20malaria%20prevalence%2C%20knowledge%2C%20and> Accessed on 21st January 2024.
- World Bank (2024). *Policy Brief- The Nerds, the Cool and the Central: Peer Education and Teen Pregnancy in Brazil*. Retrieved from: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099061024115016088/P504274170b28001b1b06516468a6f9325f>, Accessed on 4th August 2024.

The Impact of Servant Leadership Behaviours on Secondary School Students' Academic Achievement in Tanzania

Florence Willbroad Ngua¹ & Winfrida Saimon Malingumu²

¹Department of Education Planning and Policy Studies
The Open University of Tanzania
Email: florencengua77@gmail.com

²Department of Education Planning and Policy Studies
The Open University of Tanzania
Email: winnienyamka@gmail.com

Abstract

This study examined the impact of servant leadership on students' academic achievement in public secondary schools in the Mpanda Municipal Council, Tanzania. The study assessed the prevalence of servant leadership behaviours and their relationship with teacher empowerment and student performance. Using a quantitative approach and a cross-sectional survey design, data were collected from 187 participants and analysed through descriptive statistics and linear regression using IBM-SPSS. The null hypothesis that servant leadership behaviours are rarely practised in public secondary schools was rejected, confirming the presence of such leadership practices. The study concludes that servant leadership is evident, as school heads consistently prioritise their subordinates when addressing school-related matters. The study recommends that school heads proactively address their subordinates' needs to cultivate a culture of self-giving among teachers, which, in turn, can contribute to improved student achievement.

Keywords: *Servant leadership, emotional healing, head of school, leadership style*

Introduction

Leadership is a crucial element in any organisation involving human interaction, as it serves as a catalyst for change and a unifying force among employees through the power of influence (Ibrahim & Don, 2014; Wong, 2007). In business or humanitarian activities, centralised or dispersed organisations require supportive and selfless leadership to achieve success (Leadership, 2019). This form of leadership fosters positive behavioural changes in employees, enhancing their commitment to organisational goals (Gocen & Sen, 2021). As a result, organisational development becomes a key performance measure, directly influencing goal achievement. It has been argued that when, employees are motivated to put in extra effort without prioritizing personal gain, overall productivity increases, making student

academic achievement more attainable in educational settings (Podsakoff *et al.*, 2000).

Studies on leadership styles has gained momentum since the 1970s, driven by the growing recognition of employees' contributions as a vital organizational resource (Eva *et al.*, 2019). Researchers emphasize that prioritizing employees' needs is crucial in determining the effectiveness of both production and service-oriented organizations (Gocen & Sen, 2021). Leadership selection presents a unique challenge in the education sector, as different leadership styles serve diverse interests (Sağlam & Alpaydın, 2017). Schools, as organisations, benefit more from leaders who adopt a serving mindset rather than those motivated by personal gain, as this approach enhances their effectiveness in fulfilling their roles within the community (Sağlam & Alpaydın, 2017).

Servant leadership is increasingly favoured over traditional management due to its focus on social influence, encouraging individuals to pursue what is meaningful and beneficial (Sağlam & Alpaydın, 2017). This leadership style takes a holistic approach, engaging followers on multiple levels: relational, ethical, emotional, and spiritual, empowering them to grow and reach their full potential (Eva *et al.*, 2019). By fostering an environment where employees feel valued and supported, servant leadership enhances both individual and organizational success.

Servant leadership seeks first and foremost to develop followers based on leaders' altruistic and ethical orientation. According to Liden *et al.* (2015), servant leadership behaviour includes emotional healing, creating value for the community, conceptual skills, empowering, helping subordinates grow and succeed, putting subordinates first and behaving ethically. Likewise, Vān Dierendonck *et al.* (2017) reported that servant leadership behaviour involves empowerment, accountability, standing back, humility, authenticity, courage, interpersonal acceptance, stewardship, voluntary subordination, authentic self, covenantal relationship, responsible morality, transcendental spirituality, and transforming influence. Moreover, Sendjaya *et al.* (2018) mentioned servant leadership behaviour such as voluntary subordination, authentic self, covenantal relationship, responsible morality, transcendental spirituality, transforming influence.

As of this study, servant leadership is the most suitable due to its characteristics, which are evidently different when compared to other leadership styles. The question of which leadership style is ideal in educational institutions is essential now because there is an increasing need

to improve the academic achievements of school children in line with the global agenda of providing Quality Education for All (Didham & Ofei-Manu, 2015). The Sustainable Development Goals (SDG 4 on education and the Education 2030 agenda stress the need to transform educational institutions into organizations that are capable of providing quality education to students (UNESCO, 2015), which can be measured in levels of improved academic achievements among school children in the education system. These needs a leadership style which is supportive like servant leadership. Servant leaders create an environment in which people feel a sense of belonging. As a result, they become committed and ready to assist the students without thinking of their personal benefits.

Tanzania's education system requires effective institutions to bridge knowledge gaps and contribute to sustainable development (Oxfam, 2019; UNICEF, 2019; URT/UNESCO, 2017). Institutional effectiveness is closely linked to the quality of leadership, with effective school leadership serving as a cornerstone of organisational success (Spears, 2010). To enhance school performance and achieve educational objectives, school leaders must adopt leadership styles that promote collaboration, empowerment, and a strong sense of commitment among both staff and students. Identifying and validating a leadership approach that aligns with the specific dynamics of the school environment is essential for producing graduates who are well-prepared to contribute meaningfully to global sustainable development.

Schools employ a range of leadership styles, from autocratic to democratic, each influencing organizational behaviour and student achievement differently (Schroeder, 2016; Sağlam & Alpaydın, 2017). While, debates persist on the most effective leadership model, scholars suggest that servant leadership is particularly well-suited to educational settings. Doraiswamy (2013) and Ibrahim and Don (2014) argue that servant leadership which prioritizes the needs of others and fosters individual growth, aligns with the goals of school organizations. Supporting this perspective, Gocen and Sen (2021), Spears (2010), and Tzu-Bin Lin, Zhang, and Foo (2012) conceptualise leadership as a continuum—with servant leadership at one end and authoritarian leadership at the other—encompassing a range of styles that fall between these two extremes. On the other hand, servant leadership has gained increasing recognition across organizational settings, including schools, due to its positive impact on leadership behaviour, perceptions, and attitudes, which ultimately influence student academic performance (Doraiswamy, 2013; Gocen & Sen, 2021; Spears, 2010). Doraiswamy (2013) highlights the nobility of the teaching profession, emphasizing that servant leadership fosters a sense of vocation and dedication among educators. This

approach empowers teachers, enabling them to serve students more effectively (Schroeder, 2016). Servant leadership is characterised by key attributes, including valuing and developing individuals, fostering a sense of community, demonstrating authenticity, and promoting shared leadership (Taylor *et al.*, 2000). Spears (2010) expands on these qualities, identifying ten key characteristics of servant leadership: listening, empathy, healing, awareness, persuasion, conceptualisation, foresight, stewardship, commitment to the growth of others, and community-building.

Empirical studies consistently demonstrate that servant leadership enhances student performance by empowering teachers and promoting a culture of collaboration. Neubert *et al.* (2016) and Gocen and Sen (2021) highlight its role in teacher motivation, while Eva *et al.* (2019) and Liden *et al.* (2014) emphasise its impact on workplace unity. Additionally, Yukl (2013) and Van Dierendonck (2011) link servant leadership to institutional transformation, and Amanchukwu *et al.* (2015) and Bass and Riggio (2006) find it particularly effective in schools. Taylor *et al.* (2000) and Sağlam and Alpaydın (2017) advocate prioritising servant leadership in education to enhance student success. Collectively, these studies underscore the necessity of adopting leadership styles that empower teachers, foster unity, drive change, and improve overall organisational effectiveness.

Servant leadership in schools is particularly appealing because it fosters a sense of honour and service among teachers, who, in turn, extend the same commitment to their students (Schroeder, 2016). Recent studies on educational leadership in Tanzania have examined a range of themes, including the relationship between servant leadership and teacher job satisfaction, the influence of leadership styles on teacher commitment, and the role of school leadership in enhancing educational outcomes in disadvantaged communities (Nduka, 2021; Nyenyembe *et al.*, 2016; Oduro, Dachi, & Fertig, 2008). These studies have primarily examined transformational, transactional, and instructional leadership, highlighting their effectiveness in fostering teamwork, motivation, and commitment among teachers. However, these leadership styles often lack key attributes of servant leadership, such as emotional healing, ethical behaviour, conceptual skills, and a strong emphasis on putting subordinates first (Liden *et al.*, 2015). Servant leaders create an environment that motivates individuals to go beyond their formal duties, making it an ideal leadership approach in the current educational landscape of Mpanda Municipal.

An analysis of six secondary schools: Mwangaza, Kasokola, Kashaulili, Kasimba, Magamba, and Misunkumilo in Mpanda Municipal Council from

2020 to 2022 reveals a concerning trend in student academic performance. In 2020, 32.9% of students (421 out of 1,278) scored in divisions I–III, while 151 scored division zero. In 2021, the percentage of students in divisions I–III slightly decreased to 32.1% (445 out of 1,383), with 144 scoring division zero. By 2022, the percentage had dropped further to 28.8% (465 out of 1,611), while 202 students (12%) scored division zero (Municipal Education Officer Mpanda, 2023). This declining performance highlights the urgent need to assess school leadership styles, particularly those capable of harnessing the potential of both staff and students to improve learning outcomes. Despite extensive research on leadership styles, the application of servant leadership in Tanzania’s public secondary schools remains underexplored. Given the pivotal role of leadership in shaping student success, this study seeks to examine the impact of servant leadership on students’ academic achievement in public secondary schools.

Theoretical Framework: Servant Leadership Theory

This study adopted the Servant Leadership Theory, developed by Robert K. Greenleaf in 1970, as its theoretical foundation. Greenleaf’s theory emphasizes the leader’s intrinsic motivation to serve, placing the needs of followers above personal interests and fostering a supportive, people-centered approach to leadership. In educational settings, this leadership style underscores the growth and well-being of students, with a focus on fostering academic, social, and personal success through supportive leadership from teachers, school heads, and school committees (Shen, Leslie, Spybrook, & Ma, 2012; Greenleaf, 1970). The relevance of this theory to the current study lies in its capacity to enhance student engagement and improve teacher-student relationships, ultimately leading to better academic performance. Within environments where servant leadership is practiced, students’ individual needs are addressed effectively, and school leaders demonstrate a genuine concern for students’ academic progress. Servant leadership cultivates a community-oriented school culture that promotes a sense of value and support for students (Barbuto & Wheeler, 2006; Williams & Hatch, 2012). By fostering positive relationships, motivation, and a supportive learning environment, servant leadership can significantly impact students’ academic achievement, providing a deeper understanding of the mechanisms through which leadership influences academic success.

Relevance of Servant Leadership in Public Schools

Public schools, which are owned and operated by the government or parastatal entities, provide education from pre-primary to upper secondary levels. The financing of these schools typically relies on public funding strategies, ensuring accountability to the public at large. Servant leadership in

public schools is manifested through various leadership strategies to meet societal expectations for educational outcomes. School leaders, whether explicitly or implicitly, adopt leadership styles that aim to motivate both teachers and students, and these leadership behaviours directly affect the performance of both groups (Meindinyo *et al.*, 2017; Keleem *et al.*, 2021). According to Liden *et al.* (2015), servant leadership behaviours include emotional healing, creating value for the community, conceptual skills, empowerment, helping subordinates grow, putting subordinates first, and behaving ethically. Similarly, Van Dierendonck *et al.* (2017) describe servant leadership as involving empowerment, accountability, humility, authenticity, courage, along with the voluntary subordination and ethical self-behaviour that define this approach.

In public school environments, servant leadership seeks to motivate staff and students. Similarly, servant leadership emphasizes the development of followers, grounded in the leader's altruistic and ethical orientation. Leadership practices such as consultative decision-making, fostering trust, providing spiritual and emotional support, listening, and using power ethically reflect servant leadership principles. These leadership practices create a supportive climate, fostering active participation in school activities, including learning (Meindinyo *et al.*, 2017; Stewart, 2017). The influence of servant leadership on motivation leads to an overall positive school climate, improving both teacher job satisfaction and student engagement in the learning process.

Methods and Materials

This study employed a quantitative approach with a cross-sectional survey design to collect and analyse data efficiently. The quantitative method allowed for objective measurement, causality determination, and generalisation of results (Bryman, 2012; Kaplan, 2004). Six secondary schools were purposively selected from 18, based on declining student performance. Probability sampling was then used to randomly select 126 teachers, 48 students, and 6 parents, ensuring representativeness. Purposive sampling targeted six school heads and one Municipal Education Officer for insights on leadership. The total sample size was 187 participants. Data were collected via a self-constructed questionnaire with a Likert scale and analysed using regression, descriptive, and inferential statistical methods. This combination of purposive and probability sampling balanced context-specific insights and generalizability. The questionnaire was pre-tested to ensure validity and reliability, and content validity was confirmed through expert reviews. Cronbach's Alpha was used to assess reliability. On the other hand,

data collection was conducted under controlled conditions to ensure accuracy and avoid missing data, maintaining the integrity of the analysis.

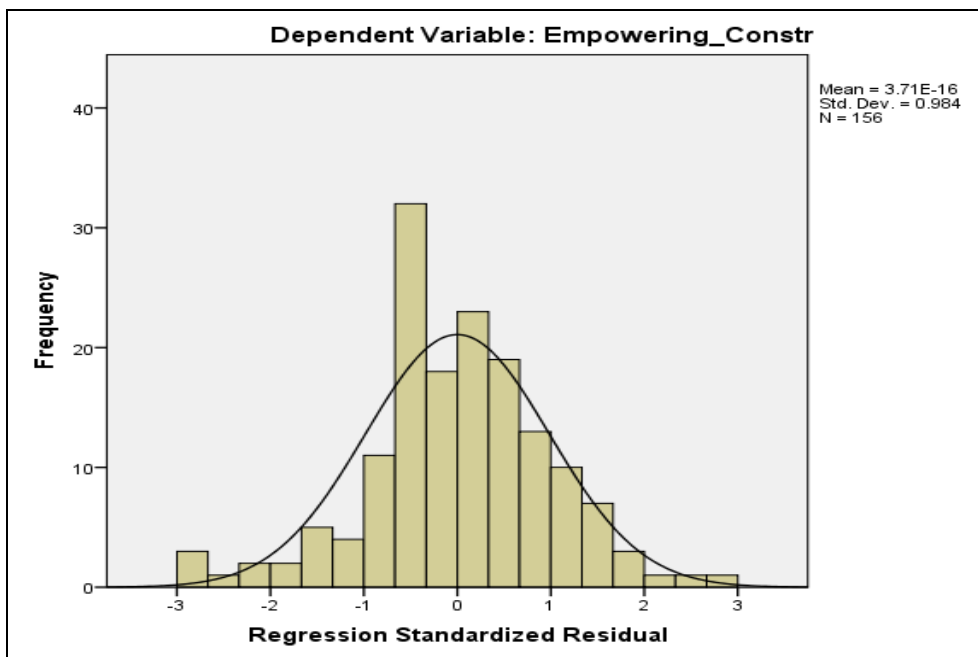
Results and Discussion

This section presents and interprets the findings of the study, focusing on the influence of servant leadership on students' academic achievement in public secondary schools. The results are analysed using both descriptive statistics and inferential methods to identify patterns and relationships within the data. The discussion integrates these findings with existing literature and theoretical perspectives to comprehensively understand how servant leadership practices impact educational outcomes. This analysis also highlights key implications for school leadership and educational policy in the Tanzanian context.

Test of Normality

A test of normality was performed to determine the type of regression analysis on data collected using a Likert scale. From the analysis, as indicated in the graph, linear regression was conducted to determine the attribution indicated on examining the experience of servant leadership behaviours in public secondary schools. Normality output is reported in Graph 1.

Figure 1: Normality output



Source: Filed Data (2023)

Figure 1 revealed that data on empowering subordinates were normally distributed; therefore, linear regression was perceived as ideal for estimating the relationship of variables within the empowerment construct.

Table 1 summarizes the findings regarding the model's predictive power in explaining the relationship between the predictors and the dependent variable.

Table 1
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.558 ^a	.312	.289	.56537

Note: a. Predictors: (Constant), Putting Subordinates Constr, Conceptual Skills Constr, Emotional Healing_Constr, Creativity_Constr, Helping Subordinates_Constr
b. Dependent Variable: Empowering_Constr

As shown in Table 1, the model indicates a moderate correlation between the predictors and the dependent variable ($R = 0.558$). The R-squared value of 0.312 reveals that approximately 31.2% of the variation in empowerment can be explained by the selected predictors, including emotional healing, conceptual skills, helping subordinates, and putting subordinates' needs first. This suggests that these servant leadership behaviours collectively contribute to fostering school empowerment. The model's moderate predictive power suggests that, although servant leadership factors significantly contribute to empowerment, additional unexamined variables may also influence this outcome. The findings underscore the presence of servant leadership traits within the school environment, reinforcing the critical role these behaviours play in fostering a positive and empowering atmosphere for both teachers and students.

Table 2
Analysis of Variance (ANOVA) of the variables in the model
ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	21.722	5	4.344	13.591	.000 ^b
	Residual	47.946	150	.320		
	Total	69.668	155			

Note: a. Dependent Variable: Empowering_Constr
b. Predictors: (Constant), Putting Subordinates Constr, Conceptual Skills Constr, Emotional Healing_Constr, Creativity_Constr, Helping Subordinates_Constr

Table 2 presents the results of the ANOVA test conducted to assess the relationship between subordinate empowerment, as an attribute of servant

leadership, and the leadership behaviours of school heads. The analysis reveals a statistically significant effect of leadership attributes on subordinate empowerment ($F(5, 150) = 13.591, p = 0.000$), indicating that the model explains a meaningful portion of the variation in empowerment. The low p-value ($p < 0.05$) suggests that the leadership behaviours, putting subordinates' needs first, emotional healing, helping subordinates, conceptual skills, and creativity collectively significantly influence empowering subordinates.

The significant F-value also indicates that the regression model provides a good fit for the data, supporting the conclusion that servant leadership attributes effectively predict empowerment outcomes within the school setting. Thus, the results demonstrate that the model reliably captures the relationship between school heads' leadership behaviours and their subordinates' empowerment.

Table 3
 Model Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.015	.332		3.057	.003
	Emotional Healing_Constr	.122	.080	.125	1.517	.131
	Creativity_Constr	.102	.080	.110	1.276	.204
	Conceptual Skills_Constr	.126	.084	.135	1.492	.138
	Helping Subordinates_Constr	.084	.092	.083	.905	.367
	Putting Subordinates_Constr	.217	.058	.295	3.744	.000

Note: a. Dependent Variable: Empowering_Constr

From Table 3, the regression analysis shows that various leadership behaviours predicted subordinate empowerment. Among these, "Putting Subordinates' Needs First" ($\beta = 0.295, t = 3.744, p < 0.005$) was a statistically significant and positive predictor of empowerment. This indicates that school heads who prioritize the needs of their subordinates significantly enhance their empowerment.

On the other hand, "Conceptual Skills" ($\beta = 0.135, t = 1.492, p > 0.005$), "Emotional Healing" ($\beta = 0.125, t = 1.517, p > 0.005$), "Creativity" ($\beta = 0.110, t = 1.276, p > 0.005$), and "Helping Subordinates" ($\beta = 0.083, t = 0.905, p > 0.005$) were not statistically significant predictors of empowerment, as their p-values exceeded the threshold of 0.05.

The results of this study highlight the significant role of "Putting Subordinates' Needs First" as a key predictor of empowerment in the school context, illustrating its essential impact on fostering empowerment among teachers. While other servant leadership attributes, such as emotional healing, conceptual skills, creativity, and helping subordinates, were found to have positive relationships with subordinate empowerment, only prioritizing the needs of others emerged as a significant factor. This finding underscores the importance of servant leadership in promoting empowerment, where school leaders create an environment that allows teachers to feel valued, supported, and motivated to contribute to school goals. Leaders who prioritize their subordinates' well-being enable them to exercise autonomy and engage in decision-making, thereby increasing their commitment and overall job satisfaction (Greenleaf, 1977; Liden *et al.*, 2008; Eva *et al.*, 2019).

Empowerment in the school setting goes beyond giving teachers autonomy; it is about fostering collaboration, shared decision-making, and professional growth. As Reid *et al.* (2022) outlined, school leaders can empower teachers by identifying shared goals, coordinating professional visions, experimenting with new ideas, and expanding professional networks practices that align closely with servant leadership. When school heads facilitate rather than direct, and teachers feel recognized and respected for their contributions, they are more likely to fully engage with the school's mission, positively impacting students' academic performance. While servant leadership is crucial, other factors, such as teacher empowerment and affective commitment, also contribute to achieving educational success.

Conclusion

This study confirms the prevalence of servant leadership behaviours in public secondary schools in Tanzania, with a particular emphasis on "putting subordinates' needs first." This practice significantly fosters teachers' empowerment and engagement, which are key drivers of school academic achievement. While, other servant leadership traits, such as emotional healing, conceptual skills, and creativity, positively influence empowerment, prioritizing teachers' needs proves to be the most impactful. Servant leadership creates a supportive environment where teachers feel valued, motivated, and empowered, enhancing autonomy, decision-making, job satisfaction, and commitment. These factors, coupled with collaboration and professional growth, directly contribute to improved student academic performance. The study recommends that school heads should implement structured professional development programmes to enhance servant leadership practices. These should focus on meeting teachers' needs,

encouraging collaborative decision-making, and applying empowerment strategies to improve overall educational outcomes.

References

- Amanchukwu, R. N., Stanley, G. J., & Ololube, N. P. (2015). A review of leadership theories, principles and styles and their relevance to educational management. *Management*, 5(1), 6-14.
- Barbuto, J. E., & Wheeler, D. W. (2006). Scale development and construct clarification of servant leadership. *Group & Organization Management*, 31(3), 300-326. <https://doi.org/10.1177/1059601106287091>
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Erlbaum.
- Bryman, A. (2012). *Social research methods* (4th ed.). Oxford University Press.
- Daniëls, E., Hondeghem, A., & Dochy, F. (2019). A review on leadership and leadership development in educational settings. *Educational research review*, 27, 110-125.
- Didham, R. J., & Ofei-Manu, P. (2015). Social learning for sustainability: Advancing community-based inquiry and collaborative learning for sustainable lifestyles. In *Responsible living: Concepts, education and future perspectives* (pp. 233-252). Cham: Springer International Publishing.
- Doraiswamy, R. (2013). Leadership and organizational behaviour in education. *International Journal of Educational Management*, 27(3), 309-324. <https://doi.org/10.1108/01409191311310732>
- Eboka, C. N. (2016). Servant leadership: A framework for transforming education. *Journal of Educational Administration and Policy Studies*, 8(2), 24-33 *Educational Leadership*, 9(2), 45-57.
- Eva, N., Sendjaya, S., Van Dierendonck, D., & Liden, R. C. (2019). Servant leadership: A systematic review and call for future research. *The Leadership Quarterly*, 30(1), 111-132. <https://doi.org/10.1016/j.leaqua.2018.07.004>
- Gocen, A. & Sen, S. (2021). A Validation of Servant Leadership Scale on Multinational Sample. *Psychological Reports 2021, Vol. 124(2)* 752–770, doi: 10.1177/0033294120957246.
- Greenleaf, R. K. (1970). *The servant as a leader*. Robert K. Greenleaf Centre for Servant Leadership.
- Greenleaf, R. K. (1977). *Servant leadership: A journey into the nature of legitimate power and greatness*. Paulist Press.

- Hu, J., & Liden, R. C. (2015). Making a difference in the teamwork: Linking team prosocial motivation to team processes and effectiveness. *Academy of Management Journal*, 58(4), 1102-1127.
- Ibrahim, A. A., & Don, M. S. (2014). Leadership styles and its impact on organizational performance: A review. *International Journal of Leadership Studies*, 8(2), 189-209.
- Kaplan, R. S. (2004). The balanced scorecard: Measures that drive performance. *Harvard Business Review*, 82(2), 172-180.
- Keleem, L., Din, S., & Rehman, K. (2021). Exploring servant leadership in educational settings: A case study of public schools. *Journal of Educational Research*, 33(4), 102-115.
- Lee, A., Lyubovnikova, J., & Tian, A. W. (2018, July). Servant leadership: A meta-analytic examination. In *Academy of Management Proceedings* (Vol... 1, p. 1570) Briarcliff Manor, NY 10510: Academy of Management.
- Liden, R. C., Wayne, S. J., Zhao, H., & Henderson, D. (2008). Servant leadership: Development of a multidimensional measure and multi-level assessment. *The Leadership Quarterly*, 19(2), 161–177. <https://doi.org/10.1016/j.leaqua.2008.01.006>
- Meindinyo, R.O.K., Ibara, E.C, & Tuatongha, C. (2017). Leadership Styles of Secondary School Principals and Teachers' Job Satisfaction in Yenagoa Local Government Area of Bayelsa State, Nigeria. *IOSR Journal of Research & Method in Education (IOSR-JRME) Volume 7, Issue 2 Ver. II* MEO Mpanda. (2023). *Educational performance report, Mpanda Municipal Council*. Ministry of Education, Tanzania.
- Nduka, C. (2021). Servant leadership and school performance in Tanzanian education systems. *Journal of Education and Practice*, 12(4), 78-90.
- Nyenyenbe, F. W., Maslowski, R., Nimrod, B. S., & Peter, L. (2016). Leadership styles and teachers' job satisfaction in Tanzanian public secondary schools. *Universal Journal of Educational Research*, 4(5), 980-988.
- Oduro, D., Dachi, H., & Fertig, B. (2008). Leadership styles in Tanzania: The role of servant leadership in secondary education. *Tanzanian Educational Journal*, 22(1), 58-64.
- Ossiannilsson, E. (2016). Challenges and opportunities for active and hybrid learning related to UNESCO Post 2015. *Handbook of research on active learning and the flipped classroom model in the digital age*, 333-351.
- Oxfam. (2019). *Tanzania Education Sector Report*. Oxfam International Press.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). *Organizational citizenship behaviors: A critical review of the*

- theoretical and empirical literature and suggestions for future research.*
 Journal of Management, 26(3), 513–563.
<https://doi.org/10.1177/014920630002600307>
- Saglam, M. H., & Alpaydin, Y. (2017). The Relationship between School Administrators Personalities and Servant Leadership Behaviours. *Journal of Education and Training Studies*, 5(8), 106-113.
- Schroeder, B. (2016). The Effectiveness of Servant Leadership in Schools from a Christian Perspective. *BU Journal of Graduate Studies in Education, Volume 8, Issue 2, 2016*
- Schroeder, R. (2016). The role of servant leadership in promoting teacher motivation in public schools. *Journal of Educational Administration*, 54(5), 566-579.
- Shen, J., Leslie, J. M., Spybrook, J. K., & Ma, X. (2012). Are principal background and school processes related to teacher job satisfaction? A multilevel study using schools and staffing survey 2003-04. *American Educational Research Journal*, 49(2), 200-230.
- Spears, L. (2010). Character and Servant Leadership: Ten Characteristics of Effective, Caring Leaders. *The Journal of Virtues & Leadership*, 1 (1), 25-30.
- Stewart, G. (2017). The Importance of Servant Leadership in Schools. *International Journal of Business Management and Commerce Vol. 2 No. 5*. Taylor, S. E., Kemeny, M. E., Reed, G. M., Bower, J. E., & Gruenewald, T. L. (2000). Psychological resources, positive illusions, and health. *American psychologist*, 55(1), 99.
- UNESCO. (2015). *Education 2030 agenda*. United Nations Educational, Scientific and Cultural Organization/UNESCO. (2017). *Tanzania National Education Policy Report*. United Republic of Tanzania.
- Van Dierendonck, D. (2011). Servant leadership: A review and synthesis. *Journal of Management*, 37(4), 1228-1261.
<https://doi.org/10.1177/0149206310380462>
- Wong, P. T. P. (2007). Servant leadership: A paradigm for the 21st century. *International Journal of Leadership Studies*, 2(1), 70-87.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Pearson Education

The Influence of School Quality Assurance Practices on Pupils' Academic Performance in Public Primary Schools in Moshi Municipality, Tanzania

Jacqueline Wilbald Tarimo¹ & Karoli John Mrema²

¹Moshi Municipality Council

jacktarimo1999@gmail.com

²The Open University of Tanzania

karol.mrema@out.ac.tz

Abstract

This study examined the influence of School Quality Assurance (SQA) practices on pupils' academic performance in public primary schools in Moshi Municipality. It focused on key quality assurance components, including inspections, teacher evaluations, and curriculum implementation checks. The study adopted ISO 9000 Theory as its theoretical framework, recognising it as a global standard for quality management and assurance practices. A mixed-methods approach with a convergent design was employed, involving a sample of 260 respondents. Teachers were randomly selected, while headteachers and School Quality Assurance Officers (SQAOs) were purposively sampled. Data collection involved questionnaires with closed-ended questions for teachers and in-depth interviews with headteachers and SQAOs. Quantitative data were analysed using descriptive statistics with IBM SPSS v20, while qualitative data were analysed thematically. Findings revealed that over 83% of teachers reported that SQA practices—particularly through formal reports—had a moderate to significant positive impact on pupils' academic performance. This impact was attributed to improved curriculum implementation, qualified teaching staff, and the use of appropriate instructional materials. However, several challenges hindered effective SQA implementation. These included inadequate instructional resources, limited motivation among SQAOs, time constraints during inspections, and teachers' reluctance to implement recommended changes. The study concludes that while SQA practices contribute meaningfully to academic improvement, their impact is undermined by infrequent visits and systemic limitations. It recommends the development of a digital monitoring system, increased investment in SQAOs' professional development, and enhanced resourcing to support more effective and timely quality assurance processes.

Keywords: *Quality assurance, academic performance, standards, school visits, feedback*

Introduction

School Quality Assurance (SQA) plays a vital role globally by ensuring that educational institutions comply with national standards and contribute effectively to the achievement of national education objectives (Afriadi *et al.*, 2023). Beyond the basic functions of monitoring and evaluation, SQA encompasses initiatives aimed at improving and modernising teaching and learning processes (Ismail *et al.*, 2023). These enhancements are instrumental in supporting both the academic and professional development of learners, highlighting the importance of robust quality assurance systems within educational organisations. Although often linked to contemporary education systems, SQA has deep historical roots. Traditionally referred to as “school inspection,” this practice dates back centuries and has long served as a foundational mechanism for monitoring and improving educational quality. For example, France introduced school inspections during the Napoleonic era in 1801 (Makiya *et al.*, 2023), and England formalised its inspection system in 1839 under the leadership of Her Majesty’s Chief Inspector (De Grauwe, 2007). Over time, these initiatives expanded across Europe and America (Eziamaka *et al.*, 2022). Globally, improving educational quality and maintaining standards remain priorities, as highlighted by UNESCO (2007). Many governments reinforce their commitment to quality education by consistently monitoring academic institutions (Omolewa, 2007). The primary objective of SQA is to assess the effectiveness of curricula, evaluate teaching and learning quality, and track student achievement. Without proper oversight, schools risk implementing curricula that are either misaligned with pupils’ learning needs or beyond their capabilities, making supervision essential in ensuring educational integrity (UNESCO, 2007).

In Sub-Saharan Africa, the introduction of formal public education coincided with the establishment of school inspection services (De Grauwe, 2007). Following independence, many developing nations strengthened their inspection services to enhance educational quality. However, rapid school expansion often outpaced the availability of trained supervisors and inspection officers (De Grauwe, 2007; Matete, 2009). In Nigeria, for example, the effectiveness of quality assurance programmes in public secondary schools is hampered by several challenges, including inadequate funding, teacher shortages, poor infrastructure, weak supervision, and examination malpractice (Obiakor, 2023; Olowe, 2023). Kenya introduced its quality assurance system in 2004 (Ward *et al.*, 2006; Wanjiru, 2014). However, its effectiveness was limited, as many teachers did not attend training seminars and often implemented educational reforms based on personal experience rather than structured guidelines. (Mtitu *et al.*, 2023).

In Tanzania, school inspection services have a long history, tracing back to the German and British colonial periods. The evolution of these services can be categorised into four key phases: The German colonial rule (1903–1919), the British administration (1919–1925), the pre-independence period (1925–1961), and the post-independence era (1961 onwards). Initially, school inspections were designed to support teachers in fulfilling their instructional responsibilities (Mbwana & Onyango, 2021). Following independence, the Tanzanian government implemented various policies to improve education quality. Notably, the Education Act No. 25 of 1978 led to the establishment of the Department of School Inspection (URT, 2011). This Act was intended to uphold high educational standards by monitoring teaching practices and ensuring alignment with the national curriculum. Its overarching aim was to provide effective oversight, enhance the quality of education delivery, and offer constructive feedback to educational stakeholders. Notwithstanding these efforts, the school inspection framework introduced in 1978 failed to yield significant improvements in student outcomes (URT, 2017). The system remained largely diagnostic, lacked clear standards and regulations, and provided minimal quality assurance support.

In 2016, the Ministry of Education, Science, and Technology (MoEST) in Tanzania transitioned from traditional school inspection to a School Quality Assurance (SQA) model. This reform introduced key elements including school development planning, the setting of learning objectives, capacity building through self-evaluation, inter-school collaboration, and increased community involvement (URT, 2017). Unlike the earlier model, which centred on procedural inspections, the revised framework focuses on outcome-based evaluations and strengthening institutional capacity to drive sustainable improvements in education quality (URT, 2017). However, implementation challenges persist, including inadequate facilities, a shortage of School Quality Assurance Officers (SQAOs), poor transportation infrastructure, and delayed reporting (Makiya *et al.*, 2022; Mwashe & Festo, 2021). Studies also highlight obstacles such as frequent curriculum changes, insufficient funding, inadequate training for quality assurers, and suboptimal working conditions (Dismas *et al.*, 2023; Mwashe & Festo, 2023).

Despite recent reforms, School Quality Assurance (SQA) remains largely ineffective in enabling public primary schools to meet established quality standards (Jeremiah, 2016; Joseph, 2018; Mutabaruka *et al.*, 2018). Previous studies have highlighted a crisis in Tanzania's SQA practices (Kambuga & Dadi, 2015; Mutabaruka *et al.*, 2018). findings in these studies has shown that some pupils complete primary education without acquiring basic literacy and numeracy skills. For instance, Makiya, Mnyanyi, and colleagues (2022)

reported that certain students graduate without proficiency in reading, writing, or arithmetic. Similarly, Chikoyo, Nzalayaimisi, and Telli (2019) found that many educators in Kilimanjaro fail to prepare lesson plans, instructional aids, or daily lesson notes. These findings raise critical concerns about the effectiveness of current SQA practices. As such, this study seeks to evaluate the extent to which school quality assurance contributes to enhancing pupils' academic performance. Specifically, this study assesses the extent to which school quality assurance reports are used to enhance pupils' academic performance and examines challenges hindering the effective implementation of quality assurance practices in primary schools.

Theoretical Framework

This study was guided by ISO 9000 theory. The theory comprises a set of international standards on quality management and quality assurance, developed to help organisations establish and maintain effective quality systems (Singh *et al.*, 2011). ISO 9000 standards are not industry-specific and can be applied across organisations of varying sizes. As one of the five ISO 9000 Quality Management System (QMS) standards, it supports institutions in meeting stakeholder expectations while ensuring compliance with relevant regulations. In the context of education, ISO 9000 has been applied to both primary and secondary levels to enhance teaching and learning quality, graduate employability and mobility, credit recognition and transfer, and education internationalisation. The framework promotes systematic planning, execution, monitoring, and continuous improvement of quality assurance processes. ISO certification serves as evidence that an institution meets established standards, improves academic performance, increases operational efficiency, and supports graduate success in broader markets.

Literature Review

School Quality Assurance Practices and Frameworks

School Quality Assurance (SQA) is a fundamental component of the education system, ensuring that schools deliver high-quality education. ISO 9001, a globally recognised Quality Management System (QMS), was originally developed for industrial applications but has since been adapted for use in educational settings. In this context, it supports the improvement of educational processes, addresses the needs of pupils and communities, and promotes continuous improvement (ISO, 2015). Key components of ISO 9001 in education include leadership commitment, stakeholder engagement (pupils, parents, and communities), staff participation, a process-oriented approach to managing learning activities, and evidence-based decision-

making. These elements collectively promote regular evaluations aimed at enhancing curriculum delivery, teaching quality, and pupil achievement. Complementing ISO 9001, UNESCO's Quality Assurance Framework underscores the importance of measurable learning outcomes, particularly in literacy, numeracy, and life skills—essential indicators of educational quality (UNESCO, 2022). UNESCO's approach advocates for a comprehensive quality assurance system encompassing curriculum design, instructional methods, resource allocation, and effective student assessment. These international standards allow countries to adapt and implement robust quality assurance systems tailored to local contexts while maintaining alignment with globally recognised benchmarks.

At the national level, many countries have established customized frameworks for School Quality Assurance to regulate student outcomes, curriculum standards, teacher competencies, and performance in schools. Tanzania's Education and Training Policy (ETP) of 2014 is the primary driver of the implementation of SQA practices, with a particular emphasis on the Whole School Approach (WSA) in Tanzania. To guarantee that schools satisfy national quality standards, this methodology involves community stakeholders, including administrators, teachers, and parents (Tanzania Ministry of Education, 2014). Regular school inspections, teacher evaluations, and the integration of ICT in quality assurance procedures are essential components of Tanzania's SQA system. Senkoro (2022) argues that these measures are intended to enhance the efficacy of teaching and the learning outcomes of pupils.

The Impact of School Quality Assurance on Academic Performance

Providing high-quality education is essential for national development, as it equips individuals with the knowledge and skills necessary for social and economic advancement (NSQAF, 2017). In Tanzania, improving the quality of secondary education is a strategic priority due to its significant influence on labour force participation and access to higher education (Fomba *et al.*, 2023; Hakielimu, 2017; Leonard & Ibrahim, 2021; Medard & Mwila, 2022; Mrema *et al.*, 2023). The importance of quality assurance in education gained global attention during the 1990 World Conference on Education for All, convened by UNESCO in Jomtien, Thailand. At this conference, participating nations committed to improving measurable learning outcomes—particularly in literacy, numeracy, and life skills—as a foundation for inclusive and equitable education (UNESCO, 2022; Katete, 2023). Effective quality assurance entails setting clear learning objectives, ensuring adequate teaching resources, monitoring progress, and evaluating success (Katete, 2023).

School quality assurance has been widely recognized for improving education across Africa, though its implementation faces challenges such as a shortage of trained inspectors, limited resources, and weak policy enforcement. In South Africa, school inspections and quality monitoring have improved literacy and numeracy, though rural areas face resource disparities (Spaull & Taylor, 2022). Similarly, in Nigeria, external evaluations and school visits have enhanced student performance, particularly in science subjects, though resistance from teachers sometimes hinders effectiveness (Owan & Bassey, 2021). In Kenya, structured quality assurance mechanisms, such as teacher evaluations and school audits, have improved national examination performance, but issues like corruption and insufficient training for quality assurance officers remain barriers (Wanjiru & Mukolwe, 2023).

The Tanzanian government has introduced several quality assurance initiatives under the Education and Training Policy (ETP) of 2014, with an emphasis on curriculum monitoring, teacher evaluations, and regular school inspections. Research by Senkoro (2022) indicates that frequent inspections have a positive impact on student academic performance. However, the effectiveness of these efforts is often undermined by persistent challenges, including inadequate funding, limited training opportunities for inspectors, and weak communication between inspectors and teachers (Mtitu & Komba, 2023). To strengthen quality assurance mechanisms, increased investment in teacher professional development and the integration of ICT-based monitoring systems are recommended (Tanzania Institute of Education [TIE], 2023).

At the district level, evidence highlights the positive impact of SQA on academic performance. Regular assessments and feedback mechanisms have been linked to improved student achievement in public secondary schools (Ombay & Mrema, 2024). In Missenyi District, frequent school visits by quality assurance officers were reported to have contributed to better student outcomes (Phillymon, 2020). Similarly, in Rombo District, internal SQA feedback has enhanced instruction, problem-solving skills, and supportive learning environments (Assenga, Muteti, & Mbua, 2024). However, these benefits are often limited by challenges such as inadequate facilities and teacher non-compliance with SQA recommendations (Ombay & Mrema, 2024; Phillymon, 2020).

Barriers to Effective SQA Practices

Across Africa, several factors are being registered to hinder the effectiveness of SQA. In Zambia, issues such as insufficient staffing, weak communication strategies, and inadequate system support were noted to restrict quality

education implementation (Changwe & Zulu; Kaunda, 2023). In Nigeria, major obstacles include lack of funding, shortages of professional teachers, poor infrastructure, corruption, and examination malpractice (Obiakor, 2023; Olowe, 2023; Olowonefa & Ogunode, 2021). In Kenya, despite efforts to monitor and evaluate education quality, challenges such as teachers' reluctance to attend training sessions and slow implementation of reforms were noted to undermine progress (Mtitu *et al.*, 2023; Muricho, 2023).

In Tanzania, the Whole School Approach (WSA) was introduced to replace the outdated inspection system, involving community members and stakeholders in SQA implementation (Mritha & Onyango, 2022). While initiatives have been taken to align education with national and global demands (Ochieng'Opalo, 2023), concerns remain regarding declining of student performance and the effectiveness of SQA in improving educational outcomes. Studies indicate that factors such as frequent school visits, timely feedback, professional development support, and involvement of teachers in SQA practices contribute to improved learning achievement (Makiya *et al.*, 2022, 2023; Mritha & Onyango, 2022). However, implementation is often hindered by insufficient SQA facilities, shortage of quality assurance officers, poor transportation infrastructure, and delayed feedback reports (Makiya *et al.*, 2022; Mwoshe & Festo, 2021).

Moreover, studies by Mtitu *et al.* (2023), Mwoshe and Festo, and Dismas *et al.* (2023) have identified several challenges affecting School Quality Assurance (SQA) practices. These include frequent curriculum changes, insufficient funding, lack of training for external quality assurers, poor working conditions, frequent school visits, and a shortage of qualified external quality assurers. While SQA is crucial for ensuring proper curriculum implementation, it may not be sufficient on its own to guarantee effective outcomes (Burra & Fanuel, 2021). Therefore, this study is particularly significant as it evaluated the role of school quality assurance practices in enhancing pupils' academic performance in public primary schools in Moshi Municipality, Tanzania

Methodology

This study employed a mixed-methods approach, which enabled the collection of both quantitative and qualitative data to ensure corroboration and enrich the findings. The use of mixed methods addressed the limitations inherent in each type of data, allowing the strengths of one to complement the weaknesses of the other. A convergent design was adopted, wherein both data types were collected in a single phase, analysed separately, and then compared to determine whether the findings confirmed or contradicted one another (Creswell *et al.*, 2021). This approach provided a robust means of

validating and verifying information from multiple sources. The study targeted a total population of 798 respondents. To obtain a representative sample, both probability and non-probability sampling techniques were employed. A total of 234 teachers were randomly selected from public primary schools using probability sampling, while 25 headteachers and one School Quality Assurance Officer (SQAQO) were purposively selected based on their roles and relevance to the study. This resulted in a final sample size of 260 respondents. Data collection instruments included a questionnaire with predominantly closed-ended questions for teachers and in-depth interview guides for headteachers and the SQAQO. The study achieved a 100% questionnaire return rate.

Quantitative data were analysed using descriptive statistics—frequencies and percentages—with the assistance of IBM SPSS version 20. Thematic analysis was used to interpret qualitative data. The validity and reliability of research instruments were ensured through content validation and pilot testing in one public primary school not included in the main sample. Reliability was further confirmed using Cronbach's Alpha, which yielded a coefficient of 0.8, indicating high internal consistency. Ethical procedures were carefully observed. Permission to conduct the study was obtained from the Director of the Moshi Municipal Council (DED), and informed consent was sought from all participants. Participants' privacy, confidentiality, and anonymity were respected throughout the research process.

Results

School Quality Assurance Reports for Pupils' Academic Performance

Teachers were asked whether School Quality Assurance Officers (SQAQOs) observe them during classroom instruction. Among the 234 teachers surveyed, the vast majority (98.3%) confirmed that they had been observed by SQAQOs during the teaching and learning process. This result is consistent with the findings during in-depth interviews in which most of the participants said that the teachers were observed by SQAQOs when they were teaching in the classroom as narrated by one of the head teachers:

During a quality assurance officer's visit, teachers are observed in the classroom while teaching to assess how the curriculum is being implemented to meet pupils' needs. Additionally, they are monitored to follow up on the previous recommendation report to determine whether they have improved their teaching techniques to enhance student performance (R 16, 2024).

The head teacher's statement highlights the critical role of School Quality Assurance in monitoring and enhancing teaching effectiveness. Through classroom observations, SQAQOs help ensure that the curriculum is implemented appropriately to meet pupils' learning needs. Follow-up on

previous recommendations also plays a vital role in supporting continuous professional development among teachers. However, the overall effectiveness of this process is influenced by the frequency of school visits, the quality and depth of feedback provided, and teachers' willingness to implement suggested improvements. In addition, teachers were asked whether SQAOs provide a report following their visits to the school. Almost all agreed that the report was provided as narrated here:

They provide a report for the teacher individually orally and for all staff as a meeting and then after visiting the school send report written and provide card which shows goods and area to correct for better academic performance (R 8, 2024).

The statement outlines the feedback process employed by School Quality Assurance Officers (SQAOs) following their school visits. Teachers receive individualised oral feedback on their performance, while collective feedback is delivered during a staff meeting. Additionally, a written report is submitted to the school, highlighting key strengths and areas requiring improvement. A performance card accompanies the report, summarising major findings and providing actionable recommendations aimed at enhancing academic outcomes. This multi-layered approach ensures that teachers receive both immediate and documented guidance, thereby fostering accountability and supporting continuous improvement in teaching practices. Another respondent added that:

Yes, we usually receive a report, but sometimes it takes a long time to arrive. By the time we get it, some of the issues raised may no longer be relevant, or we might have already found our own solutions. A timely report would be more useful in guiding school improvements (R 1, 2024).

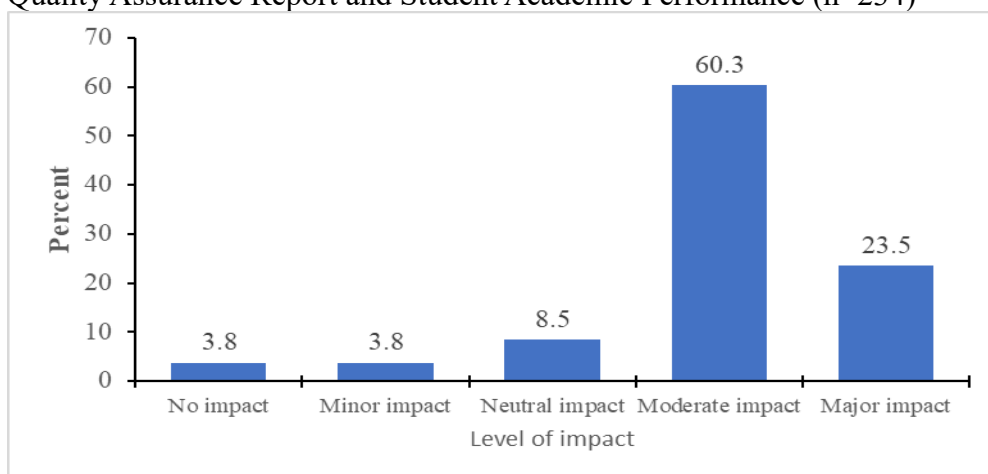
This statement underscores the issue of delays in the delivery of School Quality Assurance (SQA) reports. Although reports are typically provided, the extended time taken to issue them often results in diminished relevance, as schools may have already addressed the identified issues independently. This delay limits the effectiveness of the feedback in guiding timely school improvements. A prompt reporting process would enhance the utility of these reports, allowing schools to act swiftly on recommendations while the challenges remain current and actionable. Furthermore, another respondent revealed that formal written reports were not consistently provided after every visitation. In some cases, visits concluded without the delivery of a documented report, raising concerns about the consistency and transparency of the quality assurance process as was noted by one of the participants:

Not always. Some officers provide verbal feedback at the end of their visit, but we don't always get a formal written report. This makes it difficult to follow up on their recommendations, especially when planning for the next academic term (R 4, 2024).

The statement reveals inconsistencies in the provision of school quality assurance reports. While some SQAOs offer verbal feedback at the conclusion of their visits; formal written reports are not consistently provided. This lack of uniformity hinders teachers and school administrators from effectively following up on recommendations, especially when planning for subsequent academic terms. In the absence of documented feedback, it becomes challenging to monitor progress, implement suggested changes, or ensure accountability. These findings underscore the need for a more reliable and structured reporting system to support continuous improvement in teaching and learning outcomes. Furthermore, the respondents were asked to indicate the extent of the impact of the quality assurance reports on the pupils' academic performance. As shown in Figure 1, the majority of the respondents (60.3%) thought that the quality assurance reports had a moderate impact, while about a quarter (23.5%) indicated a major impact on pupils' academic performance. However, 9 (3.8%) of the respondents indicated that the impact of School Quality Assurance was either negligible or minor.

Figure 1:

Quality Assurance Report and Student Academic Performance (n=234)



The fact that over 80% of respondents rated the impact of School Quality Assurance Officers' (SQAOs) reports as having a moderate to major effect indicates that these reports play a significant role in improving academic performance in primary schools. This suggests that school quality assurance reports are highly valuable in enhancing pupils' academic outcomes in public primary schools within Moshi Municipality. Respondents were further asked to specify how quality assurance practices contribute to improved academic performance. As shown in Table 1, approximately 29.1% of respondents

highlighted that quality assurance ensures the proper implementation of the curriculum. Additionally, 30.3% pointed to the verification of teacher qualifications and the effective use of teaching and learning documents such as syllabi, lesson plans, and instructional notes. A smaller portion (6.4%) cited teacher motivation as a contributing factor.

Table 1
Quality assurance practices and academic performance (n=234)

Responses	Frequency	Percent
It motivates teachers in teaching	15	6.4
Because quality assurance practice ensures teaching rules and regulations are followed by the teacher and school leadership.	50	21.4
It makes sure that the curriculum is implemented well in and out of the classroom setting.	68	29.1
The qualifications of the teachers together with the presence and proper use of the teaching and learning documents are investigated.	71	30.3
Through quality assurance practices, teachers, school administration, and other education stakeholders become accountable.	30	12.8
Total	234	100

Overall, the respondents reflected positively on the role of quality assurance practices in enhancing pupils' academic performance in primary schools. Additionally, they were asked to explain how quality assurance supports the implementation of teachers' duties. As presented in Table 2, the majority (54.3%) indicated that quality assurance practices help ensure the effective use of teaching aids and foster a conducive teaching and learning environment. Another 45.7% noted that these practices assist in evaluating teachers' strengths and weaknesses in curriculum implementation. These findings suggest that quality assurance plays a crucial role in guiding and shaping teachers' responsibilities in line with established educational standards.

Table 4
Quality Assurance practices and the implementation of teaching Duties (n=234)

Responses	Frequency	Percent
Quality assurance practices assist in the implementation of teaching duties because the practice shows the weaknesses and strengths of teachers toward the implementation of the curriculum.	107	45.7
Quality assurance practices help the teacher with many issues like the use of teaching aids during the lesson, evaluating the school's environment for better student learning, and giving advice on the good method of teaching like the application of ICT materials.	127	54.3
Total	234	100

This indicates a strong recognition of QA's contribution to educational quality in both enhancing instructional quality and guiding teacher development in return facilitating the improvement of pupils' academic performance in primary schools. However, the relatively close percentages imply that while QA is valued, there may be variations in how it is perceived or implemented across different schools.

Moreover, participants' in-depth interviews reaffirmed this finding as the following narrative indicates: "Quality assurance report impacts academic performance because it shows strengths and weaknesses of the visit generally and also shows how to do for better performance." (SQAQO,2024). The statement emphasizes that the school quality assurance report has a direct impact on academic performance. It provides a clear overview of the strengths and weaknesses identified during the visit, helping the school understand what is working well and what needs improvement.

Overall, the study found that school quality assurance reports provide valuable guidance on addressing identified weaknesses and enhancing school performance. This feedback serves as a critical tool for informed decision-making and the implementation of strategies aimed at improving teaching practices, increasing student engagement, and strengthening overall academic outcomes.

Challenges on Effective Implementation of Quality Assurance Practices

The respondents were asked to mention the challenges they encountered in the course of quality assurance practice. As shown in Table 5, challenges such as inadequate motivation among school quality assurance officers (30.3%); lack of adequate motivation among school quality assurance officers (10.7%); short time for performing quality assurance tasks (7.7%); teachers' unwillingness to accept recommendations from SQAQOs (6.0%); and

lack of instructions on modern quality assurance techniques (5.6%) hinder effective implementation of SQA practices.

Table 5
Challenges by quality assurance practices for student academic performance (n=234)

Challenges	Frequency	Percent
Lack of instructions on modern QA techniques	13	5.6
Teachers' unwillingness to accept recommendations from SQAOs	14	6.0
Lack of adequate motivation among SQAOs	25	10.7
Short time for performing QA tasks	18	7.7
Inadequate resources for instruction and learning	71	30.3
All the above challenges	93	39.7

Note: QA = Quality Assurance; SQAQO = School Quality Assurance Officer

The data reveal several critical challenges affecting the implementation of School Quality Assurance (SQA) practices. The most prominent issue is inadequate motivation among SQA officers, reported by 30.3% of respondents. This is followed by a general lack of sufficient incentives (10.7%), indicating widespread dissatisfaction among quality assurance personnel. Other notable challenges include limited time allocated for conducting quality assurance activities (7.7%) and teachers' reluctance to adopt the recommendations provided (6.0%). Furthermore, the lack of training in modern quality assurance techniques (5.6%) highlights a gap in ongoing professional development. Addressing these issues through enhanced support, targeted training, and stronger collaboration between stakeholders is essential to improving the overall effectiveness of quality assurance practices in schools. On the other hand, most of the participants in the qualitative component mentioned the short time of performing tasks and lack of motivation among SQAOs as the main challenges as indicated by the following narrative: "Lack of adequate motivation among SQAOs and short time limit for performing quality assurance tasks are important challenges of implementing quality assurance practices in schools" (R1, R6).

This means that there are challenges facing both sides, that is, SQAOs and the teachers that hamper the improvement of academic performance in primary schools in Moshi municipality. Additionally, another head of school cemented the findings, when he said:

Some teachers at my school do not acknowledge the role of SQAOs. They tend to resist change by distrusting SQAOs and rejecting their recommendations. This resistance stems from the fact that not all quality assurance officers have undergone training on quality assurance practice guidelines. Instead, they typically attend seminars and workshops to enhance their quality assurance skills. Some teachers argue that school quality

assurance officers have nothing new to offer, as they are also teachers without any additional college certification in their field (R29, 2024).

The statement highlights key challenges in the implementation of School Quality Assurance (SQA) practices, particularly teacher resistance and concerns about the credibility of School Quality Assurance Officers (SQAOs). Some teachers express distrust toward SQAOs, often questioning their authority and rejecting their recommendations due to the perception that many lack formal training in quality assurance. This scepticism stems from the fact that most SQAOs acquire their skills through short-term seminars and workshops rather than through specialised certification. Such perceptions undermine the effectiveness of SQA efforts, as teachers may disregard valuable feedback that could otherwise contribute to instructional improvement. Addressing these issues requires targeted professional development for SQAOs, fostering collaborative relationships between educators and quality officers, and building trust through open communication and sustained capacity-building initiatives.

Affirming the above views on the challenges encountered in the course of quality assurance practice for the improvement of student academic performance, another school head said the following during an interview:

One significant challenge I've noticed is that many SQAOs lack up-to-date training in current quality assurance methodologies. Education is continually evolving, with new teaching strategies, technological integrations, and the current updated or revised primary school curricula. However, some SQAOs haven't received adequate professional development to keep pace with these changes. This gap can lead to evaluations that don't fully align with contemporary educational practices, potentially hindering the effectiveness of their assessments and the subsequent support they provide to schools (R5, 2024).

This statement underscores a significant challenge in school quality assurance: many School Quality Assurance Officers (SQAOs) lack up-to-date training in contemporary educational methodologies. Despite ongoing changes in teaching strategies, technology, and curricula, some SQAOs have not received sufficient professional development to keep up. This gap can result in evaluations that are misaligned with modern educational practices, thereby diminishing the effectiveness of SQAOs' assessments and their ability to provide meaningful support for improving student performance. Evidently, lack of enough allowances, inadequate resources for instruction and learning, short time for performing quality assurance tasks, and teachers' rejection of recommendations from SQAOs or resistance from teachers were the reasons for school quality assurance officers to be demoralised. Affirming the above finding, one of the SQAOs had the following to say:

School Quality Assurance Officers face challenges in improving education quality. The challenges include lack of motivation, time constraints, resistance from school leaders and teachers, overcrowding in public schools, and insufficient resources. These issues hinder their effectiveness in ensuring better learning outcomes. To improve, they need better funding, structured follow-up mechanisms, and improved working conditions, as well as better working conditions (SQAQO, 2024).

Similarly, the SQAQO went on by asserting that:

Lack of financial resources also affects our work. Sometimes, we do not have funds for transport, accommodation, or necessary materials to conduct effective school assessments. Budget constraints make it difficult to visit all schools as frequently as needed, and this weakens the overall impact of quality assurance efforts (SQAQO, 2024).

This indicates that there are multiple challenges that affect both School Quality Assurance Officers (SQAQOs) and teachers, ultimately hindering efforts to improve academic performance in primary schools within Moshi Municipality. Among the key issues are inadequate motivation stemming from low allowances, minimal incentives, and limited opportunities for career advancement—factors that diminish morale and reduce commitment to comprehensive school evaluations. Time constraints further exacerbate the problem, as SQAQOs are tasked with visiting several schools in a short span, conducting assessments, offering feedback, and submitting reports, often without sufficient time for thorough analysis or meaningful follow-up. Resistance from some school leaders and teachers—who perceive these visits as punitive rather than supportive—adds to the difficulty in implementing constructive changes. Moreover, systemic issues such as overcrowded classrooms, resource shortages, and financial limitations, including lack of funding for transport, accommodation, and materials, significantly weaken the impact of quality assurance efforts. Without improved funding, clearly structured follow-up mechanisms, and enhanced professional support, the effectiveness of school quality assurance in advancing educational outcomes remains severely compromised.

Discussion

School Quality Assurance Reports and Pupils' Academic Performance

The findings of this study indicate that School Quality Assurance Officers (SQAQOs) routinely provide reports following their visits, which significantly contribute to improving academic performance in primary schools. These reports play a critical role in enhancing curriculum delivery, reinforcing teacher accountability, and aligning instructional practices with ISO 9000 principles of systematic quality management. The majority of respondents perceived these reports as having a moderate to major impact on pupil

performance. This finding aligns with several previous studies. For instance, Ruga (2017) found that teachers positively acknowledged the improvements in academic performance following SQA visits, attributing this to support in curriculum interpretation. Similarly, Kassim *et al.* (2024) noted that SQA not only informs government policy but also enhances teacher support and accountability. Kosia and Lymtane (2018) further asserted that the feedback and formal reports provided by SQAOs post-classroom observation improve teaching and learning. The current study also revealed that SQA enhances academic performance by ensuring proper curriculum implementation, monitoring teacher qualifications, and evaluating the teaching and learning environment. Implementation of the recommendations from SQA reports improved teacher performance, further supporting findings by Allais (2017), who stressed that SQA involves monitoring, assessing, and reporting to uphold educational standards.

Similar findings were reported in Kenya by Ruga (2017), who found that supervisory roles of SQAOs positively influenced academic performance in Kiambu County. Paulo (2022) reported similar outcomes in Dar es Salaam, Tanzania. However, divergent findings emerged in a study by Peter and Mkulu (2022) in Kwimba District, where SQA had limited impact due to communication challenges, resource constraints, and poor feedback implementation. These inconsistencies may be attributed to contextual differences, such as rural infrastructure limitations that hinder regular school visits.

Challenges Hindering Effective Implementation of Quality Assurance Practices

Despite the potential benefits of SQA, the study revealed several challenges that undermine its effectiveness. Key issues include inadequate motivation among SQAOs due to low allowances, minimal incentives, and restricted career advancement opportunities. These factors negatively affect morale and reduce the commitment to thorough school evaluations.

Time constraints were also identified as a major issue, with SQAOs required to visit multiple schools, conduct assessments, provide feedback, and submit reports within limited timeframes—often without adequate opportunities for follow-up or in-depth analysis. Resistance from school leaders and teachers, who may perceive the SQA process as punitive rather than developmental, further complicates the effective implementation of recommendations. The study also identified a lack of training in modern quality assurance techniques, which delays ISO 9000 certification and weakens the credibility of SQAOs in the eyes of teachers. This gap leads to scepticism about the

relevance and validity of their recommendations, particularly when SQAOs lack formal certification and rely primarily on workshops and seminars for their training.

These findings are consistent with other studies. Mritha and Onyango (2022), in their research in Kilimanjaro, reported challenges such as lack of motivation, inadequate resources, limited training, and insufficient time for quality assurance activities. Similarly, Peter and Mkulu (2022) noted poor communication skills, inadequate staffing, and limited funding as barriers in Kwimba. Makiya *et al.* (2022) added that weak cooperation from teachers and mismatched subject expertise further hindered effective quality assurance in Arusha. The 2017/18 Global Education Monitoring Report echoed these concerns across countries in Africa and Asia, including Tanzania. The report highlighted irregular inspections, lack of resources, and negative teacher attitudes toward inspection as key barriers—issues also reflected in this study. Notably, these findings contradict the expectations outlined in the Tanzania Revised School Quality Assurance Handbook (2024), which prescribes that SQAOs should dedicate over 80% of their visits to observing teaching and learning and gathering evidence on the school's effectiveness.

Finally, this study supports findings by Medard and Mwila (2022), who observed that although SQA guidelines were partially implemented in Temeke Municipality, where issues such as underfunding, lack of personnel, overcrowded classrooms, and inadequate workspaces impeded meaningful school improvement. In sum, while SQA practices are acknowledged as crucial for enhancing academic performance, their impact is significantly limited by structural, operational, and capacity-related challenges. Addressing these issues through policy reform, increased funding, improved training, and collaborative engagement with school staff is vital for strengthening the role of SQA in Tanzania's education system.

Conclusion

This study concludes that School Quality Assurance Officers (SQAOs) visit most public primary schools in Moshi Municipality at least once annually. Participants widely acknowledged the important role of School Quality Assurance (SQA) practices in enhancing academic performance, with the majority reporting a moderate to significant impact on pupils' learning outcomes. However, a small number of respondents perceived the impact as minimal or negligible.

The study identified several barriers affecting the effectiveness of SQA practices, which emerged from both sides—SQAOs and school teachers. Key

challenges included low motivation among SQAOs and teachers, teachers' reluctance to implement the recommendations provided in SQA reports, and the limited duration allocated for quality assurance exercises. Additionally, a lack of adequate teaching and learning resources was frequently cited as a constraint to successful implementation.

To improve the effectiveness of school quality assurance practices, the study recommends more frequent and comprehensive school visits, enhanced follow-up mechanisms, and expanded training opportunities for SQAOs. Providing incentives for teachers, ensuring better allocation of resources, fostering stronger collaboration among stakeholders, and incorporating digital tools are also essential steps toward improving school monitoring and raising academic performance in primary schools.

To achieve Sustainable Development Goal 4 and Target 4.1—which aim to ensure inclusive, equitable, and quality education and promote lifelong learning opportunities for all—strengthening school quality assurance (SQA) strategies is essential for delivering relevant and effective learning outcomes by 2030. It is recommended that the government develop a digital monitoring system to streamline SQA processes and allocate sufficient funding for the training of SQA Officers in modern evaluation methodologies. Furthermore, improving teacher cooperation, increasing the number of qualified personnel, and providing modern facilities—including vehicles and ICT equipment—will enhance the frequency and quality of school visits and support the timely production of comprehensive SQA reports. Since this study focused solely on a single municipality, future research should consider expanding to rural areas and secondary schools across Tanzania to provide a broader understanding of quality assurance practices in diverse educational contexts.

References

- Adegbesan, I. A. (2021). *Bodily autonomy of young children: Mothers' perspectives of appropriate acceptance or rejection of affection for their toddler and preschool aged children*. The University of North Carolina at Greensboro.
- AFRIADI, B., Fatkar, B., Mirza, M., Fitri, F., Nur, M., Sobirov, B., Oli, M. C., Simorangkir, M. R. R., Isnaniah, I., & Prastowo, S. L. (2023). Systematic review of education quality assurance management in schools method matching. *International Education Trend Issues*, 1(2), 58-67. <https://doi.org/10.56442/ieti.v1i2.146>
- Allais, S. (2017). Labour market impact of National Qualification Frameworks in six countries. *ILO*.

- Assenga, P., Muteti, C. M., & Mbua, F. M. (2024). Extensiveness of internal school quality assurance feedback in enhancing learners' achievement in public primary schools in Rombo District, Tanzania. *International Journal of Scientific Research and Management*, 12(9), EL-05. <https://doi.org/10.18535/ijssrm/v12i09.el05>
- Burra, L. T., & Fanuel, I. M. (2021). The role of school quality assurance in improving curriculum implementation in secondary schools in Tanzania, 12(2)
DOI: 10.7176/JEP/12-2-10
- Dismas, S., Nzima, I., & Kimaro, A. Competence-Based Curriculum in Tanzania: District school quality assurance officers' understanding and practices. *International Journal of Educational Reform*, 0(0), 10567879231217458. <https://doi.org/10.1177/10567879231217458>
- Elizabeth, C. M., Noel Mark, M., Rwegasha Peter, I., & Benedicto William, M. (2023). Internal quality assurers' conception on Internal Quality Assurance (IQA) process: Examining lived experience of secondary School Academic Member of staff within Njombe Region, Tanzania. *International Journal of Research in Social Science and Humanities (IJRSS)* ISSN:2582-6220, DOI: 10.47505/IJRSS, 4(7), 36-45. <https://doi.org/10.47505/IJRSS.2023.V4.7.7>
- Eziamaka, C., Manafa, F. U., & Iheanacho, R. (2022). Influence of quality assurance measures on teachers' job performance in public secondary schools in Awka education zone of Anambra state. *Journal of Educational Research & Development*, 5(2), 62-76.
- Fomba, B. K., Talla, D. N. D. F., & Ningaye, P. (2023). Institutional quality and education quality in developing countries: Effects and transmission channels. *Journal of the Knowledge Economy*, 14(1), 86-115. <https://doi.org/10.1007/s13132-021-00869-9>
- Fulmes, E. Z., Mwila, P. M., & Onyango, D. O. (2024). Effect of educational equity on the quality of education in selected schools in Kwimba District, Tanzania. *Asian Research Journal of Arts & Social Sciences*, 22(3), 72-82. DOI: 10.9734/ARJASS/2024/v22i3524
- ISO 9001. (2015). *Quality management systems – requirements*. International Organization for Standardization. <https://www.iso.org/iso-9001-quality-management.html>
- Ismail, O. A., AlRiyami, R. M., & Alhosani, M. (2023). The art of assuring quality education: Internal approaches and best practices. In *Restructuring Leadership for School Improvement and Reform* (pp. 182-201). IGI Global.
- Joseph, B. M. (2018). Influence of school quality assurance practices on curriculum implementation in public primary schools in Tarime Town Council, Tanzania.

- Kambuga, Y., & Dadi, H. (2015). School inspection in Tanzania as a motor for education quality: Challenges and possible way forward. *Review of knowledge economy*, 2(1), 1-13. DOI: 10.18488/journal.67/2015.2.1/67.1.1.13
- Kassim, K. S., Matete, R. E., Mwinjuma, J. S., & Ali, H. D. (2024). The contribution of school quality assurance for the improvement of instructional practices in secondary schools in Zanzibar. *Journal of Issues and Practice in Education*, 16(1), 100-118.
- Katete, S. (2023). Ensuring students' academic achievement through quality assurance and control in Tanzania: Evidence from government technical institutions. *European Journal of Research and Reflection in Educational Sciences*, 11(2).
- Kaunda, J. K. (2023). *Implications of smart cities on the adjacent land uses: A Case of Konza City in Kenya* University of Nairobi.
- Komen, A. Y., & Nyandoro, K. (2023). Evaluating the influence of Secondary Education Quality Improvement Project (SEQIP) on quality education in public primary and secondary schools in Kenya: A Case of Marigat Sub-County. *African Journal of Empirical Research*, 4(1), 219-226.
- Kosia, E., & Lymtane, E. (2018). Effectiveness of school quality assurance officers' communication styles on improving teaching and learning in Arusha city public secondary schools. *International Journal of Innovative Research and Advanced Studies*, 5(8), 160-168.
- Kukali, A. (2023). The relationship between quality assurance and standards assessment and public primary schools performance at the Kenya Certificate of Primary Examinations. *Journal of African Interdisciplinary Studies*, 7(1), 13-30.
- Makiya, R., Mnyanyi, C., & Ngirwa, C. (2023). Examining school quality assurance criteria for enhancing learning achievements in public primary schools in Arusha Region, Tanzania. *Asian Research Journal of Arts & Social Sciences*, 20(2), 1-13.
DOI: 10.9734/ARJASS/2023/v20i2442
- Mbwana, S., & Onyango, D. O. (2021). Perceived influence of financial disbursement on school quality assurance in Nyamagana District, Tanzania. *East African Journal of Education and Social Sciences*, 2(2), 1-6. <https://doi.org/10.46606/eajess2021v02i02.0070>
- Medard, G., & Mwila, P. M. (2022). School quality assurance guidelines: Its implementation and challenges in public secondary schools in Temeke Municipality, Tanzania. *International Journal of Research and Innovation in Social Science*, 6(10), 124-133.
- Mrema, D., Ndayambaje, I., Ntawiha, P., & Ndabaga, E. (2023). The Initiatives for enforcing the quality assurance standards in fostering

- Universities' Compliance in Tanzania. *African Journal of Empirical Research*, 4(2), 1298-1313. <https://doi.org/10.51867/ajernet.4.2.131>
- Mtitu, E., & Komba, W. (2023). Enhancing teacher professional development through school quality assurance in Tanzania. *International Journal of Educational Development*, 60(1), 33-50. <https://doi.org/10.1080/ijed.2023.158700>
- Muricho, P. W. (2023). Analysis of education reforms and challenges in Kenya: A historical perspective. *International Journal of Current Innovations in Advanced Research*, 6(1), 36-41. <https://doi.org/10.47957/ijciar.v6i1.148>
- Obiakor, M. (2023). Management of policy implementation process on universal basic education (UBE) in Enugu education zone. *UNIZIK Journal of Educational Management and Policy*, 5(1), 129-145. <https://journals.unizik.edu.ng/ujoemp/article/view/2170>
- Ochieng'Opalo, K. (2023). What is the point of schooling? Education access and policy in Tanzania since, 1961. *RISE Political Econ. Pap.* <https://doi.org/10.35489/BSG-RISE-2023/PE07>
- Ogega, D., & Ogochi, G. (2020). Influence of teacher trainings organized by quality assurance and standards officers on students' academic performance in public secondary schools in Gucha Sub-County, Kenya.
- Olowe, M. (2023). Quality assurance: An imperative for effective implementation of business education programme in Nigeria. *Quality Assurance*, 4(8), 1-9.
 DOI: 10.5281/zenodo.8237309
- Olowonefa, G., & Ogunode, N. (2021). Quality assurance programme in public secondary schools in Nigeria: Problems and the way forward. *Middle European Scientific Bulletin*, 19, 46-58.
- Ombay, S. J., & Mrema, J. K. (2024). The impact of school quality assurance Practices on Students' Academic Performance in Public Secondary Schools in Mafia District, Tanzania. *Journal of Research Innovation and Implications in Education*, 8(4), 579-587.
- Omolewa, M. (2007). Traditional African modes of education: Their relevance in the modern world. *International Review of Education*, 53(5), 593-612. <https://doi.org/10.1007/s11159-007-9060-1>
- Owan, V. J., & Bassey, B. A. (2021). External school evaluations and student performance in Nigerian secondary schools. *African Journal of Educational Studies*, 39(4), 55-75. <https://doi.org/10.1016/afjes.2021.00392>
- Paschal, M. J., Pacho, T. O., & Adewoyin, O. (2022). Teaching methods applied in higher education during COVID-19 pandemic in Africa. *International Journal of Educational Policy Research and Review*, 9(1), 27. <https://doi.org/10.15739/IJEPRR.22.003>

- Paulo, P. S. (2022). *The contribution of school quality assurance practices on Secondary Schools Academic Achievement in Municipality*. The Open University of Tanzania.
- Phillymon, D. (2020). *The contribution of quality assurance and control on students' academic performance in public secondary schools in Missenyi District, Kagera Region, Tanzania*. Master's thesis, The Open University of Tanzania
- Ruga, T. W. (2017). *Teachers' perceptions on the influence of quality assurance and standards officers' supervisory role on pupils' academic improvement in public primary schools in Kiambu County, Kenya*.
- Senkoro, M. (2022). The impact of school inspections on student learning outcomes in Tanzania. *Tanzanian Journal of Educational Research*, 14(2), 45-60. <https://doi.org/10.1080/tjer.2022.147598>
- Spaull, N., & Taylor, S. (2022). School quality and learning outcomes in South Africa. *Journal of African Educational Research*, 45(2), 201-225. <https://doi.org/10.1080/00336287.2022.1468904>
- Tanzania Institute of Education (TIE). (2023). The role of technology in quality assurance for improved student performance. *TIE Research Report*. Retrieved from <https://www.tie.go.tz/research2023>
- Tanzania Ministry of Education. (2014). *Education and Training Policy (ETP) 2014*. Government of Tanzania.
- UNESCO. (2022). *Education for Sustainable Development Goals: Quality assurance in education*. United Nations Educational, Scientific and Cultural Organization. <https://www.unesco.org/en/education-sdg>
- Wale-Oshinowo, B. A., Omobowale, A. O., Adeyeye, M. M., & Lebura, S. (2023). Least developed countries in Africa. In S. N. Romaniuk & P. N. Marton (Eds.). *The Palgrave encyclopedia of global security studies* (pp. 882-897). Springer International Publishing. https://doi.org/10.1007/978-3-319-74319-6_346
- Wanjiru, F. & Mukolwe, E. (2023). The role of school quality assurance in improving academic performance: Evidence from Kenya. *East African Journal of Education and Social Sciences*, 5(1), 98-110. <https://doi.org/10.1080/eaess.2023.100589>
- .

Parental collaboration in implementing the competency-based curriculum for learners with special needs in primary schools: A case of Thika West Sub County, Kenya

Joyce Kinyua

Karatina University, Nyeri, Kenya

jnjeri@karu.ac.ke

Abstract

Successful implementation of the Competency-Based Curriculum (CBC) in primary schools requires effective collaboration between teachers and parents for learners with special needs. While several studies have been conducted on CBC implementation in Kenyan primary schools, most of these studies have primarily focused on children without disabilities. This study sought to explore how parental collaboration influences the implementation of the CBC for learners with special needs in primary schools in Thika West Sub-County. Epstein's Model of Parental Involvement guided the study. A descriptive survey design was employed to conduct the study. The participants were head teachers, deputy head teachers, members of the school board management and teachers. Questionnaires and interviews were used to collect data. SPSS Version 22 was utilised to analyse the gathered data, which were then presented in charts, graphs and tables. Findings indicated that both teachers and parents had limited knowledge on CBC implementation, which negatively impacted parent-teacher collaboration. A Chi-square test of independence ($\chi^2 = 9.24$, $p = 0.05$) revealed a statistically significant association between parental involvement in school programs and the perceived effectiveness in supporting learners with special needs. In other words, increased parental participation correlates with a higher perception of effectiveness. The Ministry of Education should mandate primary schools' heads to implement the CBC to establish parental support groups, for example, by integrating digital communication platforms with parents in their teaching. Additionally, the Teachers Service Commission (TSC) should allocate resources for biannual parental training workshops, facilitate financial and material support for parental collaboration programs, and conduct awareness campaigns to educate both parents and teachers about their roles as caregivers.

Keywords: *Collaboration, competency-based curriculum, implementation, special schools, learners with special needs*

Introduction

The Competency-Based Curriculum (CBC) was initially introduced in the United States in 1957. Since then, CBC model of education has been

adopted across various countries of the world (Amunga, Were & Ashioya, 2020; Mulenga & Kabombwe, 2019; Muller, 2015). The CBC emphasises practical skills necessary for modern employability and lifelong learning (Godfrey, 2018; Otieno, 2020).

Kenya's education system has experienced significant reforms since independence. The Ominde Commission Report of 1963 promote national cohesion, replacing the racially stratified education structure (Muricho & Chang'ach, 2013). In 1985, the Mackay Commission recommended the adoption of the 8-4-4 education structure, aiming at promoting self-reliance (Murungi, 2019). However, the education structure encountered several significant challenges, such as inadequate infrastructure, poorly trained teachers, and high dropout rates (Makori & Onderi, 2013). Additionally, the education systems enhanced learners' ability to engage in economic development and thereby realise the country's visions and goals (Muricho & Chang'ach, 2013). These factors prompted a shift towards CBC.

The CBC marked a significant transition from 8-4-4 to a 2-6-3-3-3 education structure. Particular attention was placed on developing 21st-century skills such as communication, collaboration, critical thinking, problem-solving, creativity and digital literacy (Amutabi, 2019). According to Omariba (2022), the successful implementation of the CBC will depend on parental engagement. This enhances competency acquisition and promotes collaboration in terms of developing learners' practical skills for their academic and personal growth. Research from within the country has shown that parental engagement is essential for the CBC accomplishment, particularly for learners with special needs who require additional support and resources (Mwarari, Githui & Mwenje, 2020; Omariba, 2022). To achieve this, schools in Kenya have developed various mechanisms to engage parents, such as home visits by teachers, parental workshops, and the establishment of school governing bodies that include parent representatives. These strategies have been effective in promoting collaboration. Studies conducted in Kenyan schools found that actively involvement of parents in the education process tend to have better student performance, improved behaviour, and increased motivation (Titus, 2018; Muigai, 2018). This is particularly important for learners with special needs who require specialized interventions, individualized education plans, and enhanced parental support to navigate the CBC framework effectively. However, challenges such as resource constraints, lack of parental awareness, reluctance by teachers and cultural factors still compromise parental effective involvement (Akala, 2021).

While several studies have examined CBC implementation in primary schools (Sifuna & Obonyo, 2019; Cherotich, 2023), most have primarily focused on children without disabilities. In Thika West Sub County, where schools accommodate learners with diverse disabilities, the extent to which parents collaborate in implementing CBC remains unclear. Socio-economic status, lack of coordination teacher-parent activities, and limited awareness about special needs education further compromise parental involvement (Okumu, Werunga & Kirwok, 2023; Maina, Limo & Keter, 2023). If these gaps remain unaddressed, learners with special needs may not fully benefit from the CBC. This is likely to widen disparities in educational outcomes between them and their regular peers without disabilities. The study at hand, therefore, sought to gain insights into the multiple roles that parents played in implementing the CBC for learners with special needs in primary schools in Thika West Sub County.

Literature review

The origins of competency-based education (CBE) can be traced back to the United States in the 1960s and 1970s when policymakers and educators sought an alternative to the conventional time-based learning system, which often resulted in gaps in student achievement. The movement gained momentum as institutions began to focus on performance-based learning, emphasizing the demonstration of acquired competencies rather than time spent in classrooms (McClarty & Gaertner, 2015). The early adoption of CBE was mainly seen in vocational education and training programs, where students were assessed based on their ability to perform specific skills relevant to their chosen careers.

Over time, the CBC model evolved and was adopted in different educational systems worldwide. Countries such as USA, Bangladesh, Finland and South Korea have implemented the CBC to enhance educational outcomes and bridge the gap between school learning and workplace demands (Islam, Rahman, Paul & Khaleduzzaman, 2025; Muchira, Morris, Wawire & Oh, 2023). Finland's education system, which is globally recognized for its quality, incorporates a competency-based approach that emphasizes personalized learning and student autonomy (Sahlberg, 2015).

Rwanda, for instance, introduced CBC in 2015 to align education with national development goals by promoting creativity, entrepreneurship, and lifelong learning (Ganyata, 2024). Similarly, Tanzania revised its curriculum to emphasize competence-based education, aiming to improve students' employability and problem-solving skills (Kitta & Tilya, 2010).

Evidence indicates that CBC advocates for using Information and

Communication Technology (ICT) in the teaching and learning process, opening students to 21st-century skills in the modern workforce (Shedrack, 2023; Nyaga, 2018). Besides, the CBC has been a move towards addressing inclusivity in education including the disabled individuals and giving them opportunities to realise their potential. This differentiated learning approaches has facilitated the participation of students with different abilities (Andiema, 2020) and thereby encourage equity in education through ensuring that all children, regardless of their learning challenges. However, many teachers lack sufficient training on competency-based education methodologies, assessment strategies, and the integration of learner-centred pedagogies in their teaching (Munyao, Nduku & Ndanu, 2023). Shortage of learning resources and infrastructure to support CBC implementation were also among the identified challenges. Many schools, especially in rural areas have critically shortages of textbooks, digital tools, and practical equipment (Kamau, 2024). For this reason, learners and teachers hardly engage in meaningful and competency-driven activities. As earlier noted, while the curriculum emphasizes the role of community in supporting learners' education, many parents are either unaware of their responsibilities or lack the necessary knowledge and resources to contribute effectively (Mwarari, Githui & Mwenje, 2020). This is particularly evident in disadvantaged communities. The frequent curriculum changes and lack of clear communication from the government have led to confusion and resistance from stakeholders, further complicating the transition process.

Parent involvement in school is a key determinant of student achievement and health. These include more than just assisting with homework to active engagement in school life, making decisions, and working with teachers to enhance the learning process. Schools also benefit from enhanced parental involvement as it leads to improved teacher-parent relationships, increased community support, and development of effective school policies that cater to diverse students' needs (Desforges & Abouchar, 2003). In CBC, parent involvement has a critical function to play in facilitating experiential skills developed in school. Through participation in experiential activities, project work, and extracurricular activities, parents are able to help learners transfer their competencies into different settings (KICD, 2019).

The CBC model of learning extends beyond traditional classroom instruction and offers opportunities for meaningful teacher-parent collaboration. Some parents struggle to understand how they can contribute effectively to their child's competency development. Most parents in Kenya, particularly those from urban and poor regions, work for numerous hours per day, leaving them with little time to attend school activities or support their children in learning (Kadenyi, Andambi & Oseko, 2024). Furthermore, poverty limits access to

learning materials, thus making it difficult for parents to provide their children with the necessary academic support (Okumu, Werunga & Kirwok, 2023; Maina, Limo & Keter, 2023). Some schools lack structured communication channels where parents get feedback about the performance of their children and their activities (Natasha, 2024).

Several case studies highlight the impact of effective parental collaboration in special education. For example, in the United States, the Parent Mentor Partnership program exemplifies successful parental collaboration in special education. This initiative focuses on family engagement and best practices in special education, operating on the principle that families are integral to educational success (Walker, Hicks, Johnson & Boone, 2022). In Finland, a collaborative model known as the “Team Around the Child” (TAC) approach was implemented in special education settings. This approach involved close cooperation between parents, teachers, therapists, and medical professionals to design and implement individualised learning plans for children with disabilities. The model led to significant improvements in the students’ learning experiences and overall well-being, demonstrating the effectiveness of multidisciplinary collaboration (Saloviita, 2020).

Adams, Harris and Jones (2018), who explored teacher-parent collaboration within inclusive education settings in primary and secondary schools in Malaysia, revealed that active parental involvement, facilitated through consistent communication and joint educational planning, significantly enhanced the learning experiences of students with disabilities. The study found that when schools actively engaged parents by providing training, offering regular progress updates, and involving them in decision-making, students with disabilities demonstrated higher levels of participation and achievement (Engelbrecht *et al.*, 2016).

Theoretical framework

One of the most widely recognized theories supporting parental involvement in education is Epstein’s Model of Parental Involvement. Epstein (2001) proposed six key types of parental involvement that contribute to a child’s education: parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community. Parenting involves creating a supportive home environment conducive to learning, while communication refers to effective dialogue between parents and schools. Volunteering includes parental participation in school activities, while learning at home encompasses parental support in reinforcing school lessons. Decision-making allows parents to be involved in school governance, and community collaboration ensures that external stakeholders support the education process. Epstein’s model emphasizes the interconnected roles of

families, schools, and communities in fostering student success. The study applied the theory to evaluate the practice of parental involvement in implementing CBC in special schools in Thika West Sub-County.

Another theory is Hoover-Dempsey and Sandler's Parental Involvement Model, which focuses on the psychological and motivational factors that drive parental engagement in education. According to this model, parental involvement is influenced by their beliefs about their role in their child's education, their perception of their ability to help, and invitations for involvement from the school or child (Hoover-Dempsey & Sandler, 1997). This theory points out the importance of promoting a welcoming school environment and encouraging parental confidence in their ability to support their children's education.

Methodology

Research Design

This study employed a descriptive survey design to investigate different approaches to parental collaboration in the implementation of school programs within the Competency-Based Curriculum (CBC). The design was chosen for its effectiveness in gathering detailed information that describes existing phenomena, identifies problems, and provides a clear understanding of the current state of parental involvement in primary schools (Siedlecki, 2020). The mixed methods approach was appropriate for this study because it allowed for a comprehensive understanding of parental collaboration in implementing the CBC by combining the strengths of both qualitative and quantitative data (Schoonenboom, 2023). Quantitative data, collected through structured questionnaires, provided measurable data into the extent and patterns of parental involvement, while qualitative data, gathered through interviews with head teachers, offered deeper contextual understanding of parents' experiences and perceptions.

Target Population and Sample Size

The target population of head teachers, deputy head teachers, school board management members, and special needs teachers in primary schools was selected because these stakeholders play key roles in implementing the CBC for learners with special needs. Head teachers and deputy head teachers provide leadership and policy direction, ensuring that inclusive education strategies are adopted at the school level. School board management members influence resource allocation and parental engagement policies, while special needs teachers possess hands-on experience adapting the curriculum. Therefore, a total 140 participants took part in the study (i.e., 10 head teachers, 10 deputy head teachers, 80 members of school board and 40 teachers. Since the target population was small enough to study in its

entirety, a census approach was adopted to include all participants, thereby eliminating sampling bias and ensuring complete representation of perspectives.

Data Collection Instruments

Multiple methods were used to collect both quantitative and qualitative data. Structured questionnaires were designed and administered to teachers and members of the school Board of Management gather quantitative data from the respondents. The questionnaires included both closed and open-ended questions to capture a wide range of information regarding the approaches to parental involvement, school policies on parental collaboration, and best practices in the all-round learning process. Interviews were conducted with selected head teachers and deputy head teachers were used to collect qualitative data. The interviews were conducted face-to-face at the participants' respective schools with each session lasting approximately 30 to 45 minutes. Examples of interview schedule questions included; How would you describe the level of parental involvement in implementing the CBC in your school? What strategies has your school adopted to enhance parental collaboration? What challenges do you face in engaging parents of learners with special needs?

Pilot Study

Before the main data collection, a pilot study was conducted to test the reliability and validity of the research instruments. The pilot study involved a smaller sample of 10 respondents selected from a different but comparable population to those in the main study. This pre-testing phase aimed to identify any ambiguities or issues in the questionnaires and interview schedules, ensuring they were clear and effective in capturing the intended data. For example, some questions used technical terms related to the Competency-Based Curriculum (CBC) that were not uniformly understood by all participants, while others were too broad, leading to inconsistent interpretations. To address these issues, the wording of such items was revised for clarity and simplicity, ensuring that all terms were clearly defined and aligned with the local educational context

Validity

To ensure content validity, the questionnaires and interview schedules were reviewed by experts in education and curriculum development. Their feedback was used to refine the instruments, ensuring that they comprehensively covered all aspects of parental collaboration in CBC implementation. The research instruments were subjected to scrutiny by subject matter experts who provided feedback on the relevance and clarity of the items. The subject matter experts who reviewed the research instruments

included university lecturers specializing in education, curriculum studies, and special needs education, as well as senior officer from the Ministry of Education with experience in implementing the Competency-Based Curriculum (CBC). These individuals were selected based on their academic qualifications, professional experience, and familiarity with the Kenyan education system, particularly in relation to CBC and inclusive education. Adjustments were made based on their recommendations to ensure that the instruments accurately reflected on the study's objectives. To ensure construct validity, the constructs were operationalized clearly to ensure that the instruments measured the intended concepts and not extraneous factors. Additionally, feedback from the subject matter experts helped refine the instruments to ensure that each item was directly related to the constructs of interest.

Reliability

The reliability of the questionnaires was assessed using Cronbach's alpha coefficient to measure internal consistency. A value of 0.85 was obtained, which exceeded the acceptable threshold of 0.7 (Singh, 2017), indicating that the questionnaires had good internal consistency and were reliable for the study. The reliability analysis helped in identifying and revising any items that did not contribute to a reliable measure of the constructs being studied. For the qualitative data from interviews, inter-rater reliability was ensured by having multiple researchers independently code the data.

Data Analysis

The collected data was analyzed using both quantitative and qualitative methods. Quantitative data from the questionnaires was processed using the Statistical Package for the Social Sciences (SPSS) version 22. Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to summarize and present the data in a clear and interpretable format. For qualitative data obtained through interviews, thematic analysis was applied. First, audio recordings were transcribed verbatim to ensure accurate capture of participants' views. The transcripts were then read multiple times, and initial codes were assigned to relevant text segments based on recurring ideas or concepts, such as "parental involvement," "communication challenges," and "resource challenges." These codes were grouped into broader categories and then organized into key themes aligned with the study objectives. Findings from both data sets were integrated and presented using charts and graphs to enhance interpretation, support conclusions, and inform practical recommendations.

Results and discussion

The study employed descriptive research design employing a mixed-methods approach to analyze data, integrating quantitative (descriptive and inferential

statistics) and qualitative (thematic analysis) techniques. Quantitative data obtained through structured questionnaires were coded and analyzed using descriptive statistics such as frequencies, percentages, and means to identify patterns in parental involvement, school policies, and associated challenges. These were presented in tables and figures to enhance clarity. Qualitative data from open-ended responses and key informant interviews were thematically analyzed to complement and contextualize the quantitative findings. The major themes that emerged include: (1) Levels and Forms of Parental Involvement, (2) Perceived Effectiveness of Parental Engagement in Special Needs Education, (3) Influence of School Policies on Parental Collaboration, (4) Challenges Hindering Parental Involvement, and (5) Best Practices for Enhancing Collaboration.

Demographic Information

Collecting demographic information such as gender (Figure 1), age (Figure 2), role in school (Table 1), and the number of years involved with the school (Table 2) is key to contextualize the findings and understand how factors such as age, gender, and professional role within the school might influence perceptions and experiences related to parental collaboration in the implementation of the Competency-Based Curriculum (CBC) for learners with special needs. Such background data allowed for the examination of patterns or differences across respondent groups and ensured that the analysis captured diverse perspectives relevant to the study objectives.

Gender

Figure 1: The gender of the respondents

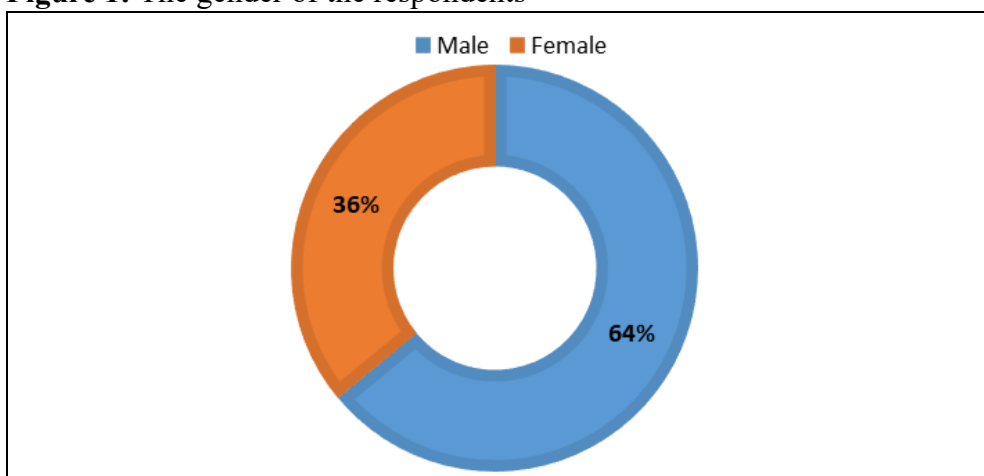
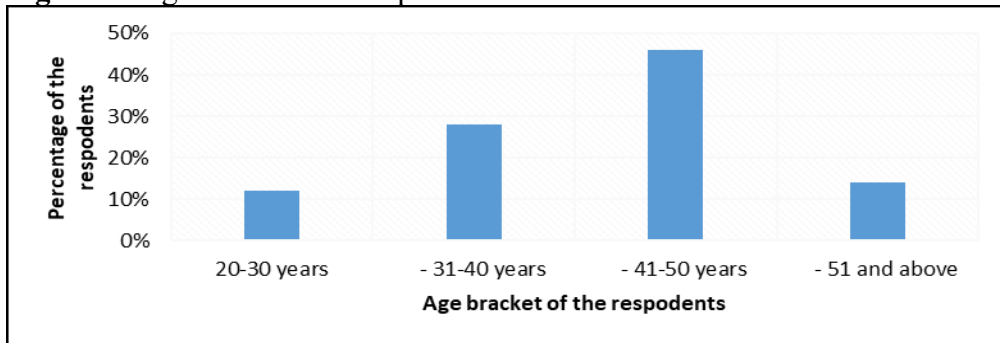


Figure 1 indicates that 64% were males and 36% were females.

Age

Figure 2: Age brackets of Respondents



The age of the respondents varied each other. The age group between 20 and 30 constitutes 12%, 28% of respondents were aged between 31 and 40, the 51 and above constituted 14%, and 46% ranged from 41 to 50. This indicates that the majority of the sample comprises individuals likely in their mid to late career stages.

Respondents Categories

The respondents were asked to specify their category in school, and the results are detailed in Table 1.

Table 1
Distribution of Respondents by Category

Respondents	Frequency	Percentage
Head Teachers	10	7
Deputy Head Teachers	10	7
Board members	80	57
Teachers	40	29
Total	140	100

The study findings indicate that the majority of respondents were board members, accounting for 57% (n=80) of the total sample. Teachers were 40 (29%), while head teachers and deputy head teachers constituted 7% each.

Number of years involved with the school

The respondents were asked to indicate the number of years they have been involved with their respective schools. The findings are illustrated in Table 2.

Table 2
Number of Years Involved with the School

Respondents	Frequency	Percentage
Less than 1 year	7	5
1-3 years	18	13
4-6 years	24	17
More than 6 years	91	65
Total	140	100

The majority of respondents 91 (65%) have been involved with the school for more than six years, indicating a high level of experience and familiarity with school operations. A smaller proportion (17%, n=24) have been engaged in for 4 to 6 years, while 13% (n=18) had experience ranging from 1 to 3 years. Only 5% (n=7) have been involved for less than a year

Parental Involvement in School Programs

The respondents were asked to indicate how often do parents participate in school activities and programs. The results are summarized in the Table 3

Table 3
Parental Involvement in School Programs

Frequency	Respondents	Percentage
Never	11	7.5%
Rarely	25	17.5%
Sometimes	77	55%
Often	21	15%
Always	7	5%
Total	140	100%

The findings indicate that the majority of parents (55%, n=77) are sometimes involved in school programs, suggesting occasional participation in their children's education. A notable proportion (17.5%, n=25) rarely engage in school activities, while 7.5% (n=11) never participate at all, indicating a significant involvement gap. On the other hand, 15% (n=21) often take part in school programs, and only 5% (n=7) are always actively involved. These results suggest that while some parents engage in school activities, a considerable number have limited participation, which could have adverse implications for CBC implementation for learners with special needs. A study by Mulinya and Kimotho (2024) conducted in the informal settlement in Nairobi found that a striking 67% of parents lacked a comprehensive understanding of CBC, which consequently limited their ability to support their children's education effectively.

Ways Parents Get Involved in School Programs

The study also explored the various ways parents engage in school programs (See Table 4).

Table 4
School Programs that Parents are involved with

Parental Involvement Activity	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Total
Attending parent-teacher meetings	7	10	18	40	65	140
Volunteering in school events	80	30	20	7	3	140
Communicating regularly with teachers	15	20	28	42	35	140
Participating in decision-making processes	40	25	32	25	18	140

Attending parent-teacher meetings had the highest level of participation, with 65 parents (46.4%) always attending and 40 (28.6%) often attending, indicating strong engagement in this area. Regular communication with teachers also showed notable involvement, with 35 parents (25%) always engaging and 42 (30%) often engaging. However, participation in decision-making processes was unsatisfactory. Only 18 parents (12.9%) always took part, while 40 (28.6%) never participated. The least common form of involvement was volunteering in school events, where 80 parents (57.1%) never participated, and only 3 (2.1%) always did. These results suggest that while parents are more involved in direct communication with teachers and meetings, their engagement in decision-making and school events remains limited. This negatively impact collaborative efforts in implementing the CBC for learners with special needs. Several existing studies support these findings. Lekli and Kaloti (2015) demonstrated that consistent parent-teacher communication contributes to improved learner outcomes. Similarly, Nyarko's (2011) Ghana-based research examining the impact of parental engagement in education found a statistically significant positive relationship between parental involvement and students' academic performance.

Effectiveness of parental involvement in supporting learners with special needs

The respondents were asked to rate how effective they believe various forms of parental involvement are in enhancing the educational experience and support for learners with special needs. Table 5 presents the findings.

Table 5:
Perceived effectiveness of parental involvement in supporting learners with special needs

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean
1. Parents provide adequate learning support at home for children with special needs.	15	25	40	35	25	3.21
2. Parents actively collaborate with teachers to address the learning challenges of their children.	10	30	35	40	25	3.29
3. The school provides sufficient opportunities for parental engagement in special needs education.	20	35	30	30	25	3.04
4. Parental involvement positively impacts the academic performance of learners with special needs.	5	20	30	50	35	3.64
5. Parents receive adequate training and guidance on how to support children with special needs at home.	25	40	30	25	20	2.82

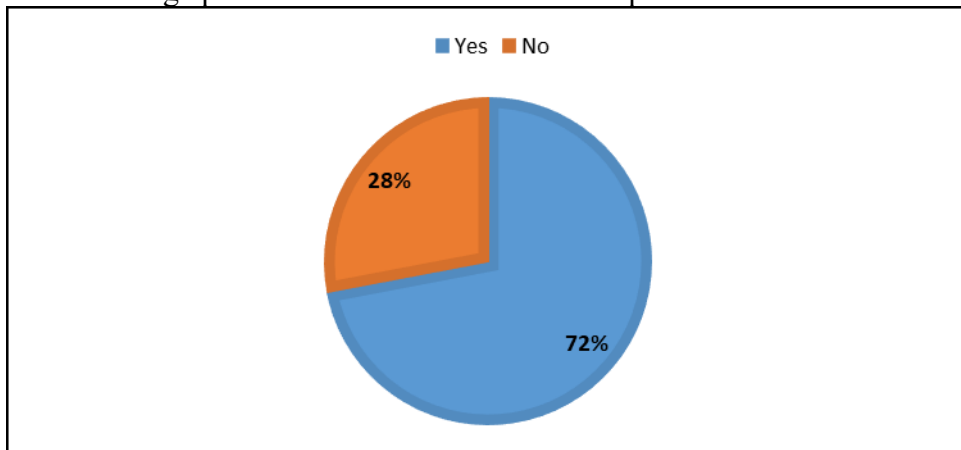
The findings reveal that while parental involvement is generally recognized as beneficial for learners with special needs, its effectiveness varies across different aspects. The highest-rated aspect was the positive impact of parental involvement on academic performance ($M = 3.64$), indicating that when parents engage in their children's education, their learning outcomes improve. However, the moderate scores for parental collaboration with teachers ($M = 3.29$) and the provision of adequate learning support at home ($M = 3.21$) suggest that while some parents are actively involved, others may face challenges in fully supporting their children. The availability of school-led opportunities for parental engagement ($M = 3.04$) also indicates that while schools attempt to involve parents, the effectiveness of these initiatives may need improvement. The lowest-rated aspect was parental training and guidance ($M = 2.82$), implying a critical gap where many parents lack the necessary skills and resources to support learners with special needs.

As noted by Participant HT-03 (Personal communication, June 15, 2024), "Parents are key in creating a supportive home environment and ensuring their children attend school regularly, which is fundamental for the academic progress of learners with intellectual disabilities."

Similarly, Participant DHT-07 (Personal communication, June 18, 2024) observed that *"While some parents are committed, many do not participate in school activities or communicate with teachers about their children's progress, which affects collaborative efforts."*

School Policies on Parental Collaboration

The respondents were further asked if they were aware of any school policies that encourage parental collaboration in CBC implementation



Majority of the respondents (72%) indicated that they are aware of school policies that encourage parental collaboration in CBC implementation, while 28% of them indicated that they are not aware.

The study investigated respondents' opinions on the extent to which school policies effectively promote parental collaboration. The results are shown in Table 5

Table 5
Respondents' Opinions on the Effectiveness of School Policies in Promoting Parental Collaboration

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean
1. The school's policies encourage frequent communication between parents and teachers.	10	20	35	45	30	3.46
2. The school has clear guidelines that support parental involvement in decision-making.	15	25	40	35	25	3.21
3. Policies in place make it easy for parents to participate in school activities.	12	18	38	45	27	3.45
4. The school provides adequate resources and support for parental collaboration.	20	30	30	35	25	3.04
5. The school administration actively seeks parental input when making key decisions.	18	28	32	40	22	3.14

The findings in table 5 indicated that school policies encourage frequent communication between parents and teachers ($M = 3.46$). Similarly, school policies making it easy for parents to participate in school activities scored 3.45, reflecting a relatively positive perceptions of parental involvement opportunities. However, the clarity of guidelines supporting parental involvement in decision-making received a moderate score ($M = 3.21$), implying that not sufficiently clear or accessible. The availability of resources and support for parental collaboration was rated lower ($M = 3.04$). This indicates that parents provide inadequate assistance in their engagement efforts. Lastly, parental input in key school decisions scored 3.14, suggesting that the room for improvement in actively seeking and implementing their contributions is still available. The results align with Desforges and Abouchaar's (2003) findings that while policies exist, their implementation and perceived effectiveness can vary greatly, often requiring more robust and consistent application.

Head teachers and their deputies expressed mixed views regarding the efficacy of existing school policies in promoting parental collaboration. One participant (HT-05, personal communication, June 17, 2024) noted, *"While our school policies explicitly emphasize parental involvement, translating*

these guidelines into practice remains challenging. Despite established structures like parent-teacher meetings and school boards, we consistently observe low participation rates particularly among parents of children with special needs."

Another deputy head teacher (DHT-09, personal communication, June 20, 2024) explained, *"Many parents are unaware of school policies regarding their involvement because communication channels are not always effective. Some parents assume their role is limited to paying school fees, while others face literacy barriers that hinder their engagement with written policy documents."*

Challenges in Implementing School Policies for Effective Parental Collaboration

The study examined the challenges encountered in implementing school policies designed to enhance parental collaboration. The results are presented in Table 6.

Table 6
Challenges in Implementing School Policies for Effective Parental Collaboration

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean
1. Lack of clear communication between schools and parents hinders collaboration.	8	15	30	50	37	3.68
2. Parents' busy schedules make it difficult for them to participate in school programs.	5	12	28	55	40	3.86
3. Limited school resources affect the effective implementation of parental collaboration policies.	10	20	35	45	30	3.50
4. Cultural and socio-economic factors create barriers to parental involvement in schools.	12	18	32	50	28	3.51
5. School administrators do not sufficiently involve parents in decision-making.	15	25	38	40	22	3.21

The highest-rated challenge was parental participation in school programs was limited by tight schedule ($M = 3.86$). This means that time was a major barrier to parental involvement. Lack of clear communication between schools and parents was also a significant challenge ($M = 3.68$). This

suggests that better communication strategies are needed. Limited school resources ($M = 3.50$) and cultural and socio-economic barriers ($M = 3.51$) were moderately rated. The assumption here was that both financial constraints and diverse family backgrounds had a far impacted on parental engagement. The lowest-rated challenge was insufficient involvement of parents in school decision-making ($M = 3.21$), suggesting that while parental participation exists, it may not be fully optimized. These findings point out the need for flexible engagement strategies, improved communication channels, and increased resource allocation to enhance parental collaboration in schools. Achoka *et al.* (2015) conducted a study in Nandi Central Sub-County, Kenya revealed that many parents struggle to balance work commitments with involvement in their children's education, leading to minimal participation in school functions and academic support at home.

As one head teacher (HT-06, personal communication, June 22, 2024) explained, *"Many parents do not fully understand their role in their children's education. Despite having policies in place to encourage participation, some parents assume that education is solely the school's responsibility."* This misunderstanding has several critical implications: it undermines home-school continuity in CBC implementation, limits the transfer of learning between school and home environments, and reduces the effectiveness of individualized education plans (IEPs) that require active parental input. These findings align with Odongo (2018) research on role perception gaps in Kenyan primary education, which found that parents of children with special needs often feel inadequately prepared to support pedagogical activities at home.

Deputy head teacher (DHT-02, personal communication, June 25, 2024) further noted, *"We lack the financial and human resources to implement some of the policies effectively. Organizing regular parental workshops, follow-ups, and home visits requires funding that many schools do not have."* This resource limitation helps explain several observed phenomena: the persistent gap between policy aspirations and practical implementation, the ways socioeconomic factors challenge collaborative models and the variations in parental engagement levels across different schools. These challenges are not unique to the study context; UNESCO (2020) reports on inclusive education systems in Sub-Saharan Africa found that 78% of schools lacked dedicated budget lines for parental engagement activities, suggesting a regional pattern of underfunding in this critical area.

Best Practices in Collaborating with Parents

The study explored the best practices implemented by schools to enhance parental collaboration. Table 7 identifies several strategies that have been effective in promoting better engagement between schools and parents.

Table 7
Best Practices for Enhancing Parental Collaboration

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean
1. Regular parent-teacher meetings improve parental engagement in school activities.	5	10	25	55	45	3.96
2. Schools should provide training programs to equip parents with skills for supporting their children's education.	7	15	30	50	38	3.77
3. Open communication between teachers and parents enhances collaboration.	4	12	28	58	38	3.91
4. Flexible school engagement programs encourage more parents to participate in school activities.	6	14	35	50	35	3.74
5. Schools should involve parents in decision-making to strengthen their commitment to their children's education.	8	18	32	48	34	3.63

The highest-rated strategy was regular parent-teacher meetings ($M = 3.96$), indicating that frequent interactions between teachers and parents significantly enhance engagement. Open communication between teachers and parents ($M = 3.91$) was also highly rated, emphasizing the importance of maintaining transparent and consistent dialogue. Providing training programs for parents ($M = 3.77$) and flexible school engagement programs ($M = 3.74$) were moderately rated, suggesting that capacitating parents with skills and accommodating their schedules can improve collaboration. The lowest-rated but still significant strategy was involving parents in school decision-making ($M = 3.63$). This means that while parental input is valued, it may not always be fully implemented. Home visits provide a personalized approach to engaging with parents and addressing their specific concerns. These strategies align with Epstein's (2001) framework, which emphasizes multiple forms of parental engagement to build strong school-family partnerships.

Relationship between parental involvement and the perceived effectiveness in supporting learners with special needs

Chi-square test of independence was conducted to determine if there is a significant association between the frequency of parental involvement in

school programs and the perceived effectiveness of this involvement in supporting learners with special needs. The finding is presented in Table 8

Table 8
Parental Involvement and Perceived Support

	Parental involvement	Perceived Effectiveness
Chi-Square	9.24 ^a	.560 ^a
df	2	2
Asymp. Sig.	.016	.756

a. 0 cells (.0%) have expected frequencies less than 5

The test results ($\chi^2 = 9.24$, $p = 0.05$) indicate a statistically significant association, suggesting that more frequent parental involvement is associated with a higher perception of effectiveness in supporting learners with special needs.

Conclusion

Findings revealed that parents seldom participated in school programs. The primary modes of involvement include attending parent-teacher meetings, regular communication with teachers, decision-making processes and some parents volunteer in school events. Furthermore, despite awareness of school policies promoting parental collaboration, many respondents expressed dissatisfaction with their effectiveness. The study also established a significant association between the frequency of parental involvement and its perceived effectiveness in enhancing learning outcomes for special needs learners.

Recommendations

To enhance parental involvement, schools should implement the following recommendations. The Ministry of Education should mandate primary schools implementing the Competency-Based Curriculum (CBC) for learners with special needs to establish parental support groups and integrate digital communication platforms such as school portals and WhatsApp groups to enhance engagement with parents. Additionally, the Teachers Service Commission (TSC) should allocate resources for biannual parental training workshops, facilitate financial and material support for parental collaboration programs, and conduct awareness campaigns to educate both parents and educators on the critical role of parental involvement in special needs education.

The study recommends further research to explore how socioeconomic status, parental education levels and availability of school resources intersect to influence patterns of parental involvement, which may help explain why

some parents actively engage while others remain disengaged. Additionally, given the current reliance on traditional forms of communication such as meetings and face-to-face interactions, future studies could examine the effectiveness of digital alternatives such as SMS updates or virtual Individualized Education Program (IEP) sessions in addressing challenges like limited time or mobility, particularly for parents of learners with physical disabilities.

References

- Achoka, J. S. K., Chepsiror, E., Odoyo, F. S., & Chepchirchir, G. (2015). Parents' Extent In and Challenges to Academic Support to Their Children in Kenyan Public Primary Schools in Nandi Central Sub-County. *Advances in Social Sciences Research Journal*, 2(11). 68-76. <https://journals.scholarpublishing.org/index.php/ASSRJ/article/view/1425>
- Adams, D., Harris, A., & Jones, M. S. (2018). Teacher-parent collaboration for an inclusive classroom: Success for every child. *MOJES: Malaysian Online Journal of Educational Sciences*, 4(3), 58-72.
- Akala, B. M. M. (2021). Revisiting education reform in Kenya: A case of Competency Based Curriculum (CBC). *Social Sciences & Humanities Open*, 3(1), 100107.
- Amunga, J., Were, D., & Ashioya, I. (2020). The Teacher-Parent Nexus in the Competency Based Curriculum Success Equation in Kenya. *International Journal of Educational Administration and Policy Studies*, 12(1), 60-76.
- Amutabi, M. N. (2019). Competency based curriculum (CBC) and the end of an era in Kenya's education sector and implications for development: Some empirical reflections. *Journal of Popular Education in Africa*, 3(10), 45-66.
- Andiema, N. C. (2020). Teachers' competencies in evaluation of competency-based curriculum among special needs learners in Kenya. *Global Journal of Educational Research*, 19(2), 135-145.
- Bennington, A. (2004). Science and pre-school children with special educational needs: Aspects of home-based teaching sessions. *British Journal of Special Education*, 31(4), 191-198.
- Brigman, G., Villares, E., Mullis, F., Webb, L. D., & White, J. F. (2021). *School counselor consultation: Skills for working effectively with parents, teachers, and other school personnel*. John Wiley & Sons.
- Cherotich, N. (2023). *Influence of Teachers' Preparedness on Implementation of Competency Based Curriculum (CBC) In Public Primary Schools In Bomet East Sub-County, Bomet County, Kenya* (Doctoral dissertation, University of Kabianga). <http://197.136.17.126/handle/123456789/742>

- Desforges, C., & Abouchaar, A. (2003). *The impact of parental involvement, parental support and family education on pupil achievement and adjustment: A literature review* (Vol. 433). Queen's Printer, London.
[https://library.bsl.org.au/jspui/bitstream/1/3644/1/Impact%20of%20Parental%20Involvement Desforges.pdf](https://library.bsl.org.au/jspui/bitstream/1/3644/1/Impact%20of%20Parental%20Involvement%20Desforges.pdf)
- Engelbrecht, P., Savolainen, H., Nel, M., Koskela, T., & Okkolin, M.-A. (2016). Making meaning of inclusive education: Classroom practices in Finnish and South African classrooms. *Compare: A Journal of Comparative and International Education*, 46(5), 691-710.
- Epstein, J. L. (2001). *School, family, and community partnerships: Preparing educators and improving schools*. Westview Press.
- Fleming, K. B. (2024). *Parent Perspective: How Raising a Child With a Disability Shapes Involvement in Early Childhood Special Education Programs*. [Unpublished Doctoral dissertation] Concordia University Chicago.
- Ganyata, O. (2024). Challenges of internship in Rwanda Teacher Education and mitigating solutions; A case of one Teacher Training College. *Rwandan Journal of Education*, 7(3), 111-128.
- Godfrey, N. (2018). *Examining the Practice of Competence-based Curriculum (CBC). on the Provision of Quality Education in Tanzania: A Case of Selected Secondary Schools in Tabora and Nzega Districts* [Unpublished Doctoral dissertation], The Open University of Tanzania).
- Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why do parents become involved in their children's education?. *Review of educational research*, 67(1), 3-42.
- Islam, S., Rahman, A., Paul, U. C., & Khaleduzzaman, M. (2025). Teachers' perceptions of and adaptations to implementing a competency-based curriculum at the secondary level in Bangladesh. *Oxford Review of Education*, 1-19.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (1998). Cooperative learning returns to college what evidence is there that it works?. *Change: The magazine of higher learning*, 30(4), 26-35.
- Kadenyi, J. A., Andambi, R. I., & Oseko, A. (2024). The effect of socio-economic factors on student engagement in Christian religious education in public secondary schools in Hamisi Sub County, Vihiga County, Kenya. *International Journal of Education, Science and Social Sciences*, 3(2), 129–137.
- Kamau, C. W. (2024). *Institutional Factors Influencing Implementation of Competency Based Curriculum in Public Primary Schools in Kigumo Sub-county, Murang'a County Kenya* [Doctoral dissertation], University of Nairobi.

- Kitta, S., & Tilya, F. (2010). The status of learner-centered learning and competency-based education in Tanzania. *Journal of Education and Development*, 30(1), 45-58.
- Lalvani, P. (2019). *Constructing the (M) other: Narratives of disabled motherhood*. Peter Lang Publishing.
- Lekli, L., & Kaloti, E. (2015). Building parent-teacher partnerships as an effective means of fostering pupils' success. *Academic Journal of Interdisciplinary Studies*, 4(1), 101-104.
- Maina, E. J., Limo, A., & Keter, J. (2023). Effects of Socio-Political and Economic Marginalization on Education Management in Kerio Valley Region of Marakwet East-Sub County, Elgeyo Marakwet County. *Journal of Research in Education and Technology*, 1(2), 12-22.
- Makori, A., & Onderi, H. (2013). Challenges in achieving effective recruitment of secondary school teachers in Kenya. *International Journal of Advanced Research in Management and Social Sciences*. 2(3), 40-63
- McClarty, K. L., & Gaertner, M. N. (2015). Measuring mastery: Best practices for assessment in competency-based education. *American Enterprise Institute for Public Policy Research*. 1-16. <https://www.aei.org/wp-content/uploads/2015/04/Measuring-Mastery.pdf>
- Muchira, J. M., Morris, R. J., Wawire, B. A., & Oh, C. (2023). Implementing Competency Based Curriculum (CBC) in Kenya: Challenges and Lessons from South Korea and USA. *Journal of Education and Learning*, 12(3), 62-77.
- Muigai, J. W. (2018). Parental Involvement in Primary Schools in Kenya as a major strategy for academic success. *European Journal of Education Studies*.4(2). 1-10.
- Mulenga, I. M., & Kabombwe, Y. M. (2019). A competency-based curriculum for Zambian primary and secondary schools: learning from theory and some countries around the world. *International Journal of Education and Research*. 7(2), 117-130
- Mulinya, S. J., & Kimotho, S. K. (2024). Parental Perceptions and Challenges in Supporting the Competency-Based Curriculum (CBC) in Deep Sea Informal Settlement, Loresho, Nairobi County. *African Journal of Education and Practice*, 9(2), 15-30.
- Munyao, A., Nduku, E., & Ndanu, C. (2023). Teacher Instructional Preparedness on the Implementation of Competency Based Curriculum in Public Primary Schools in Lamu-West Sub-County, Kenya. *Journal of Popular Education in Africa*, 7(7), 20-32.
- Muricho, W. P., & Chang'ach, J. K. (2013). Education reforms in Kenya for Innovation. *International Journal of Humanities and Social Science*. 3(9) 123-149.

- Murungi, J. M. (2019). *Kenyan Education System and Self-Reliance: A Decolonizing Perspective* [Doctoral dissertation], Chuka University.
- Mwaisaka, A. M. (2019). Investigating how parental involvement influences learning outcomes of their children in early childhood education in Taita Taveta County. Unpublished Masters Thesis). Dar es salaam: Aga Khan University
- Mwarari, C. N., Githui, P., & Mwenje, M. (2020). Parental involvement in the implementation of competency-based curriculum in Kenya: Perceived challenges and opportunities. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(3), 201-208.
- Mwarari, C. N., Githui, P., & Mwenje, M. (2020). Parental involvement in the implementation of competency-based curriculum in Kenya: Perceived challenges and opportunities. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(3), 201-208.
- Natasha, F. (2024). Influence Of Parental Involvement on Implementation of The Competency Based Curriculum in Public Primary Schools in Likuyani Sub-County, Kenya. {Unpublished Degree Project}. Greta University.
- Nyaga, F. (2018). *Assessment of public primary school teachers' preparedness in the implementation of digital literacy programme in public primary schools in Imenti north sub-county, Kenya* (Unpublished Doctoral dissertation], University of Nairobi).
- Nyarko, K. (2011). Parental school involvement: The case of Ghana. *Journal of emerging trends in educational research and policy studies*, 2(5), 378-381.
- Odongo, G. (2018). Barriers to parental/family participation in the education of a child with disabilities in Kenya. *International journal of special education*, 33(1), 21-33.
- Okumu, Z. Y., Werunga, R. K., & Kirwok, E. (2023). Influence of Single Parents' Economic Status on Pupil's Academic Performance in Primary Schools in Bondo Sub County, Kenya. *Journal of Research in Education and Technology*, 1(2), 47-57.
- Omariba, A. (2022). Challenges faced by parents in implementing competence-based curriculum in primary schools: Kenyan perspective. *International Journal of Education and Research*. 10(5), 1-12.
- Otieno, D. (2020). Integrating digital literacy in competency-based curriculum. In *Handbook of Research on Literacy and Digital Technology Integration in Teacher Education* (pp. 142-155). IGI Global.
- Rakap, S., Balikci, S., Aydin, B., & Kalkan, S. (2024). Promoting inclusion through embedded instruction: Enhancing preschool teachers' implementation of learning opportunities for children with disabilities. *Journal of Developmental and Physical Disabilities*, 36(6), 995-1018.

- Sahlberg, P. (2015). *Finnish Lessons 2.0: What Can the World Learn from Educational Change in Finland?* Teachers College Press.
- Saloviita, T. (2020). Teachers' attitudes towards inclusive education in Finland. *Scandinavian Journal of Educational Research*, 64(3), 332-345.
- Schoonenboom, J. (2023, January). The fundamental difference between qualitative and quantitative data in mixed methods research. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* (Vol. 24, No. 1).
- Shedrack, K. (2023). *Competency based curriculum and creativity learning outcomes among grade four pupils in Makueni county, Kenya* (Unpublished Doctoral dissertation), Mount Kenya University Press).
- Siedlecki, S. L. (2020). Understanding descriptive research designs and methods. *Clinical Nurse Specialist*, 34(1), 8-12.
- Sifuna, D. N., & Obonyo, M. M. (2019). Competency based curriculum in primary schools in Kenya-prospects and challenges of implementation. *Journal of Popular Education in Africa*, 3(7), 39-50.
- Singh, A. S. (2017). Common procedures for development, validity and reliability of a questionnaire. *International Journal of Economics, Commerce and Management*, 5(5), 790-801.
- Titus, R. W. (2018). *Parental involvement and their influence on academic achievement in Kenya Certificate of Primary Education: A Case of public primary schools in Soy-Turbo Sub-Counties, Uasin Gishu County* (Unpublished Doctoral dissertation), University of Eldoret
- Turnbull, A. P., Turnbull, H. R., Erwin, E. J., & Soodak, L. C. (2015). *Families, professionals, and exceptionality: Positive outcomes through partnerships and trust*. Pearson.
- UNESCO. (2020). *Global education monitoring report: Inclusion and education – All means all*. United Nations Educational, Scientific and Cultural Organization.
- Wairimu, N. L. (2022). *Parental involvement in the formation of school and family partnerships in the implementation of Competency Based Curriculum: A study of public primary schools in Lang'ata Sub County* (Unpublished Doctoral dissertation), Strathmore University.
- Walker, K., Hicks, G., Johnson, K., & Boone, B. (2022). *Partnering with Families through Special Education*. The Ohio Statewide Family Engagement Center. Retrieved from https://cete.osu.edu/wp-content/uploads/2022/08/Special-Education-Research-Brief-2022.pdf?utm_source=chatgpt.com
- Winsler, A., Diaz, R. M., & Montero, I. (1997). The role of private speech in the transition from collaborative to independent task performance in young children. *Early Childhood Research Quarterly*, 12(1), 59-79.

- Wong, R. S. M., Ho, F. K. W., Wong, W. H. S., Tung, K. T. S., Chow, C. B., Rao, N., ... & Ip, P. (2018). Parental involvement in primary school education: Its relationship with children's academic performance and psychosocial competence through engaging children with school. *Journal of Child and Family Studies*, 27, 1544-1555.
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of child psychology and psychiatry*, 17(2), 89-100.
- .

Bibliometric Analysis of Psychological Distress Among Higher Learning Students in Africa

Justine Kavindi¹, January Basela² & Martanus Ochola Omoro³

¹College of Education, Department of Educational Psychology and Curriculum Studies, University of Dodoma, Tanzania.

Email: kavindi84.jk@gmail.com

²College of Education, Department of Educational Psychology and Curriculum Studies, University of Dodoma, Tanzania.

Email: jabasela@gmail.com

³College of Education, Department of Educational Psychology and Curriculum Studies, University of Dodoma, Tanzania

Email: omomartan@gmail.com

Abstract

This bibliometric study explores research trends, collaborative networks, and thematic focus areas within the field of psychological distress among higher education students in Africa. It offers a comprehensive overview of recent scholarly contributions, identifying key researchers, institutions, and publication patterns. A total of 877 empirical studies were retrieved from the Dimensions database using predefined search criteria. After a rigorous screening and eligibility assessment, 264 studies met all inclusion criteria and were included in the final analysis. Using VOSviewer 1.6.20 software, the study conducted network analyses and generated data visualizations to map research collaborations and thematic developments. The University of Cape Town and Addis Ababa University emerged as leading institutions in publishing research on psychological distress in Africa. Notably, countries such as South Africa, Ethiopia, Canada, Ghana, Kenya, and Uganda demonstrated high levels of international research collaboration in this domain. Keyword analysis revealed that the research is strongly tied to broader issues concerning societal, health, and psychological well-being. Thematic analysis identified several core research clusters, including the epidemiology of psychological distress, the impact of the COVID-19 pandemic, and mental health challenges among university students. Citation analysis further highlighted the most influential authors, institutions, and publication sources, offering deeper insights into the field's academic landscape. This study provides critical insights into the evolution of research on psychological distress among higher education students in Africa, emphasizing key trends, collaborative patterns, and thematic developments that can inform future research and policy initiatives.

Keywords: *Psychological distress, citation analysis, mental distress, mental health, academic distress, social distress, higher learning students*

Introduction

Psychological distress has become a critical focus of contemporary research due to its rising prevalence globally and the substantial impact it has on individuals and communities. The growing complexities of modern life—marked by socioeconomic hardships and environmental stressors—have been strongly linked to the rising prevalence of psychological distress (Mboya *et al.*, 2020a). It is estimated that approximately 30% of the global population experiences psychological distress annually, with one in four individuals likely to face mental health-related issues, including psychological distress (WHO, 2020). The concept of psychological distress has been defined in diverse ways across scholarly literature. Xu and Zhu (2023) conceptualize it as an array of unpleasant emotional states elicited by psychological, social, or spiritual factors, encompassing experiences that range from normal emotional fluctuations to more severe conditions such as anxiety, depression, and personality disturbances. Mboya *et al.*, (2020) describe it as the unpleasant emotions experienced when an individual is overwhelmed, which can severely disrupt daily activities. Viertiö *et al.* (2021) identify it as a non-specific manifestation of stress, anxiety, and depression. Meanwhile, the American Psychiatric Association (APA, 2022) provides a broader conceptualization of psychological distress, describing it as an undifferentiated constellation of symptoms that includes anxiety, depression, functional impairments, personality traits, and behavioural issues. However, the widely accepted definition includes a spectrum of negative emotional experiences, such as stress, anxiety, and depression, often resulting from adverse life events or ongoing stressors (APA, 2013).

Prevalence rates of psychological distress vary significantly across countries. Approximately 31% of the global population experience elevated levels of psychological distress (Naylor, 2022), with students reporting higher rates than the general population (Mboya *et al.*, 2020). In Africa, for instance, South Africa reports a prevalence rate of 28% (Pilla & Edward, 2019), Ghana 21%, Somalia between 21.6% and 49.1%, and Tunisia 36% (Kondirolli & Sunder, 2022). A study by Mboya *et al.* (2020a) further highlights a 46% prevalence rate of psychological distress, underscoring the gravity of the issue. Manifestations of psychological distress are diverse and include substance abuse, academic underperformance, decreased productivity, and antisocial behaviour among the university students (Bantjes *et al.*, 2017). Common symptoms of psychological distress identified in the literature include loss of interest in usual activities, excessive worry, and fear, all of which can disrupt daily functioning (Auerbach *et al.*, 2018). Factors contributing to the prevalence of psychological distress include economic hardship, illness, natural disasters, challenges in intimate relationships, academic pressures, and family-related problems (Mboya *et al.*, 2020a).

The etiology of psychological distress is multifactorial and context-dependent. Research highlights several contributing factors, including inadequate adjustment to college life among students, economic disadvantage, social isolation, and academic pressure (Alipio, 2020; Gust *et al.*, 2017; Hersi *et al.*, 2017). Studies conducted in Africa have identified unique determinants, including gender, lower income, lack of close friendships, work tension, loneliness, and disease-related challenges (Muna & Atinkut, 2018; Rweyemamu, Mbotwa & Mramba 2024). These factors collectively impact individuals' cognitive, emotional, and social functioning, exacerbating psychological distress.

Despite extensive evidence on the causes of psychological distress, studies consistently find that students are disproportionately affected compared to the general population (Sifunda *et al.*, 2024; Rweyemamu, Mbotwa & Mramba 2024; Mutinta, 2022). Most research efforts on psychological distress in Africa have been concentrated in countries such as South Africa, Ethiopia, and Ghana, leaving many other regions underrepresented. There remains a notable gap in empirical research on psychological distress, particularly among higher education students in several African contexts (Mboya *et al.*, 2020b). This scarcity of comprehensive data may lead to underdiagnoses and inadequate intervention strategies, leaving affected populations vulnerable. To bridge this gap, this study conducted a bibliometric analysis as an emerging methodological approach for synthesizing existing literature and uncovering research trends. Bibliometric analysis utilizes mathematical and statistical methods to assess large bodies of scholarly literature, offering valuable insights into authorship patterns, institutional contributions, and emerging thematic trends (Xu & Zhu, 2023).

This study employed bibliometric methods to evaluate the scholarly output on psychological distress within African contexts, focusing on the contributions of journals, institutions, authors, and nations in advancing knowledge of psychological distress in Africa. Thus, the aim of this study was to identify key research trends, scholarly contributions, and gaps in the literature on psychological distress within African contexts, with a particular focus on higher education students. This is because the effort made on this area focused on general psychological issues, such as depression, anxiety, academic stress, and psychological challenges faced by caregivers and medical students (Losioki & Hemed, 2021; Mboya *et al.*, 2020b; Mutinta, 2022). A recent study by Fadiji *et al.* (2024) explored positive psychology and well-being in Africa, yet research explicitly addressing psychological distress remains limited. This study identified key trends, research priorities, and influential contributors in the field of psychological distress by analysing

literature from the Dimensions database using VOSviewer 1.6.20 software. The findings aim to enhance the understanding of community mental health in Africa and support the development of evidence-based interventions to address psychological distress. Guided by a central research question—What are the trends of empirical research on psychological distress among higher education students in Africa as identified through bibliometric analysis? —this study provides a comprehensive overview of the current scholarly landscape.

Methods and Materials

This study employed bibliometric analysis to systematically evaluate research trends on psychological distress in Africa, specifically focusing on higher-learning students. Analysis was done on the data obtained from the dimension database accessed in August 2024. Bibliometric analysis was chosen to enable a comprehensive assessment of scholarly output, including the frequency of occurrence of key terms, authorship networks, institutional contributions, country-level research productivity, and citation impact. The study focused on research articles published between 2018 and 2024, with the rationale being to assess how the COVID-19 pandemic influenced research patterns and to identify shifts in scholarly attention toward psychological distress among African students. Through bibliometric analysis, the study effectively mapped the evolution of psychological distress as a research domain, revealing key thematic areas, collaboration networks, and influential scholarly contributions. This approach provides an empirical foundation for understanding the scholarly landscape and informing future research directions.

The search strategy was conducted using a scientific database known as Dimensions, a digital scientific platform that includes published scholarly electronic content, research analytic features, and citations. Dimensions was chosen because it is more than just a citation database. It is an integrated research ecosystem that provides deeper coverage and insights into research impact, funding, and collaboration. Bibliometric analysis is particularly valuable for policy analysis, funding tracking, and the discovery of open-access research. The Dimensions database facilitated this study by providing rich contextual search capabilities and visualizations of large datasets, including citation counts per publication (García-Sánchez *et al.*, 2019). The keywords employed in the search of data were "psychological Distress" OR "mental distress" OR "psychological stress" OR "mental health" AND "university students" OR "higher learning students" "Africa." The search was limited to open-access articles, allowing the authors to access full journal articles than only reading and reviewing the title and abstract. The researchers conducted a thorough deliberation to assess any article potentially

eligible for inclusion before finalizing the review. The Dimensions database was instrumental in filtering studies based on predefined inclusion and exclusion criteria. Only research articles that met these criteria were selected, as they provided rigorous empirical evidence crucial for capturing the broader trends of psychological distress in Africa. Other types of documents—such as books, book chapters, monographs, and conference proceedings—were excluded from the analysis to ensure consistency and methodological rigor. To enhance understanding of the data, researchers conducted a systematic skimming of all the included articles. They focused on the abstract to get the main idea of each study, the introduction to understand the research problem and objectives, the methodology to assess the study's relevance, the results and discussion sections to identify key findings, and the conclusion to capture final takeaways and recommendations.

Inclusion and exclusion criteria

The data included studies on psychological distress that were related to the following content areas: Health sciences, human society, public health, education, education policy, sociology and philosophy, and education systems. The inclusion and exclusion criteria considered the summarised information in Table 1.

Table 1
Inclusion and Exclusion Criteria

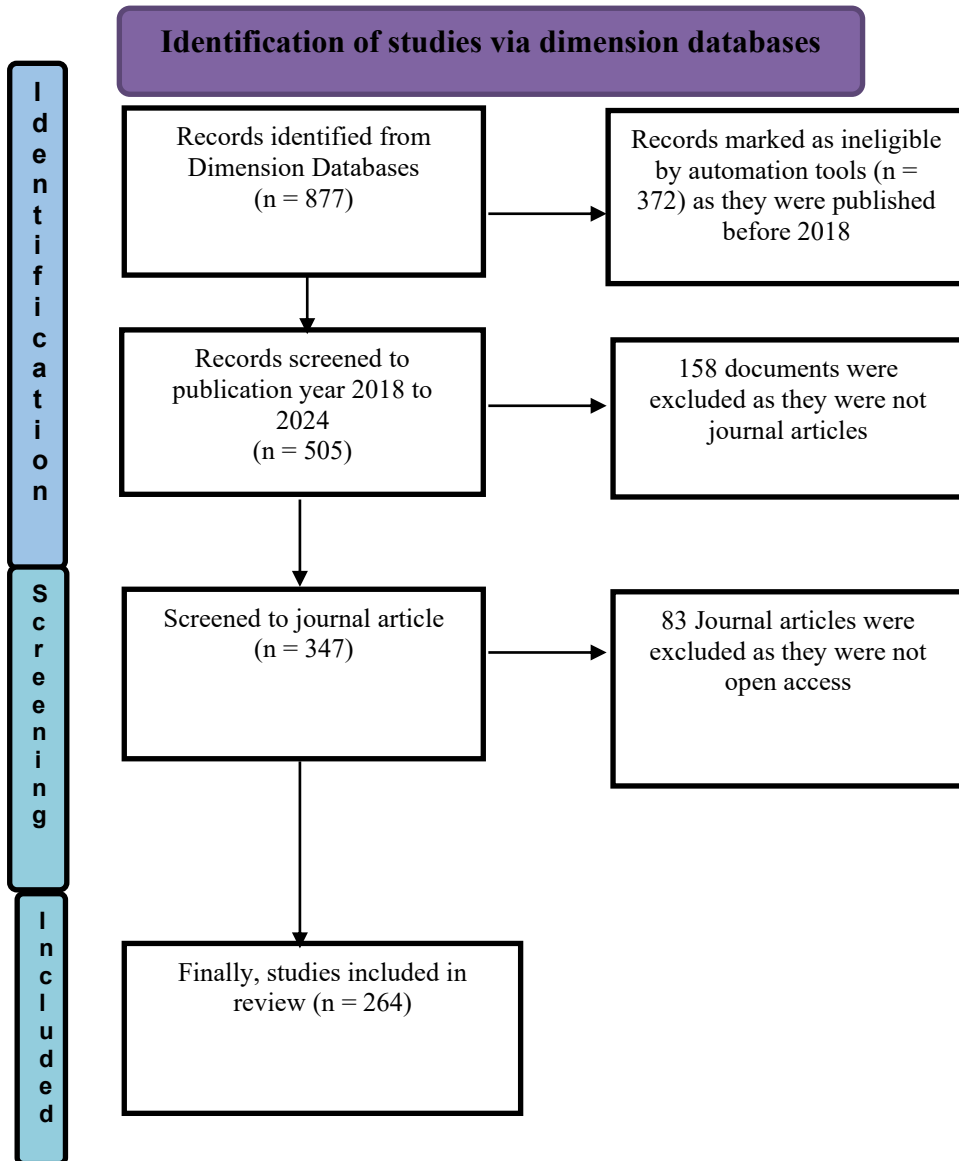
Criteria	Inclusion	Exclusion
Accessibility	Empirical articles only that are open access	Closed access empirical articles
Publication type	Articles that are peer-reviewed	Monographs, thesis, proceedings book chapters and all other papers coming out from reputable journals
Publication years	Articles published between 2018 to 2024	All article published before 2018 and after 2024
Language of article	All articles written in English language	The article is reported in different languages other than English
The focus of the articles	Empirical Articles focusing on psychological distress in Africa	Articles not focusing of psychological distress in Africa
Place where the research was conducted	Empirical articles from Africa	Empirical studies conducted in other continents than Africa

Source: Researchers' Conceptualization (2024).

Process flow chart of the systematic review

The process of selecting the articles for review for this study considered Preferred Reporting Items for Systematic Reviews and Meta-Analyses

(PRISMA) (Page *et al.*, 2021) PRISMA enhances the clarity, transparency, and reproducibility of systematic reviews and meta-analyses as shown in Figure 1



Source: Researchers' conceptualization (2024)

Figure 1 presents a flow diagram illustrating the bibliometric screening process, which consisted of three key stages. The first stage, *Identification*, involved collecting a large number of records from the Dimensions database. The second stage, *Screening*, entailed the removal of duplicate records and an initial relevance assessment based on the titles and abstracts of the studies. The final stage, *Inclusion*, involved selecting studies that met all predefined criteria for inclusion in the final analysis or review. Generally, the figure visually summarises how the total records were filtered down to the final set for research or study purposes.

Data analysis procedures

The VOSviewer 1.6.20 software was employed to analyse the bibliometric data from the dimensions' database, focusing on network and overlay visualisations. The analysis examined authors and co-authors, identifying the most influential researchers and their collaborative networks. It also assessed institutional productivity, determining which organisations contributed the most to the research field. Additionally, the study explored country-wise research output, mapping global contributions and highlighting international collaborations among researchers. Furthermore, citation and co-citation analyses were employed to identify influential studies and foundational literature in the field. The software also visualised collaboration networks by clustering authors, institutions, and countries based on their co-authorship connections. The total link strength metric was used to quantify the intensity of these collaborations, offering insights into the strength and extent of academic partnerships. This analysis offered a comprehensive view of research trends, key contributors, and the structure of scholarly communication across different regions and institutions.

Results

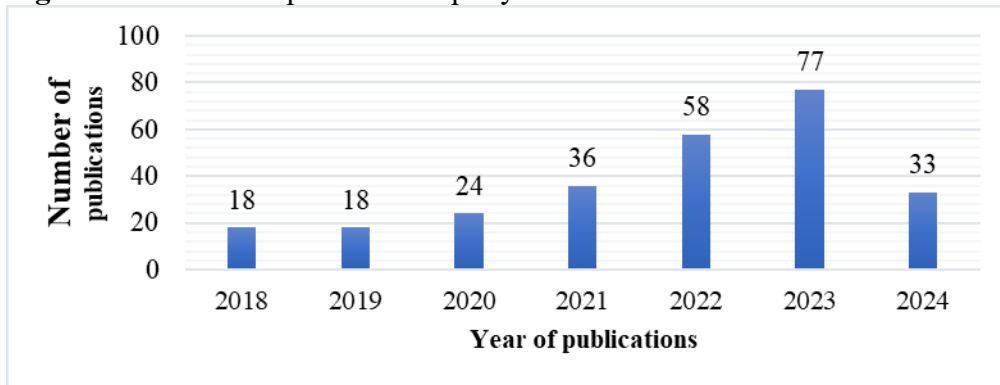
This section presents the findings of the bibliometric review on research trends related to psychological distress in Africa. It highlights the most highly cited authors, organizations, and countries; identifies countries with the strongest publication linkages; examines co-authorship patterns among highly collaborative nations; and provides a detailed analysis of frequently used keywords.

Trends in research about psychological distress in Africa

The analysis of all African research on psychological distress among higher education students found that this field of study in Africa can be divided into three phases. The results revealed that the first phase, from 2018 to 2020 was characterised by a moderate level of research productivity in this area. More research is needed compared to the other years. The second phase, lasting

from 2020 to 2023, showed an explosive increase in publications, with most associated with psychological distress and COVID-19. The final phase of the analysis is set in 2024, during which a decline in the number of publications on psychological distress was observed. However, it is important to acknowledge that this study was conducted before the end of 2024, and there remains the possibility of an increase in publications by year's end. Figure 2 presents a summary of the observed publication trends.

Figure 2: Number of publications per year



Authors with the highest citation on psychological distress

The citation analysis was done by reflecting on the minimum number of 3 citations per authors. The unity of analysis for this section involved authors who have conducted studies on psychological distress among higher learning students. Out of 1437 authors, Thornicroft and Grahame had the highest number of citations, totaling 128. Table 2 summarises the findings by showing each author's number of documents, citations, and total link strength.

Table 2

Authors with the Highest Citation Link

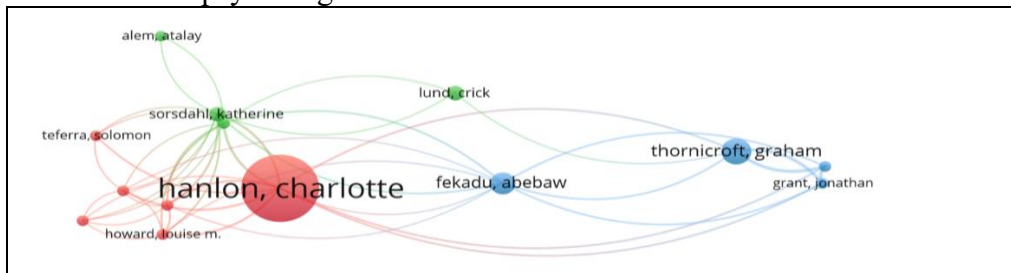
Author	Documents (Empirical articles)	Citations	Total link strength
Thornicroft, graham	7	128	17
Hanlon, charlotte	18	93	27
Lund, crick	4	93	3
Njim, tsi	3	92	0
Badu, eric	4	65	9
Mitchell, rebecca	3	57	9
Fekadu, abebaw	6	54	14
Tekola, bethlehem	3	47	6
Ben-ezra, menachem	3	41	0
Hyland, philip	3	41	0
Karatzias, thanos	3	41	0

Shevlin, mark	3	41	0
Wagenaar, bradley h.	3	37	0
Grant, jonathan	3	33	16
Votruba, nicole	3	33	16
Howard, louise m.	3	32	12
Jidong, dung ezekieli	3	29	0
Myers, bronwyn	3	16	18
Sorsdahl, katherine	4	16	18
Adjorlolo, samuel	3	15	0
Eaton, julian	3	13	0
Demissie, mekdes	3	11	10
Hahn, judith a.	3	9	0
Teferra, solomon	3	7	5
Akena, dickens	3	6	0
Mulushoa, adiyam	3	6	14
Alem, atalay	3	4	2
Hoekstra, rosa a.	3	4	0

Source: Researchers' conceptualization (2024)

As shown in Table 2, authors such as Thornicroft, Hanlon, Charlotte, and Lund lead in number of citations, signifying their substantial contributions to the field of psychological distress in Africa. To provide further explanations, this study also traced the authors with the highest citation links, and the findings are illustrated in the network visualisation of authors in Figure 3.

Figure 3: Network visualisation of authors with the highest links and citations about psychological distress

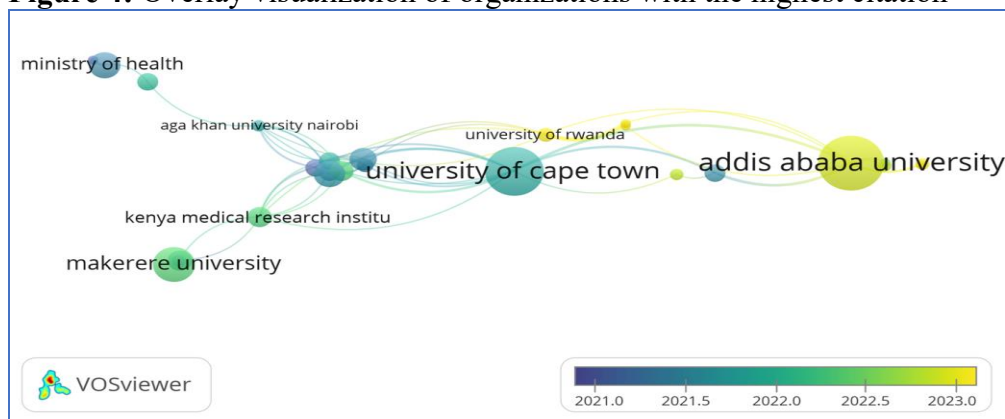


As shown in Figure 3, Thornicroft, Graham, and Hanlon Charlotte have highest citation links, implying that they may have been frequently published in high-impact journals, consequently leading to broader exposure. Furthermore, Thornicroft and Grahame have extensively collaborated with numerous authors, enhancing their visibility and increasing cross-referencing in related scholarly works. In contrast, authors with lower citation counts may face limited access to research resources, tend to publish in lower-impact or less widely read journals, or focus on niche topics with a more limited audience.

Organisations with the highest citation

The study analysed organizations with the highest number of citations to determine which institutions have made the most significant contributions to the body of knowledge on psychological distress through collaborative research. The unit of analysis in this part was organizations, and only those with a minimum of three citations were considered. Among the 572 organizations that met the inclusion criteria, only 71 surpassed the established significance threshold. Further analysis revealed that while 39 organizations met the threshold, only 26 exhibited the strongest citation links, highlighting their central role in collaborative research on psychological distress. Additional results regarding these interconnected links are presented in Figure 4.

Figure 4: Overlay visualization of organizations with the highest citation



This analysis revealed that Addis Ababa University had the highest number of citations, followed by the University of Cape Town, Makerere University, the Ministry of Health, and Kenya Medical Research Institute. In 2023, documents originating from Addis Ababa University received a high number of citations, whereas in 2022, publications from the University of Cape Town were among the most highly cited.

Countries with highest publications/links on psychological distress in Africa

The analysis on this theme aimed to identify countries with the highest publication output and strongest collaborative patterns in the field of psychological distress among higher education institutions in Africa. The study included only countries with a minimum of five documents, resulting in 72 countries meeting the inclusion threshold. The summary of the findings is presented in Table 3.

Table 3:

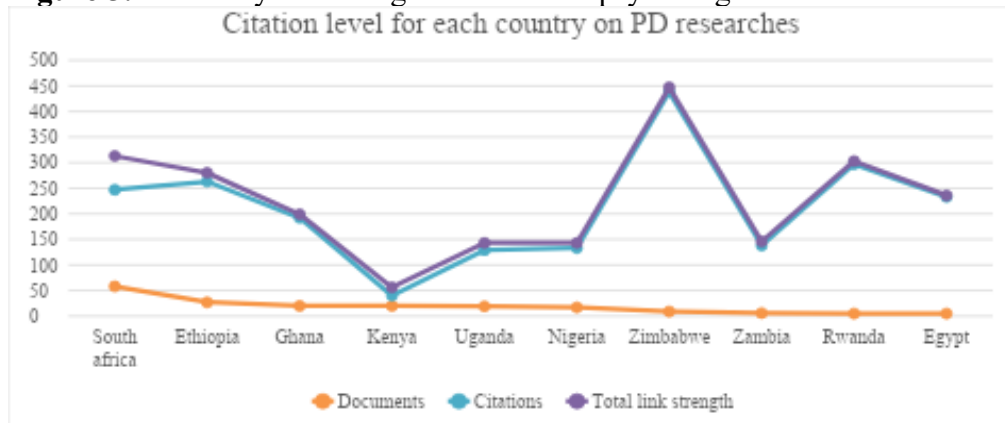
Countries with higher publications and links to psychological distress

Country	Documents	Citations	Total link strength
South Africa	58	189	66
Ethiopia	27	236	17
Ghana	20	172	7
Kenya	20	20	16
Uganda	19	110	14
Nigeria	17	116	10
Zimbabwe	9	429	9
Zambia	6	132	8
Rwanda	5	292	6
Egypt	5	228	3

Source: Researchers' conceptualization (2024)

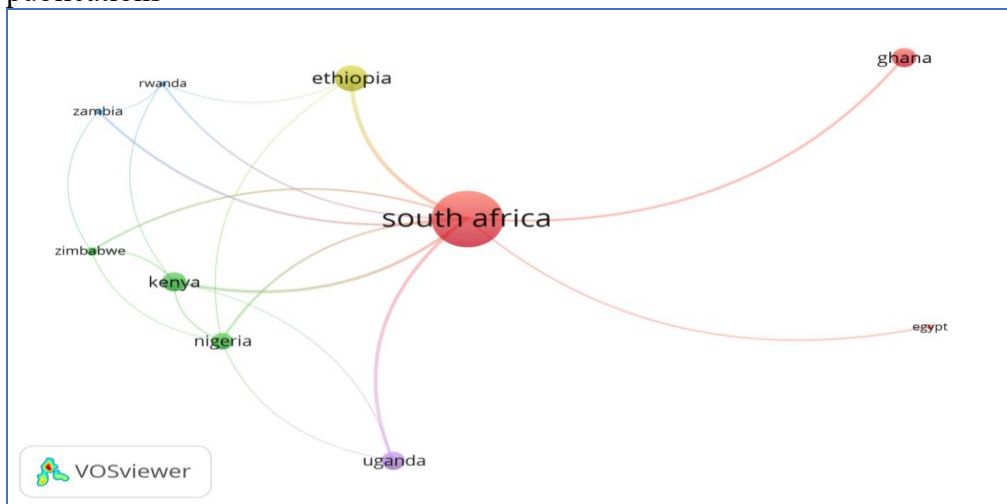
The findings in Table 3 indicate that South Africa has the leading publications by 58 documents with almost 66 collaborative links compared to the 5 documents from Egypt, which had only 3 collaborative patterns. South Africa's leadership in publications reflects its advanced research infrastructure and funding capabilities, underscoring disparities in African research capacity. The increased availability of internet access and advancements in science and technology have contributed to the growth of research on psychological distress. However, as shown in Table 3, some countries with fewer publications have accumulated higher citation counts than those with larger publication volumes. For instance, Zimbabwe, despite having only nine publications, has garnered 429 citations, suggesting that its research is both impactful and highly relevant to the African context. Figure 5 presents a summary of those countries with high citation despite their few publications they have.

Figure 5: A country with a higher citation on psychological distress in Africa



The findings in Figure 4 show that Zambian publications are highly cited as compared to South Africa, which has a high level of publications. An analysis was conducted using network visualization to trace the most prominent countries with high publication output on psychological distress among higher education students in Africa. South Africa manifested a leading publication as can be observed in findings summary presented in Figure 5.

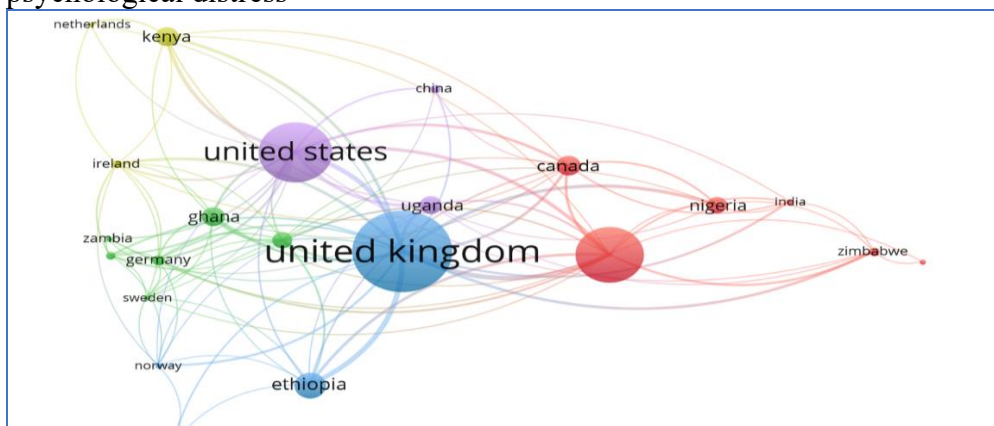
Figure 5: Network visualisation of the popular country in Africa with higher publications



Co-authorship among countries with high collaboration on psychological distress

This section examines the co-authorship networks among countries that demonstrate high levels of collaboration in research on psychological distress. The analysis highlights inter-country partnerships and identifies regions contributing significantly to the collective knowledge on this topic within higher education contexts in Africa. These scholars investigated number of psychological related topics about African. Thus, this study acknowledges the contributions of these countries and their researchers. A default threshold was set, requiring a minimum of five and a maximum of 25 documents per country. Out of the 72 countries analysed, only 22 met this criterion, highlighting the concentrated nature of scholarly output in this field (see Figure 6).

Figure 6: Network visualisation of the country with higher co-authorship on psychological distress



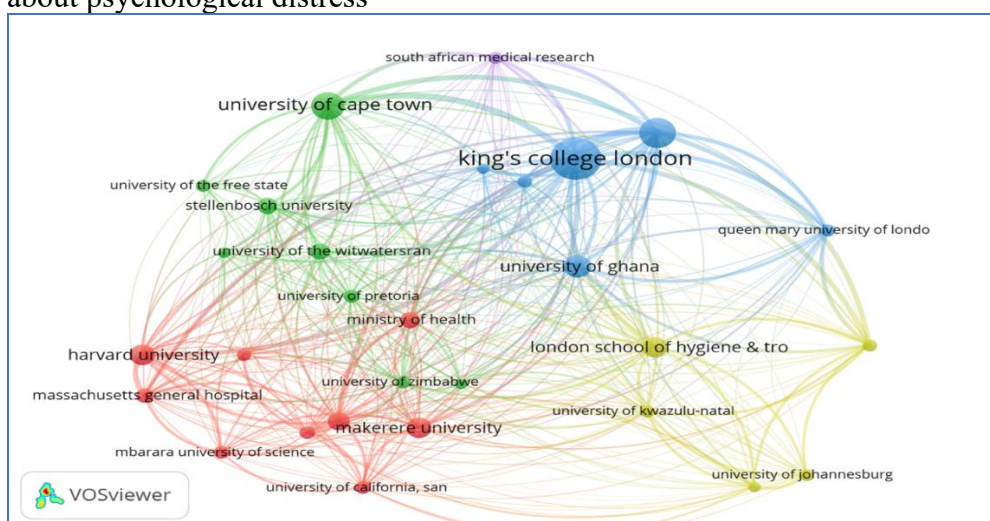
with a high number of publications on psychological distress also demonstrated elevated levels of co-authorship. Notably, the analysis revealed that the majority of reviewed studies involved collaborations with authors based outside the African continent. The network visualization further showed stronger collaborative ties with developed countries than among African nations themselves. This means that researchers or institutions in the studied context collaborate more frequently with institutions from developed countries, which may imply that the field of psychological distress is less emphasized in Africa than in developed countries. The patterns relating to how countries collaborate to research psychological distress have been grouped in colours, nodes, links and clusters. The United States and the United Kingdom had the largest nodes and are centrally located in the network, indicating they are major players and have extensive collaborations with many other countries in Africa. The thick lines connecting these nodes represent strong co-authorship links among countries such as the United Kingdom, Ghana, Ethiopia, Kenya, Nigeria, and Canada. The network visualization also reveals distinct clusters of countries, indicated by colour and spatial proximity, suggesting regional or institutional collaboration patterns in psychological distress research. For example, there seems to be a cluster involving the UK, Nigeria, Canada, and India. Another cluster might involve the US, Ireland, Netherlands, and Germany. Peripheral Countries: Countries like Zimbabwe and Sweden have smaller nodes and are located on the periphery, suggesting fewer collaborations in this network. Findings also show that African countries collaborate much more with the United Kingdom and the United States than how they collaborate among themselves.

Most cited sources on psychological distress

The study analysed 264 empirical research articles, which originated from 157 different sources, each contributing at least one document. Further

Furthermore, the study analysed the bibliographic coupling between organizations. The analysis was based on the default cut off point of 5 minimum organization documents. Bibliographic coupling is when two or more organizations are cited by the same third-party sources in their publications. Essentially, the greater the number of shared citations between two organizations, the stronger their bibliographic coupling. This method was used to identify relationships and similarities among organizations based on their research outputs and the extent to which they cite common sources, thereby revealing patterns of intellectual alignment and collaborative potential. The findings of this analysis are presented in Figure 8.

Figure 8: Network visualisation of bibliographic coupling of organisation about psychological distress



Findings in Figure 8 indicate connections between the nodes that demonstrate bibliographic coupling among the organisations. The thickness of the lines typically represents the strength of the coupling; a thicker line signifies a greater number of shared references between the two connected organisations. The varying colours signify clusters of closely related organisations based on common references. Organisations within the same cluster are likely engaged in similar topics or related research fields. For instance, the Blue Cluster comprises organisations like King's College London and the University of Ghana, indicating a strong bibliographic coupling between them, suggesting they may have significant shared research interests. The Green Cluster includes organisations such as the University of Cape Town and the University of the Free State, indicating that these organisations are more closely related to each other than those in other clusters. The Red Cluster encompasses organisations like Harvard University and Makerere University which share a considerable number of references

with each other, suggesting close research connections or similar focus areas. This analysis also reveals inter-cluster connections, as illustrated in the figure 8 by the links bridging different clusters, indicating cross-thematic collaboration and intellectual overlap among research groups. For example, connections between the blue and red clusters indicate that while these organizations are part of different research networks, they still share some standard references, suggesting cross-disciplinary or collaborative research.

Analysis of the keywords co-occurrence

The analysis of the authors' keywords of scientific papers in Africa about psychological distress among higher learning students considered those occurred at least 25 times. The findings revealed that out of 7,399 terms extracted, 95 keywords met the inclusion threshold based on the default 60% selection criteria. Of these 95 keywords, only 57 were selected for analysis by the VOSviewer software, reflecting their relevance and frequency within the literature. These keywords were analysed from the titles and abstracts of the papers; structured abstract labels and copyright statements were ignored. Results of the most frequent keywords were summarised in Table 4

Table 4

The top 20 keywords from literature about psychological distress

No	Keyword	Occurrences
1	Person	190
2	Depression	162
3	Mental illness	122
4	Patient	114
5	Woman	113
6	Review	108
7	Adolescent	98
8	Covid	95
9	Student	85
10	Practice	83
11	Training	83
12	Knowledge	82
13	Anxiety	76
14	Stigma	76
15	Attitude	74
16	Barrier	74
17	Food insecurity	74
18	Mental health service	74
19	Treatment	74
20	Effect	70

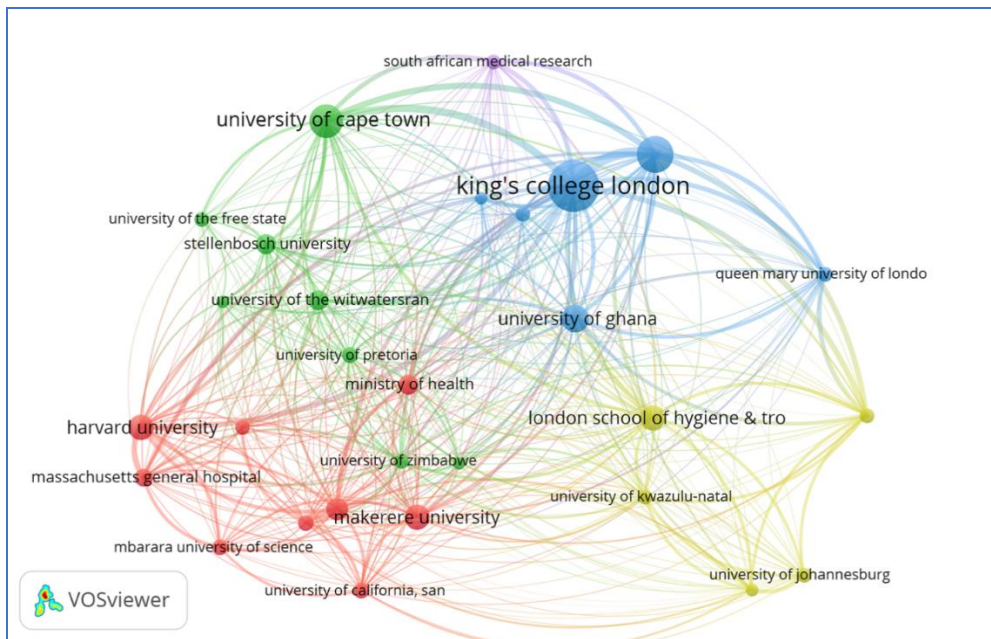
Source: Researchers' conceptualization (2024)

From the co-occurrence map of keywords, the visualisation provides a snapshot of the research landscape on psychological distress; it highlights key areas of focus such as depression, vulnerable populations such as (women and adolescents), mental illness, stigma and the impact of the COVID-19 pandemic. It also reveals the interdisciplinary nature of the research, with connections between psychological, social and environmental factors contributing to distress.

The most frequent terms related to psychological distress were categorised into six (6) coloured clusters: Cluster 1 (red) consisted of 22 items that involved keywords related to “adolescents, adults, age, depression, pregnancy, food insecurity, pregnant women, anxiety, mental disorder” and others as can be seen in figure 9. Cluster 2 (green) was represented by 16 items which involved keywords such as “barrier, bipolar disorder, training, schizophrenia patient, persons” etc. (see figure 9). Cluster 3 (blue) involved keywords such as “polices, gap, youth, literature, middle-income country, recovery, and mental illness.” Cluster 4 (yellow) involved keywords like “attitudes, climate change, knowledge and students” while cluster 5 (purple) involved keywords like “life, quality, self, and Uganda.” The sixth cluster had 2 items (ocean blue) that are related to disease, keywords involved were “COVID 19 and pandemic.” It was also noted that very few studies focused on psychological distress among university students in higher learning institutions in Africa.

In addition, the VOSviewer network visualisation revealed a bibliographic coupling among institutions involved in research on psychological distress. African institutions were found to be less coupling with fellow African institutions than the way it does to the global collaborations in the field. The University of Cape Town, Makerere University, University of Johannesburg, University of Ghana, and Addis Ababa University were revealed to have a significant collaboration with institutions from North America, such as Harvard University, Massachusetts General Hospital, King's College London, and London School of Hygiene & Tropical Medicine. More information can be seen in Figure 11.

Figure 11: Bibliographic Coupling of Institutions About Psychological Distress Research



Analysis revealed that collaborations among institutions focused on medical or clinical perspectives, psychological distress within the African context, mental health in the UK and Africa, the public health approach, tropical diseases, and health issues in Africa. The network visualization reveals substantial international collaboration, with particularly strong connections between African institutions and those in the United States and the United Kingdom. This global engagement underscores the importance of adopting a geographically diverse and multidisciplinary approach to the study of psychological distress. However, thematic analysis indicates that only a small portion of the reviewed studies specifically focused on psychological distress among students in higher education institutions. The majority of research instead concentrated on the general population and broader social and health-related issues.

Discussion

This bibliometric study examines the fluctuating patterns of scientific research publications on psychological distress among higher education students in Africa over the past eight years, from 2018 to 2024. The analysis includes citation metrics for the most cited authors, organizations, and countries, as well as an assessment of publication output by country. Additionally, the study investigates co-authorship networks, keyword co-

occurrence, and bibliographic coupling among organizations to map the collaborative and thematic structure of the research landscape.

This bibliometric analysis identified fluctuating publication trends regarding psychological distress among higher education students in Africa. Specifically, a decline in publications was observed between 2018 and 2020, followed by a sharp increase in research output in subsequent years. The primary focus of these studies was the relationship between psychological distress and associated risk factors, particularly in the context of the COVID-19 pandemic. The dynamic nature of publication trends can be largely attributed to the global impact of the pandemic, which prompted researchers worldwide, including those in Africa, to investigate the psychological effects of COVID-19. Similar trends have been reported in previous bibliometric studies such as those conducted by Chen *et al.* (2021) and Egwuogu *et al.* (2021). Moreover, increased financial support from international donors during the pandemic facilitated empirical studies on mental health in Africa. The present study found a significant rise in publications between 2021 and 2023, followed by a notable decline in 2024. These findings align with the bibliometric study by Egwuogu *et al.* (2021) on the scientific literature concerning mental health research in Africa, which reported a substantial increase in publications in 2021. Similarly, Xu *et al.* (2024) conducted a bibliometric analysis on global psychological distress trends, revealing a surge in research output during the COVID-19 pandemic, particularly concerning psychological distress in stroke patients. In addition, a comparative bibliometric analysis by Maalouf *et al.* (2020) on mental health research in response to the COVID-19, Ebola, and H1N1 outbreaks revealed that the volume of mental health studies was significantly higher for COVID-19 than for Ebola and H1N1 combined.

This study identified the University of Cape Town in South Africa as the leading institution in publishing research on psychological distress among higher education students in Africa. It was followed by Addis Ababa University in Ethiopia, the University of Ghana, and Makerere University in Uganda. These findings suggest that South African institutions have played a particularly prominent role in advancing research on this topic. A similar trend was observed in the bibliometric review conducted by Fadiji *et al.* (2024) on positive psychology and well-being in Africa, which found that the top ten contributing institutions were all based in South Africa. Furthermore, the majority of these publications were co-authored with researchers from developed countries, including the United States, the United Kingdom, Canada, Germany, Norway, the Netherlands, and China. This collaboration suggests that African scholars are actively contributing to the global discourse on psychological distress, which has emerged as a significant

international concern (Chen *et al.*, 2021). However, it also implies a potential gap in localized attention and awareness regarding the prevalence and impact of psychological distress within African communities. This underscores the need for increased scholarly focus and policy-driven engagement to address context-specific mental health challenges across the continent.

The keyword analysis in this study indicates that a significant portion of the reviewed literature on psychological distress has associated the phenomenon with individual-level characteristics, depression, and anxiety. The analysis revealed that, although 'anxiety' was not the most frequently occurring keyword, it remained highly relevant within the context of higher education students, reflecting its significance as a core aspect of psychological distress in academic settings. These findings align with those of Egwuogu *et al.* (2021). Additionally, the keyword analysis highlighted a strong focus on gender and demographic factors, with terms such as "woman" and "adolescent" suggesting that gender and age play crucial roles in the study of psychological distress. Research in Africa appears to concentrate more on the effects of psychological distress among women than men. For instance, Kondirolli and Sunder (2022) found that women are disproportionately affected by psychological distress compared to their male counterparts. This observation highlights the need for further research to explore why men appear to be less affected by psychological distress, including potential underreporting, gender-based coping mechanisms, or cultural perceptions of mental health.

Moreover, keywords such as "COVID-19" and "pandemic" were highly relevant, emphasizing the considerable impact of the COVID-19 pandemic on psychological distress among students. These findings are consistent with those reported by Chen *et al.* (2021). Similarly, a bibliometric study by Ndibalema (2024) investigating the rise of cyberbullying among higher education students noted an increase in research publications on students' mental health between 2020 and 2023. It was also revealed in the study by Maalouf *et al.* (2020). It was also demonstrated that most studies on psychological distress were interconnected with broader mental health concerns. In addition to depression, frequently occurring terms included "mental illness," "mental health services," "mental disorders," "stress," and "schizophrenia." This indicates that, in alignment with global research trends, scholars in Africa have also placed significant emphasis on the psychological well-being of students—a pattern similarly observed in the studies by Egwuogu *et al.* (2021) and Chen *et al.* (2021). Additionally, keywords such as "barriers" and "stigma" highlight critical challenges faced by students experiencing psychological distress.

The analysis further highlights a research gap in the explicit examination of the relationship between academia and psychological distress. While the presence of keywords such as "review," "practice," "training," "systematic review," and "qualitative study" suggests a research-oriented approach, the limited focus on academia indicates a need for more targeted investigations. This gap raises critical questions about whether current studies sufficiently address the impact of psychological distress on academic engagement, performance, and institutional support systems. Furthermore, existing literature overwhelmingly supports the notion that psychological distress negatively impacts students' academic performance and overall mental well-being (Kondirolli & Sunder, 2022). However, the extent to which educational institutions have adapted their policies and interventions to mitigate these effects remains unclear, highlighting a critical need for further research to bridge this knowledge gap.

The findings of this study identified the top ten African countries contributing most significantly to research on psychological distress among higher education students: South Africa, Ethiopia, Ghana, Kenya, Uganda, Nigeria, Zimbabwe, Zambia, Rwanda, and Egypt. Among them, South Africa emerged as the leading contributor, reflecting its relatively advanced research infrastructure and greater access to funding (Pilla & Edward, 2019). This trend underscores broader disparities in research capacity across the African continent. Notably, institutions such as the University of Cape Town and the University of Pretoria have assumed dominant roles in this research area, likely due to socioeconomic advantages, stronger funding mechanisms, and national research priorities that support high academic output. This observed trend aligns with the findings of Fadji *et al.* (2024), who similarly reported that South Africa is the central hub of scientific productivity in Africa. Their bibliometric analysis emphasized the dominance of South African institutions, particularly North-West University, thereby reinforcing the notion that research output remains concentrated within a few well-resourced academic centers. This disparity raises critical questions about how other African nations might expand their research contributions and whether structural barriers—such as limited funding, inadequate institutional support, and lack of policy engagement—are restricting broader participation in psychological distress research across the continent."

Furthermore, the findings from the current review revealed limited co-authorship among African countries and indicated many co-authorships with countries from developed countries. South Africa is the leading country in Africa to cooperate with countries like the United States, the United Kingdom, China and Canada. Other countries, such as Ethiopia and Ghana, were found to collaborate closely with international partners in research and

publication. This suggests that psychological distress remains an underexplored issue within much of Africa and may require more context-specific evidence to accurately reflect its prevalence and impact (Mboya *et al.*, 2020a). While such collaborations can facilitate the generation and dissemination of new knowledge, there is also a risk that, if not approached carefully, the resulting interventions or solutions may not be fully aligned with the realities of the African context. The lack of strong collaborations among African authors on psychological distress among higher learning students may limit researchers from combining their expertise, potential and experiences to generate innovative ideas towards solving psychological distress problems. Students may also need more access to knowledge about psychological distress.

To address the limited collaboration among African authors on psychological distress in higher education, policymakers should promote regional research networks and cross-country academic partnerships. These efforts can foster interdisciplinary collaboration, allowing researchers to integrate diverse areas of expertise and develop innovative solutions to the mental health challenges faced by students. In parallel, higher education policies should mandate the incorporation of comprehensive mental health support systems and awareness programs within universities, ensuring a sustained and coordinated response to psychological distress. At a practical level, universities should prioritize expanding access to mental health education and support services through peer-led initiatives, dedicated counseling centers, and digital platforms. Additionally, building the capacity of academic and health staff is essential to equip them with the skills necessary to identify and respond to psychological distress at an early stage. Collectively, these actions can contribute to a more supportive academic environment and enhance the overall well-being of students.

Conclusion

This bibliometric analysis highlights the evolving research landscape on psychological distress among higher education students in Africa, revealing both progress and persistent challenges. The study identifies fluctuating publication trends, with a decline in research output between 2018 and 2020, followed by a notable surge from 2021 to 2023 largely driven by the onset of the COVID-19 pandemic. The pandemic heightened interest in psychological distress and attracted financial support from international donors, which facilitated a wave of empirical studies on mental health across Africa. However, the observed decline in publications in 2024 may signal a waning prioritization of the issue, raising concerns about the long-term sustainability of scholarly engagement. Additionally, the study highlights that much of the existing research focuses on individual-level factors such as depression and

anxiety, while broader structural and institutional determinants of psychological distress remain insufficiently explored.

The dominance of South African institutions, particularly the University of Cape Town and the University of Pretoria, underscores disparities in research capacity across African countries. While South Africa has established itself as a leading contributor, the limited representation of other nations suggests significant gaps in research infrastructure, funding, and policy engagement across the continent. Moreover, the study reveals that the majority of African publications on psychological distress involve international co-authorships, predominantly with scholars from developed nations, particularly the United States, the United Kingdom, Canada, and China. While such collaborations enhance knowledge exchange and resource access, they also raise concerns about how research outcomes accurately reflect the African context.

A key gap identified in this study is the limited exploration of the direct relationship between academia and psychological distress. While keywords such as "review," "training," and "qualitative study" reflect a strong research orientation, there is a lack of targeted investigations into how psychological distress affects academic engagement, performance, and institutional support systems. Moreover, most research remains concentrated on individual-level factors, with structural and institutional influences largely underexplored. The absence of robust intra-African research collaborations further limits the potential for context-specific interventions tailored to the mental health needs of African students. To address these gaps, it is crucial to sustain mental health research beyond the COVID-19 pandemic.

Although the crisis spurred increased scholarly attention, the decline in publications in 2024 raises concerns about diminishing focus. Therefore, universities, policymakers, and funding agencies must commit to long-term investment in mental health research, interventions, and systems to monitor student well-being over time. Establishing regional research hubs, securing sustainable funding mechanisms, and enhancing intra-African collaboration will be critical steps in building research capacity and producing culturally relevant, evidence-based solutions. However, this study's findings are tempered by several key limitations: by analysing only open-access, English-language articles, it overlooked potentially rich insights in subscription journals and non-English publications, introducing both accessibility and language biases; furthermore, its exclusive focus on empirical research from Africa, while offering valuable regional depth, restricts the broader applicability of its conclusions to higher education contexts in other socio-economic, cultural, and environmental settings.

Additionally, this study recommends expanding the scope of research to include societal and cultural determinants of psychological distress, such as stigma, traditional beliefs, and economic barriers. These factors are essential for developing holistic and contextually grounded mental health strategies. Promoting cross-border collaboration among African institutions through conferences, shared platforms, and targeted funding can help bridge the current disconnect and foster innovation across the continent. Furthermore, a shift in research emphasis is needed toward early detection and preventative strategies, as most existing studies focus on severe psychological conditions. Identifying early warning signs and implementing proactive mental health initiatives can enable timely intervention and support. By advancing these recommendations, researchers, policymakers, and academic institutions can strengthen the existing knowledge base, foster more inclusive and collaborative research ecosystems, and improve the mental well-being of higher education students across Africa.

Reference

- Alipio, M. (2020). Adjustment to college and academic performance: Insights from Filipino college freshmen in an allied health science course. *Science Gate*, 76, 43.
- Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Green, J. G., Hasking, P., Murray, E., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Stein, D. J., Vilagut, G., Zaslavsky, A. M., & Kessler, R. C. (2018). WHO world mental health surveys international college student project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology*, 127(7), 623–638. <https://doi.org/10.1037/abn0000362>
- American Psychiatric Association. (2013). *Anxiety disorders*. In *Diagnostic and statistical manual of mental disorders (5th ed.)*. <https://doi.org/10.1176/appi.books.9780890425596.dsm05>.
- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders (5th ed.)*. American Psychiatric Publishing.
- Bantjes, J., Swartz, L., & Niewoudt, P. (2017). Human rights and mental health in post-apartheid South Africa: Lessons from health care professionals working with suicidal inmates in the prison system. *BMC International Health and Human Rights*, 17(1), 1–9. <https://doi.org/10.1186/s12914-017-0136-0>
- Chen, Y., Zhang, X., Chen, S., Zhang, Y., Wang, Y., Lu, Q., & Zhao, Y. (2021). Bibliometric analysis of mental health during the COVID-19 pandemic. *Asian Journal of Psychiatry*, 65. <https://doi.org/10.1016/j.ajp.2021.102846>
- Egwuogu, C., Ibeke, E., Chaurasia, P., Iwendi, C., & Boulouard, Z. (2023,). Bibliometric Analysis of Scientific Literature on Mental Health

- Research in Africa. In *International Conference on Advances in Communication Technology and Computer Engineering* (pp. 469-489). Cham: Springer Nature Switzerland.
- Fadiji, A. W., Khumalo, I. P., Wissing, M. P., & Appiah, R. (2024). A bibliometric review of positive psychology and well-being research in Africa. *Frontiers in Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1384362>
- García-Sánchez, P., Mora, A. M., Castillo, P. A., & Pérez, I. J. (2019). A bibliometric study of the research area of video games using the Dimensions.ai database. *Procedia Computer Science*, 162, 737–744. <https://doi.org/10.1016/j.procs.2019.12.045>
- Gureje, O., & Alem, A. (2000b). Mental health policy development in Africa. *World Health Organization*, 78(4), 480–481.
- Gust, D. A., Gvetadze, R., Furtado, M., Makanga, M., Akelo, V., Ondenge, K., Nyagol, B., & McLellan-Lemal, E. (2017). Factors associated with psychological distress among young women in Kisumu, Kenya. *International Journal of Women's Health*, 9(8) 255-264. <https://doi.org/10.2147/IJWH.S125133>
- Hersi, L., Tesfay, K., Gesesew, H., Krah, W., Ereg, D., & Tesfaye, M. (2017). Mental distress and associated factors among undergraduate students at the University of Hargeisa, Somaliland: A cross-sectional study. *International Journal of Mental Health Systems*, 11(1), 1–8. <https://doi.org/10.1186/s13033-017-0146-2>
- Jenkins, R., Mbatia, J., Singleton, N., & White, B. (2010). Prevalence of psychotic symptoms and their risk factors in Urban Tanzania. *International Journal of Environmental Research and Public Health*, 7(6), 2514–2525. <https://doi.org/10.3390/ijerph7062514>
- Jin, Z., Cao, W., Wang, K., Meng, X., Shen, J., Guo, Y., Gaoshan, J., Liang, X., & Tang, K. (2021). Mental health and risky sexual behaviours among Chinese college students: A large cross-sectional study. *Journal of Affective Disorders*, 287(May 2020), 293–300. <https://doi.org/10.1016/j.jad.2021.03.067>
- Kondirulli, F., & Sunder, N. (2022). Mental health effects of education. *Health Economics*, 31, 22-39. <https://doi.org/10.1002/HEC.4565>
- Losioki, E., & Hemed, K. (2021). *Perceived Psychosocial Impacts of COVID-19 among Students in Higher Learning Institutions in Dar-es-Salaam, Tanzania*. 8(1), 11–21.
- Maalouf, F. T., Mdawar, B., Meho, L. I., & Akl, E. A. (2021). Mental health research in response to the COVID-19, Ebola, and H1N1 outbreaks: A comparative bibliometric analysis. *Journal of Psychiatric Research*, 132, 198–206. <https://doi.org/10.1016/j.jpsychires.2020.10.018>
- Maureen E Canavan, Sipsma, H. L., Adhvaryu, A., Ofori-Atta, A., Jack, H., Udry, C., Osei-Akoto, S., & Bradley, E. H. (2013). Psychological

- distress in Ghana: Associations with employment and lost productivity. *International Journal of Mental Health Systems*, 7(1), 1–9.
- Mboya, I. B., John, B., Kibopile, E. S., Mhando, L., George, J., & Ngocho, J. S. (2020a). Factors associated with mental distress among undergraduate students in northern Tanzania. *BMC Psychiatry*, 20(1), 1–8. <https://doi.org/10.1186/s12888-020-2448-1>
- Mboya, I. B., John, B., Kibopile, E. S., Mhando, L., George, J., & Ngocho, J. S. (2020b). *Factors associated with mental distress among undergraduate students in northern Tanzania. BMC psychiatry*, 20, 1–7.
- Monteiro, N. M. (2015). Addressing mental illness in Africa: Global health challenges and local opportunities. *Community Psychology in Global Perspective*, 1(2), 78–95.
- Muna, S., & Atinkut, Z. (2018). Prevalence and associated stress factors among Ambo University undergraduate students: Implication for Intervention. *International Journal of Psychology and Counselling*, 10(4), 29–39. <https://doi.org/10.5897/IJPC2018.0532>
- Mundia, L. (2011). Effects of Psychological Distress on Academic Achievement in Brunei Student Teachers: Identification Challenges and Counselling Implications. *Higher Education Studies*, 1(1), 51–63. <https://doi.org/10.5539/hes.v1n1p51>
- Mutinta, G. (2022). *An investigation into mental distress among students at Universities in the Eastern Cape, South Africa*. 1–19.
- Ndibalema, P. M. (2024). The growth of cyberbullying among youth in higher learning institutions: A bibliometric analysis. *Educational Dimension*, 10, 143–166. <https://doi.org/10.55056/ed.700>
- Carter, M. J. (2014). Diagnostic and statistical manual of mental disorders. *Therapeutic Recreation Journal*, 48(3), 275.
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews.
- Pilla A. L. & Edward, K. (2019). Depression Among University Students in South Africa. *Psychological Reports*, 91(7), 725-739. <https://doi.org/10.2466/pr0.91.7.725-728>
- Viertiö, S., Kiviruusu, O., Piirtola, M., Kaprio, J., Korhonen, T., Marttunen, M., & Suvisaari, J. (2021). Factors contributing to psychological distress in the working population, with a special reference to gender difference. *BMC Public Health*, 21(1), 1–17. <https://doi.org/10.1186/s12889-021-10560-y>
- Xu, Z., & Zhu, Y. (2023). Bibliometric analysis of psychological distress in stroke: Research trends, hot spots, and prospects-an emphasis on China. *Journal of Multidisciplinary Healthcare*, 16, 4279–4291. <https://doi.org/10.2147/JMDH.S434201>

Yassin, A. A., Razak, N. A., Saeed, M. A., Al-Maliki, M. A. A., & Al-Habies, F. A. (2021). Psychological impact of the COVID-19 pandemic on local and international students in Malaysian universities. *Asian Education and Development Studies*, 10(4), 574-586. <https://doi.org/10.1108/AEDS-05-2020-0098>

Assessing Lecturers' Teaching Strategies for Learners with Hearing Impairment in Tanzanian Higher Learning Institutions

Pharida P. Mgwesa¹ & Eugen Mtemi Philip²

¹Department of Psychology and Special Education

The Open University of Tanzania

Email: pharidapmgwesa@gmail.com

²Department of Special Needs Education

Archbishop Mihayo University College of Tabora-AMUCTA (A Constituent

College of St. Augustine University of Tanzania.

ORCID: <https://orcid.org/0000-0002-8642-1994>

Email: eugenphilip@gmail.com

Abstract

This study assessed the teaching strategies employed by lecturers to support learners with hearing impairments (LwHI) in higher learning institutions in Tanzania, addressing a critical gap in inclusive education practices. The research underscores the importance of adapting pedagogical approaches to promote equitable learning opportunities for all students. The study was guided by two objectives: (i) to examine the current teaching strategies utilized by lecturers in inclusive classrooms, and (ii) to explore the perceptions of LwHI regarding the effectiveness of these strategies. Employing a qualitative research approach within a single case study design, data were collected through semi-structured interviews with a purposive sample of 10 lecturers and 10 students with hearing impairments. The findings revealed that lecturers implemented a range of instructional strategies, including video captioning, transcription, sign language interpretation, visual aids, and the use of multimedia resources. Additionally, assistive technologies such as listening devices were employed alongside collaborative learning techniques. Despite these efforts, both lecturers and learners reported several challenges, including limited proficiency in assistive technology use, overcrowded classrooms, time constraints, and communication barriers due to unreliable interpretation services. The study recommends enhanced classroom modifications, targeted training for lecturers in sign language, and the increased application of interactive teaching methods. Furthermore, it calls on curriculum developers to integrate the specific needs of learners with hearing impairments into educational planning and instructional delivery.

Keywords: Teaching strategies, hearing impairment, social constructivism, higher learning institutions

Introduction

Appropriate teaching strategies for learners with hearing impairment (LwHI) are essentially important elements in enhancing access to education and promoting successful learning through facilitating clear communication, engagement, and understanding of the curriculum goals. However, evidence shows that these strategies used for teaching LwHI in higher learning institutions face significant challenges, including communication barriers, limited access to resources, social isolation, overcrowded classrooms, and inadequate training for educators (Kigotho, 2016). These challenges not only hinder their academic success and engagement but also pose substantial challenges to the effective implementation of inclusive education. Inclusive strategies, however, have been shown to improve learning outcomes for LwHI, promote social integration and empower students to advocate for their needs (Arif *et al.*, 2024). To effectively support LwHI, educational institutions must implement teaching strategies that include visual aids, assistive technologies, and collaborative learning opportunities (Farhan & Razmak, 2022). Higher learning institutions ought to create a more equitable learning environment that supports the success of all learners.

LwHI in higher learning institutions have been the subject of considerable research worldwide, highlighting the importance of inclusive education and equal access (Howell & Lazarus, 2003; Kochung, 2011). Studies consistently show that when teachers use appropriate teaching strategies which are tailored to the specific learning needs, learners perform well academically (Heward, 2010). Research conducted in Europe has demonstrated the positive impact of inclusive classroom practices on the academic achievement and social integration of LwHI in European universities (Kottmann *et al.*, 2019; Lsmbrechts *et al.*, 2024). These practices foster a more accessible and engaging learning environment, promote collaboration among peers, and enhance communication strategies that are crucial for their academic success and social interaction (Mitchell & Sutherland, 2020; Cavinato *et al.*, 2021). Similarly, recent studies in the USA have revealed that the use of assistive technologies such as captioning and amplified sound systems in university classrooms brought positive achievement in teaching and learning in classrooms of LwHI (Rehman, 2024; Atcherson *et al.*, 2015). For instance, a study by Quinto-Pozos (2011) on communication strategies and accessibility issues for deaf and hard-of-hearing students in American higher education highlighted the importance of multimodal communication and accommodations.

On the other hand, experiences in Africa about teaching strategies suggest that using sign language interpretation has become the best practice and produces good outcomes for the LwHI. A study by Ndlovu and Moyo (2018),

which examined the challenges faced by LwHI in accessing higher education in South Africa, revealed the importance of specialised support services and inclusive curriculum design. In East Africa, researchers such as Jiseve (2023) explored the effectiveness of inclusive teaching strategies for LwHI in Kenyan universities. The findings reported that the role of trained sign language interpreters and accessible learning materials were essential to LwHI in an inclusive setting. In Uganda, Emong and Eron (2016) investigated the experiences of learners with disabilities in higher education institutions, emphasizing the need for inclusive policies and faculty training.

Several studies have been conducted on teaching strategies for learners with hearing impairment in learning (Hadi *et al.*, 2019; Patrick, 2017). For example, Farrell (2008) examined the effectiveness of the teaching strategies for LwHI in mainstream classrooms, including the use of hearing aids, cochlear implants, and total communication methods involving gestures, sign language, speech reading, and fingerspelling. These strategies, complemented by supportive learning resources, have proven beneficial to learners with hearing impairments (LwHI) in enhancing academic achievement. Similarly, the study revealed that teachers employed these strategies to ensure full access to the curriculum, guided by the prevailing pedagogical approaches (Farrell, 2008). The integration of technology—such as hearing aids, captioning, and sign language interpreters—has also been affirmed as instrumental in facilitating curriculum accessibility for LwHI. (Hallahan & Kauffman, 2006; Heward, 2013). Studies show that some lecturers in higher learning institutions utilise simplified materials and instructional methods and consider physical arrangement and curriculum modification (Hallahan & Kauffman, 2006). Likewise, Loeding (2011) reported that LwHI benefited from loop systems, hearing aids, cochlear implants, FM systems, and visual cues like captioned materials and transcripts.

In addition, a study by Williams (2024) conducted in the United Kingdom found that lecturers also ensured that audiovisual materials, such as videos and online resources, were captioned or had transcripts available. Lecturers also employed assistive listening devices, such as hearing loop systems or FM systems, to improve listening experiences for the learners. These devices were used to transmit sound directly to students' hearing aids, reducing background noise and enhancing comprehension. Further studies conducted by Gambari *et al.* (2013) in Nigeria found that cooperative learning and collaborative activities were effective teaching strategies used by lecturers for LwHI.

In Tanzania, studies by Koboli (2021), Mkongo (2019), and Mtuli (2015) recommended modifying the learning environment by incorporating acoustic

materials to reduce background noise and promoting small group instruction to enhance peer learning. Additionally, lecturers were encouraged to use visual aids—such as slides, diagrams, charts, and written instructions—alongside strategies like total communication, captioning, and motivational techniques as effective methods for supporting teaching and learning for all students, including those with hearing impairments (Mkongo, 2019). Inclusive teaching strategies for LwHI in higher learning institutions involve the use of visual aids, such as slides and written materials, to support verbal communication and improve comprehension (Shartiely, 2013). According to Nsereko (2010), the considerations of optimal seating arrangements that maximise visibility and reduce distance from the teacher are recommended. In addition, visual cues, gestures, and facial expressions enhance comprehension and are particularly beneficial to learners with hearing impairments (LwHI), as they provide additional layers of meaning that support verbal and written communication. Similarly, improving classroom acoustics by using sound-absorbing and reflective materials can help to create a clearer speech environment (Iglehart, 2020).

The Government of Tanzania has implemented a range of policies and legal frameworks to promote inclusive education in the country, particularly for LwHI. Such initiatives include: The National Policy on Disability of 2004 and the Persons with Disabilities Act of 2010, which mandate equal access to education for students with disabilities, including those with hearing impairments (URT, 2004; 2010). Similarly, the Government formulated the Education and Training Policy of 2014, as revised in 2023, which emphasises inclusion of children with disabilities in primary and secondary education levels to ensure equal access and equity in the provision of education (URT, 2014, 2023). In a bid to reinforce the provision of education to children with disabilities, the Government of Tanzania established the National Disability Mainstreaming Strategy (2010-2015), which aimed to promote the inclusion of persons with disabilities in all aspects of society. These include education, advocating for inclusive education policies, teacher training and the provision of assistive devices and accessible learning environments. Additionally, Tanzania's overarching Education Sector Development Programme (ESDP) has consistently prioritised inclusive education as a key strategic area, emphasising the need to improve access, participation, and learning outcomes for children with disabilities in mainstream schools (URT, 2017).

To ensure proper inclusion of children with disabilities, Tanzania formulated the National Strategies for Inclusive Education of 2022-2026 which has streamlined specific frameworks and strategies for enhancing inclusive practices in schools, covering areas such as teacher training, curriculum adaptation, and community engagement to guide the implementers of

inclusive education (URT, 2022). In order to enhance teaching skills, the Government of Tanzania has also been conducting teachers training at various education levels. For example, the Patandi Teachers' College, the Open University of Tanzania (OUT), Archbishop Mihayo University (AMUCTA), and the University of Dodoma (UDOM), offer specialised programmes in special and inclusive education, including courses on teaching the Deaf/Hard of Hearing students (Tungaraza, 2014). The named institutions provide a range of educational services, including pre-vocational and vocational training, identification and accommodation of LwHI through sign language, visualisation, and spoken language.

Moreover, the researchers conducted by Beard *et al.* (2019) and Jiseve (2023) show that LwHI in higher learning institutions advocate for flexibility in teaching methods and accommodations tailored to individual needs. This includes providing additional time for assignments, offering alternative assessment formats, and allowing for different communication preferences. Jiseve (2023) indicated that LwHI were satisfied with faculty members who are knowledgeable about hearing impairments, open to communication, and who exhibit sensitivity towards their needs. Philip (2022, 2023) analysed the teaching models that are used in Tanzanian secondary schools including team teaching, coaching and consultative. Among these, team teaching emerged as the most prevalent and robust model, with approximately 73.2% of respondents agreeing that it was more effective than the other approaches. Conversely, the study conducted by Semunyu and Rushahu (2023) at the University of Dares Salaam revealed that the most effective way of teaching LwHI is sign language interpretation. However, the study also identified several challenges, including difficulties in conveying complex technical concepts, issues with voicing, and inconsistencies in sign language variation. Nevertheless, there has been limited research on effective teaching strategies for LwHI in higher learning institutions in Tanzania. A study by Kisanga (2019) also emphasised the need for inclusive policies, faculty training, and assistive technologies. In a similar vein, Kaingo (2023) explored the experiences of LwHI in Tanzanian universities, highlighting the importance of inclusive teaching practices and accessible resources. However, much of the existing research has concentrated on the challenges of implementing inclusive practices, such as insufficient training for lecturers and limited access to resources and support services (Mtebe & Raisamo, 2014).

Notably, a significant research gap persists regarding the teaching strategies employed by lecturers for LwHI as not all educators are trained to manage inclusive classrooms (Mwakyaja, 2013). A study by Philip (2022) noted that many teachers continue to rely primarily on spoken English, indicating a lack of effective strategies tailored to LwHI. While studies from Europe, the USA,

and other African countries have addressed effective teaching strategies, research in Tanzania has predominantly focused on primary and secondary education (Mtuli, 2015; Migehe, 2014; Samweli, 2023). So, few studies have specifically investigated teaching strategies for LwHI in higher education (Kisanga, 2019; Philip, 2022; Semunyu & Rushashu, 2023).

Despite the Tanzanian government's efforts to enhance support for learners with hearing impairments (LwHI) in higher learning institutions—such as recruiting trained lecturers, providing note-takers and sign language transcribers, and establishing resource rooms—the teaching strategies employed by lecturers have not yielded the desired outcomes (Haule, 2015; Kisanga, 2017; Seni, 2022). This highlights the critical need for research that investigates the specific instructional methods used to support LwHI in these settings. Understanding how lecturers adapt their teaching and evaluating the effectiveness of these strategies is essential for informing the development of a more inclusive and responsive educational framework. Such insights are vital for improving the academic experiences and outcomes of LwHI in Tanzania. Addressing this knowledge gap, the current study aimed to inform policy and practice while fostering a more equitable learning environment for all students. Specifically, the study focused on two objectives: (i) to explore the current teaching strategies employed by lecturers in Tanzanian higher learning institutions when teaching students with hearing impairments; and (ii) to examine the perceptions of students with hearing impairments regarding the teaching strategies used by lecturers in these institutions.

Theoretical Framework

This study was guided by the Social Constructivism Theory (SCT), originally developed by Lev Vygotsky in 1978. The SCT emphasises the role of social interactions in the learning process, highlighting how collaborative and active learning environments can enhance the educational experiences of LwHI (Vygotsky & Cole, 2018; Akpan *et al.*, 2020). The theory underscores the need to engage with more knowledgeable others, those with greater skills, such as teachers or peers, to foster cognitive growth (Amineh & Asl, 2015). Another central concept in SCT is the Zone of Proximal Development (ZPD), which refers to the range between what a learner can achieve independently and what they can accomplish with guidance and support. The underlying principle is that learners should initially attempt tasks independently, receiving support from teachers or parents only when necessary. This approach involves presenting learners with appropriately challenging activities and offering guidance selectively to promote their autonomy and learning success (Berk, 1994). This approach underscores the significance of scaffolding in the learning process, which involves creating supportive conditions that enable a child to progress from their existing knowledge to

new skills and understanding. Teachers or parents typically fulfil this supportive role (Eun, 2020). The theory is relevant to this study as it underscores the importance of social interactions, cultural contexts, and collaborative learning in education. The study explores how LwHI engage with instructors and peers, highlighting the role of knowledgeable others in providing guidance and scaffolding to support cognitive development. The study identifies effective strategies that accommodate diverse learning needs, ultimately contributing to improved educational outcomes. Furthermore, it aligns with the principles of Sociocultural Theory (SCT) by examining current assessment practices, thereby informing the development of more inclusive and effective teaching strategies.

Methods and Materials

A qualitative research approach using a case study was employed, as the study objectives required in-depth exploration (Creswell & Creswell, 2023). The research was conducted in Dodoma City, Tanzania, at a university selected purposively for its relevance to the targeted population. Purposive sampling techniques were used to select participants, focusing on lecturers with at least five years of experience teaching LwHI, as well as those teaching courses that include a significant number of such learners. A total of ten lecturers and ten LwHI were sampled to enable in-depth exploration while ensuring manageable data collection (Campbell, 2020). The inclusion of LwHI was essential to directly capture their lived experiences and the challenges they encounter. Data were collected through semi-structured interviews with both lecturers and LwHI, capturing diverse perspectives on the educational experience. This method provided rich insights into the challenges faced and the strategies considered effective in teaching LwHI (Taherdoost, 2022). Additionally, thematic analysis was employed to analyse the collected data, allowing for the identification and examination of themes across the datasets.

Findings and Discussions

This section presents and discusses the research findings in alignment with the study's objectives, which are to explore the teaching strategies employed by lecturers in Tanzanian higher learning institutions for learners with hearing impairments, and to examine the perceptions of LwHI regarding the effectiveness of these strategies. The discussion centres on teaching strategies employed by lecturers for LwHI so as to provide a deeper understanding of current practices and their implications for inclusive education.

Lecturers' teaching strategies for Learners with Hearing Impairment

In this objective, most lecturers explained a range of commonly used teaching strategies for learners with hearing impairments. These included

captioning and transcription, sign language interpretation, visual aids and multimedia resources, clear communication strategies, assistive listening devices, collaborative learning, flexible assessment, and inclusion. Participants highlighted not only the strategies used during the presentation but also, they reflected on their effectiveness.

Captioned materials and transcripts

The study found that lecturers employed audiovisual materials, such as videos and online resources with captions and transcripts, which allowed LwHI to access the content effectively and follow along with the information being presented. However, challenges were found in terms of technical expertise when using such strategies. As one participant remarked:

Captioning and transcription services are suitable for accommodating students with hearing impairments in our institution; they ensure accessibility and equal participation in lectures and course materials. However, challenges arise when technical issues or delays occur in providing timely captioning or transcription; this temporarily hinders the students' ability to access the content (L6).

These findings concur with the previous study conducted by Hallahan and Kauffman (2006) and Banks (2019), which reported that LwHI benefited from captioned materials and transcripts. Hence, using captioning material during teaching HI learners seemed to be vital to LwHI.

Use of sign language interpretation and clear communication

The findings indicate that sign language interpretation services provided in Tanzanian universities are often inadequate due to a shortage of qualified interpreters and limited competence in the field. This inadequacy contributes to frequent misunderstandings and misconceptions of academic concepts among LwHI. The participant described another teaching strategy used that involved sign language interpretation to support learners understands concepts in their language:

I use sign language interpretation in my lectures to facilitate effective communication for students with hearing impairments. This allows direct interaction and engagement in the classroom. However, it is challenging to find qualified sign language interpreters, especially in specialised subject areas. I'm not competent in using sign language. Furthermore, clear communication strategies, such as facing the students and using visual cues, help foster a supportive learning environment. Nonetheless, maintaining consistent, clear communication is difficult in larger lecture halls (L2).

This reflection highlights the critical need for institutional investment in training and deploying qualified sign language interpreters, particularly in subject-specific contexts. It also underscores the importance of equipping

lecturers with basic sign language skills and effective communication techniques. Additionally, it points to the influence of physical learning environments—such as large lecture halls—on the quality of communication and inclusivity. Available studies show that LwHI benefit greatly through the use of sign language, studies conducted by (Jiseve, 2023; Mkama, 2023; Mkama, 2024; Semunyu&Rushahu, 2023). Similar findings are also underscored by Rehman (2024), Banks (2019), which reveal the benefits of sign language interpretation.

Use of visual aids and multimedia

The study found that lecturers made efforts to support learners with hearing impairments by using visual aids, multimedia presentations, and written materials to supplement verbal instruction. These included slides, diagrams, charts, and written instructions, as well as the provision of lecture notes and learning materials to offer multiple modes of communication and enhance understanding. However, despite these positive intentions, several challenges emerged. Many lecturers lacked the necessary skills and confidence to effectively use multimedia technology, and often struggled to apply these tools in ways that fully addressed the learning needs of LwHI. One participant emphasized the value of visual and multimedia resources as alternative means to promote comprehension and inclusion for learners with hearing impairments. The participant said:

The use of visual aids and multimedia resources enhances alternative means of understanding. Nevertheless, creating accessible and inclusive visual materials requires careful consideration. Moreover, ensuring proper contrast, readability, and compatibility with assistive technologies is challenging. Furthermore, I offer flexible assessments that enable them to demonstrate their knowledge and skills through written assignments and visual presentations. However, designing and grading alternative assessments is time-consuming and requires additional resources. Ensuring fairness and maintaining the same level of rigour across different assessment formats is challenging (L8).

This reflection underscores the importance of institutional support in developing inclusive teaching and assessment practices. It suggests a need for professional development focused on creating accessible visual materials and using technology effectively. Moreover, it highlights the necessity for clear policies and resource allocation to support alternative assessments that are fair, rigorous, and adaptable to diverse learner needs. Without such systemic support, even well-intentioned efforts by individual lecturers may fall short in achieving full inclusivity. This finding is supported by Mtuli (2015) and Philip (2023) who underscore that the utilisation of visual materials, such as slides, diagrams, charts, and written instructions, as well as total communication, captioning, and motivation, are effective strategies for LwHI, which have produced the desired results for such learners.

Collaborative learning activities

The findings revealed that lecturers encouraged collaborative learning activities that foster peer support and interaction. These include group work, discussions, and cooperative projects that provide opportunities for LwHI to engage with their peers, exchange ideas, and learn from different perspectives. However, while these activities were observed to be beneficial, they also presented challenges particularly when learners with hearing impairments required individual assistance from lecturers, which was not always readily available. Additionally, some students with hearing impairments reported experiences of stigma from their hearing peers, which affected their sense of inclusion. Lecturers also highlighted the use of collaborative teaching as a strategy aimed at accommodating all students, including those with hearing impairments, by fostering peer interaction and shared learning experiences. As participant L3 explained:

I promote collaborative learning activities and encourage peer-to-peer interactions and knowledge sharing, allowing them to learn from their classmates. However, challenges arise when ensuring effective communication during group discussions. Students need additional support. As a facilitator, I must ensure that all learners are actively participating and contributing. This is difficult because of overcrowded classrooms (L3).

This statement underscores the value of collaborative learning in fostering inclusion and mutual learning among students, including those with hearing impairments. However, it also points to the practical limitations posed by overcrowded classrooms, which hinder effective communication and individualized support. This finding correlates with findings by Hornby (2014), Wynne (2010) and Philip (2021) who all agree that cooperative learning and collaborative activities are effective teaching strategies used by lecturers for LwHI. Generally, lecturers demonstrated a commitment to inclusive education but emphasized the need for additional support, training, and infrastructure to effectively implement these strategies.

Assistive listening devices and amplification systems

The study found that lecturers utilised assistive listening and amplification devices, such as microphones and speakers, to enhance the audibility of their lectures and improve sound clarity for learners with hearing impairments. These tools help transmit sound directly to students' hearing aids or assistive listening devices, effectively reducing background noise and supporting better comprehension. However, many lecturers reported difficulties in managing this technology due to a lack of technical skills and training as commented by one of the participants below.

The use of assistive listening devices, such as personal FM systems, speakers, and microphones which are found in the classrooms, helps to ensure hearing clearly for those with residual hearing. Yet, ensuring the availability and

maintenance of these devices is a challenge, as limited resources and technical issues once arise, which temporarily disrupt the students' access to these devices. Also, the systems are not active enough (L10)

The quotation above highlights the critical role of assistive listening devices in supporting learners with hearing impairments, particularly those with residual hearing. However, it also reveals systemic gaps in resource allocation, device maintenance, and technical support. This finding is similar to finding by Hanks (2011) and Mkongo (2021). Additionally, Banks (2019) reported that LWHI benefit from loop systems, hearing aids, cochlear implants, FM systems, and infrared systems. Personal hearing aids were also noted to enhance learning for those with residual hearing. To realize these benefits, classrooms should be modified with the installation of group hearing aids.

The perceptions of students with Hearing Impairments regarding the teaching strategies used by lecturers in teaching

Research findings revealed that lecturers were employing different teaching strategies to enhance and accommodate learning needs of LWHI. On the other hand, students shared their perceptions on the teaching strategies employed by their lecturers; i.e., sign language interpretations, captioning and subtitling, clear communication, and collaboration, which were viewed both positively and negatively (see details below). Based on the respondents' verbatim, data suggest that teaching strategies employed by lecturers were perceived positively when implemented well with consideration of all learners and perceived negatively when implemented improperly.

Effective Communication

Students reported that clear communication, such as facing the audience, speaking clearly, and using visual cues enhanced their understanding and engagement in class discussions. One respondent shared their thoughts on the communication strategies used during lectures, stating:

Clear communication strategies employed by lecturers, such as facing the students, speaking clearly, and using visual cues, greatly assist in my understanding and ensure effective classroom communication. Additionally, visual aids and multimedia resources used by lecturers greatly enhance my learning experience. They make the information more accessible and facilitate my comprehension of complex topics (S10).

This perspective underscores the importance of intentional communication practices and the integration of visual and multimedia tools in promoting inclusive learning. The student's experience suggests that relatively simple strategies such as maintaining eye contact, using visual cues, and providing multimedia support can significantly enhance comprehension for learners with hearing impairment. This finding aligns with Mtebe and Raisamo

(2014), who emphasise that effective communication is vital for LwHI to access information in academic settings. Similarly, Philip (2022) highlights that; communication strategies significantly impact the academic experiences of LwHI. However, while some students expressed appreciation for these strategies, others noted that lecturers occasionally failed to implement them consistently, leading to confusion and hindering engagement. This inconsistency contrasts with the literature, which often assumes that effective communication is uniformly applied.

Use of Visual Aids

Students expressed positive perceptions of the use of visual aids and multimedia resources, noting that these tools greatly facilitated their learning experiences as one of the participants remarked the following:

Not all lecturers effectively incorporate visual aids and multimedia resources. Some rely heavily on auditory information, which poses challenges for me in comprehending the material. Furthermore, some lecturers do not consistently employ clear communication strategies, such as facing the students or using visual cues; sometimes, they move randomly in the classroom. This hinders the ability to lip-read and fully engage in classroom discussions (S5).

Another participant explained that:

I appreciate the use of visual aids and multimedia resources by lecturers. It helps me to follow the lectures more easily and ensure that I don't miss out on any important information. (S1)

The narratives above depict contrasting student experiences, which highlight the uneven implementation of inclusive teaching practices among lecturers. While some students benefit significantly from the use of visual and multimedia supports, others face barriers when such strategies are inconsistently applied or absent altogether. Standardising practices such as facing students, minimising unnecessary movement, and integrating visual aids would help create a more equitable learning environment for learners with hearing impairments. This finding resonates with Mtuli (2015) and Migehe (2014), who argue that visual aids are essential for enhancing comprehension among LwHI. However, some participants also reported that not all lecturers effectively incorporated these resources, with certain educators relying heavily on auditory information (S5). This divergence suggests that while the literature supports the use of visual aids, actual classroom implementation may vary, resulting in mixed experiences for LwHI.

Sign Language Interpretation

The role of sign language interpretation emerged as another critical theme. Students highlighted the value of sign language interpreters in facilitating

their understanding and engagement in discussions (S4). With regard to challenges faced by students, one participant explained that:

There have been instances where the sign language interpretations made by some lecturers are not accurate or the interpreter was not fully qualified and aware of the content clearly, leading to misunderstandings and confusion (S3).

Regarding the importance of sign language interpretation as a teaching strategy for students, including those with hearing impairments, as one respondent explained:

The sign language interpretation provided by lecturers is valuable. It enables me to fully understand and engage in class discussions, ensuring that I have equal access to the content (S4)

These results align with findings from other studies that emphasise the necessity of qualified interpreters to ensure accessibility. For example, a study by Chekwaze and Juma (2024) mentioned that the use of sign language was interpreted poorly by students because it was not mentioned within the curriculum, thus it seemed to be challenging. Although the Tanzanian education curriculum does not designate sign language as an official language of instruction, it is commonly used to support learners with hearing impairments. However, some students noted that the accuracy of sign language interpretations varied significantly, often resulting in misunderstandings (S3). This inconsistency highlights a critical gap in the quality of support services and underscores the urgent need for well-trained, qualified interpreters. It also raises important questions about the training, professional development, and institutional support available for individuals providing interpretation services in higher education settings. ***Collaborative Learning***

The findings also revealed a positive perception of collaborative learning strategies. Students appreciated opportunities for group discussions and peer interactions which enhanced their understanding and allowed for shared learning experiences. However, the effectiveness of such strategies often depended on the lecturer's ability to facilitate these interactions, indicating a need for training in collaborative teaching methods. This aligns with the study findings by Chekwaze and Juma (2024) which indicated that the inability of hearing-impaired students to comprehend class lessons was linked to teachers' inadequate sign language skills. In such cases, students with hearing impairments often had to rely on their peers for information regarding course content and expectations. However, some of these classmates were perceived by lecturers as lacking the necessary knowledge and skills to provide accurate and reliable support. As a result, this peer

dependence sometimes led to the spread of misinformation, further hindering the academic progress of learners with hearing impairments.

Inconsistency in strategy implementation

Learners also registered negative perceptions regarding the inconsistency of strategy implementation. Participants noted that lack of reliable captioning and transcription services sometimes hindered their comprehension, particularly during multimedia presentations. The participant said:

Sometimes, the lecturers do not consistently use captioning or transcription services, which make it difficult for me to fully grasp the content presented in videos or audio materials (S4).

The excerpt above highlights the critical role of captioning and transcription in ensuring equal access to multimedia learning resources for students with hearing impairments. The inconsistency in using these services creates barriers to comprehension and engagement, undermining the principles of inclusive education. The implication is that institutions must prioritize the integration of accessible media practices by mandating the use of captions and transcripts for all audio-visual content and providing training and tools to support lecturers in doing so effectively. This finding aligns with Semunyu and Rushahu (2023), who argue that inconsistent application of inclusive practices can create barriers for LwHI. Furthermore, Mwakyeja (2013) highlights that insufficient training for educators can lead to a reliance on traditional methods that do not accommodate diverse learning needs.

Conclusions and implication of the study findings

The assessment of lecturers' teaching strategies for learners with hearing impairment (LwHI) in Tanzanian higher learning institutions reveals crucial implications related to the research objectives. The study found that while some diverse strategies are employed, many lecturers predominantly use verbal communication, which limits the effectiveness of instruction for LwHI. This highlights the urgent need for targeted training and professional development for educators to adopt more inclusive practices. Additionally, students' perceptions indicate feelings of marginalization, emphasizing the necessity for more visual aids and interactive learning opportunities. These findings suggest that bridging the gap between teaching strategies and the actual needs of LwHI is vital for enhancing their academic experiences.

This study significantly contributes to existing knowledge by providing empirical data on the effectiveness of teaching strategies for LwHI in Tanzanian higher education, which is an underexplored area. The insights gained advocate for integrating inclusive teaching approaches and underscore the importance of professional development for lecturers. Theoretical insights drawn from the data can inform models of inclusive education tailored to the

unique challenges faced by LwHI. Educational institutions can foster a more equitable learning environment and ultimately improve outcomes for learners with hearing impairments and inform future policies and practices in Tanzanian higher learning institutions.

To enhance good access to teaching strategies for LwHI the study recommends the following: there should be ongoing training sessions for lecturers and staff to raise awareness about learners with hearing impairment, teaching strategies and installation of assistive listening devices. Moreover, encouragement for peer collaboration amongst students with hearing impairment and those without impairment in terms of group discussions and interactive activities that enhance their learning experience. Further, it is recommended that the department collect feedback from students and lecturers about teaching strategies employed for evaluation and improvement purposes to meet the learning needs of LwHI. Additionally, it is recommended that the collaboration between technical staff (sign language interpreters, audiologists) and lecturers be enhanced to improve the teaching and learning process for LwHI to facilitate communication, guide accommodations, and ensure a coordinated approach to supporting students with hearing impairments. Finally, it is recommended to encourage lecturers to adopt flexible teaching approaches that can be individualized to accommodate different learning styles and communication methods.

References

- Akpan, V. I., Igwe, U. A., Mpamah, I. B. I., & Okoro, C. O. (2020). Social constructivism: Implications on teaching and learning. *British Journal of Education*, 8(8), 49-56.
- Amineh, R. J., & Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of Social Sciences, Literature and Languages*, 1(1), 9-16.
- Arif, A., Rani, S., & Siddique, Q. (2024). Teaching Approaches to Enhance Social Interaction for Students with Hearing-Impaired at Higher Education Level in Lahore. *Annals of Human and Social Sciences*, 5(2), 413-425.
- Atcherson, S. R., Franklin, C. A., & Smith-Olinde, L. (2015). *Hearing Assistive and Access technology*. Plural Publishing.
- Banks, J. (2019). Are we ready: Faculty Perceptions of Postsecondary Students with Learning Disabilities at a Historically Black University? *Journal of Diversity in Higher Education*, 12(4), 297.
- Beard, L., Blake, L., & Strassle, C. (2019). Teaching Strategies for Students with Hearing Loss in Higher Education: Perspectives of Deaf College Students. *Journal of Postsecondary Education and Disability*, 32(2), 149-164.

- Berk, L. E. (1994). Vygotsky's theory: The Importance of Make-believe, Play. *Young Children*, 50(1), 30-39.
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652-661.
- Cavinato, A. G., Hunter, R. A., Ott, L. S., & Robinson, J. K. (2021). Promoting student interaction, engagement, and success in an online environment. *Anal Bioanal Chem* 413, 1513–1520 (2021). <https://doi.org/10.1007/s00216-021-03178-x>
- Chekwaze, J. & Juma, Z. R. (2024). Inclusive education and the dynamics in students with hearing impairments in Tanzania: From teachers' and Students' Perspectives on the Use of Sign Language. *Journal of Research Innovation and Implications in Education*, 8(4), 172–182. <https://doi.org/10.59765/jtyfg7452.1>.
- Creswell, W. J., & Creswell, D. J. (2023). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Sage Publications.
- Emong, P., & Eron, L. (2016). Disability inclusion in higher education in Uganda: Status and strategies. *African journal of disability*, 5(1), 1-11.
- Eun, Y. S. (2020). Constructivism: National Identity and Foreign Policy. *The SAGE Handbook of Asian Foreign Policy*. London: SAGE, 30-50.
- Farhan, W., & Razmak, J. (2022). A comparative Study of an Assistive e-learning Interface among Students with and without Visual and Hearing Impairments. *Disability and Rehabilitation: Assistive Technology*, 17(4), 431-441.
- Farrell, M. (2008). *Educating Special Children*. Routledge.
- Gambari, I. A., James, M., & Olumirin, C. C. (2013). Effectiveness of video-based cooperative learning strategy on high, medium and low academic achievers. In *The African Symposium: An Online Journal of the African Educational Research Network* (Vol. 13, No. 2, pp. 77-85).
- Hadi, F. N., Wahyuni, D. S., & Sulistyawati, H. (2019). Teacher's Strategies in Teaching English for the Hearing-Impaired Students. *English Education*, 7(2), 264-271.
- Hallahan, D. P., & Kauffman, M. J. (2006). *Exceptional Learners*. Pearson.
- Haule, M. J. (2015). Open Educational Resources Utilization in Tanzanian Higher Learning Institutions. *Business Education Journal*, 1(1).
- Heward, W. L. (2010). *Exceptional Children*. 10th ed. Pearson.
- Hornby, G. (2014). *Inclusive Special Education*. Springer.
- Howell, C., & Lazarus, S. (2003). Access and Participation for Students with Disabilities in South African Higher Education: Challenging Accepted Truths and Recognizing New Possibilities. *Perspectives in Education*, 21(3), 59-74.

- Iglehart, F. (2020). The Impact of Classroom Acoustics on Learners with Hearing Impairment. *Journal of Inclusive Education*, 18(2), 45-58.
- Jiseve, K. K. (2023). From the Hands to the Eye: The Role of Kenya Sign Language in Realization of the Right to Access to Justice for the Deaf Community in Kenya (Doctoral dissertation, University of Nairobi).
- Kaingo, R. M. (2023). Inclusion of students with hearing impairment in universities in Dodoma City, Tanzania (Doctoral dissertation, Kyambogo University [unpublished work]).
- Kigotho, L. W. (2016). Barriers faced by Students with Hearing Impairment in the Inclusive Learning Environment: A Case of the University of Nairobi (Doctoral dissertation, University of Nairobi).
- Kisanga, S. E. (2017). Educational Barriers of Students with Sensory Impairment and their Coping Strategies in Tanzanian Higher Education Institutions (Doctoral dissertation, Nottingham Trent University).
- Kisanga, S. E. (2019). Barriers to Learning faced by Students who are Deaf and Hard of Hearing in Higher Education Institutions in Tanzania. *Papers in Education and Development*, 37(2).
- Kochung, E. J. (2011). Role of Higher Education in Promoting Inclusive Education: Kenyan Perspective. *Journal of Emerging Trends in Educational Research and Policy Studies*, 2(3), 144-149.
- Kottmann, A., Vossensteyn, J. J., Kolster, R., Veidemann, A., Blasko, Z., Biagi, F., & Sánchez-Barrioluengo, M. (2019). Social inclusion policies in higher education: Evidence from the EU. *Report. Publications Office of the European Union, Luxembourg*.
- Lambrechts, A. A., Cavallaro, M., & Lepori, B. (2024). The European Universities initiative: between status hierarchies and inclusion. *Higher Education*, 88(4), 1227-1247.
- Loeding, B. L. (2011). Assistive Technology for Deafness and Hearing Impairments: Assistive Technology. *Principles and Applications for Communication Disorders and Special Education*, 4, 325-365.
- Marschark, M., & Hauser, C.P., (2011). *How Deaf Children Learn: What Parents and Teachers Need to Know*, 1ST Edition. Oxford University Press.
- Marschark, M., & Hauser, P. (2018). Communication Strategies and Accessibility Issues for Deaf and Hard-of-Hearing Students in American Higher Education. *American Annals of the Deaf*, 163(5), 437-455.
- Migheha, G. J. (2014). *An analysis of academic performance of students with hearing impairment in Tanzania secondary schools* (Master's thesis, Open University of Tanzania).
- Miller, R. (1996). *The Developmentally Appropriate Classroom in Early Education*. Derrmar Publisher:

- Mitchell, D., & Sutherland, D. (2020). *What really works in special and inclusive education: Using evidence-based teaching strategies?* Routledge.
- Mkama, I. (2023). Bilingual Deaf Education: Enhancing Literacy among Deaf Learners in Secondary Education in Tanzania: *Special Issue on Inclusive & Special Education –African Journals Online*, 41(1) 86-96.
- Mkama, I. (2024). *Introduction to Linguistics of Tanzanian Sign Language*. Tridax Africa Company Limited. Mkongo, J. I. (2019). *Inclusion/Integration of Children with Hearing Impairment in Pre-Primary Education in Tanzania*. Ludwig - Maximilians - Universität.
- Mtuli, T. C. (2015). *Assessing the challenges of teaching and learning of hearing-impaired students enrolled in regular primary and secondary schools* (Doctoral dissertation, The Open University of Tanzania).
- Mwakyeja, B. M. (2013). *Teaching students with visual impairments in inclusive classrooms: A case study of one secondary school in Tanzania* (Master's thesis, University of Oslo, Norway).
- Ndlovu, S., & Moyo, M. (2018). Challenges Faced by Students with Hearing Impairments in Accessing Higher Education in South Africa. *South African Journal of Higher Education*, 32(1), 232-249.
- Nsereko, H. (2010). Multimodal communication in the instruction of learners with hearing impairment: teachers' perceptions and application in inclusive classes (Master's thesis, University of Oslo, Norway).
- Patrick, C. (2017). Strategies used in teaching written English language to learners with hearing impairment: A case of Njia Special School in Meru County, Kenya. *International Journal of Education and Research*, 5(12), 1-14.
- Philip, E. M. (2021). Improving English Comprehension Ability among Students with Hearing Impairment in Inclusive Classroom: A Collaborative Instructional Approach (Doctoral Thesis, University of Dodoma).
- Philip, E. M. (2022). Teaching Models Used and Challenges Experienced in Secondary School Classes with Special Needs Learners in Tanzania. *East African Journal of Education and Social Sciences* 3(6)129-137. DOI: <https://doi.org/10.46606/eajess2022v03i06.0244>.
- Philip, E. M. (2023). The Contribution of Sign Language Interpreters to Academic Achievement of Deaf Students: A Case Study of Archbishop Mihayo University College of Tabora. *International Journal of Science and Research*, 12(11) 81-91.
- Philip, E.M. (2024). Realization of access, equity, diversity and inclusion in inclusive education: What are the missing gaps in Tanzania? *European Journal of Contemporary Education and E-Learning*, 2(1), 53-65.
- Quinto-Pozos, D. (2011). Teaching American Sign Language to hearing adult learners. *Annual Review of Applied Linguistics*, 31, 137-158.

- Rehman, N. U., Aftab, M. J., & Ali, H. H. (2024). Role of technology integration in educational settings for students with hearing impairment. *Bulletin of Education and Research*, 46(1), 87-105.
- Samweli, L. (2023). Inclusive Education in Tanzania: *Assessing Teachers' Knowledge, Challenges, and Strategies in Managing Children with Disabilities in Public Primary Schools*. (Master Dissertation, the University of Dodoma).
- Semuny, Y. F., & Rushahu, B. (2023). Challenges and coping mechanisms in sign language interpretation at the University of Dar es Salaam. *African Journal Online* 41(1) 127-142.
- Seni, A. J. (2022). Bottlenecks to inclusive higher education for students with disabilities during the COVID-19 pandemic in Tanzania. *Journal of Issues and Practice in Education*, 14(2), 108-134.
- Shartieli, N. E. (2013). Discourse strategies of lecturers in higher education classroom interaction: a case at the University of Dar Es Salaam, Tanzania (Doctoral dissertation, Stellenbosch: Stellenbosch University).
- Taherdoost, H. (2022). Designing a questionnaire for a research paper: A comprehensive guide to designing and develop an effective questionnaire. *Asian Journal of Managerial Science*, 11(1), 8–16. <https://doi.org/10.51983/ajms-2022.11.1.3087>
- Tungaraza, F. D. (2014). Training teachers in special needs education in Tanzania: A long and challenging ordeal to inclusion. *Huria: Journal of the Open University of Tanzania*, 16, 49-60.
- United Nations. (2006). *Convention on the Rights of Persons with Disabilities*. United Nations.
- URT. (2009). *National Strategy on Inclusive Education (2009-2017)*. Government Printer.
- URT. (2010). *Persons with Disabilities Act of 2010*. Government Printer.
- URT. (2017). *Education Sector Development Program*. Government Printer.
- Vygotsky, L., & Cole, M. (2018). Lev Vygotsky: Learning and social constructivism. *Learning Theories for Early Years Practice*. SAGE Publications Inc., 68-73.
- Williams, L. (2024). Unlocking Accessibility: Captions, Transcripts, and Audio Descriptions. Retrieved from [www.https://openlibrary-repo.ecampusontario.ca](https://openlibrary-repo.ecampusontario.ca)
- Wilmshurst, L., & Brue, W.A. (2005). *A Parent Guide to Special Education*. American Management Association.
- Wynne, S. M (2010). *Early Childhood Special Education General Curriculum Teacher Certification Exam*. XAMoline Inc.
- .
- .

Impediments Encountered by Female Learners in Access to Diploma Education Through Open and Distance Learning in Tanzania

Rehema Dastan Msamada & Abdallah Jacob Seni

Department of Educational Foundations and Continuing Education

The University of Dodoma

abdallah.seni@udom.ac.tz

ORCID: 0000-0003-0904-5267

Abstract

This study investigates the gender-specific barriers that female learners face in accessing and successfully participating in distance education programmes, focusing on the Tanzanian context. Drawing on liberal feminist theory, which advocates for equal rights, opportunities, and institutional support for women, the paper examines how open and distance learning (ODL) environments address or perpetuate existing gender inequalities. Drawing on qualitative data from female students enrolled in Open and Distance Learning (ODL) programmes, this study identifies various challenges that hinder access to diploma education. These include entrenched gender roles and domestic responsibilities, reproductive obligations, patriarchal constraints, financial dependency, low self-confidence, and limited digital literacy. The findings indicate that, while ODL is designed to offer flexibility and inclusivity, it often falls short in meeting the specific needs of female learners due to persistent structural and sociocultural barriers. The analysis challenges the assumption that flexibility alone guarantees equity and instead calls for gender-responsive reforms in the design, delivery, and institutional policies governing distance education. The study concludes by recommending targeted strategies to promote gender equity in ODL, such as policy reforms, financial support mechanisms, awareness campaigns, and capacity-building initiatives. These findings contribute to ongoing debates on gender and education, highlighting the need for a feminist-informed approach to educational access and reform in developing countries.

Keywords: *Female students, access to ODL, distance learning, adult education*

Introduction

Open and Distance Learning (ODL) in Tanzania was established in December 1992 to promote inclusive education (URT, 2003). Despite this noble mission, female adult learners remain under-enrolled and underperform relative to their male counterparts, indicating persistent gender disparities in

access and outcomes (Maxwell & Chmiel, 2014). Diploma-level qualifications achieved through ODL offer critical pathways to professional advancement, economic empowerment, and social mobility for Tanzanian women. Many women can overcome socioeconomic constraints by earning a diploma, enhancing their decision-making power within households, and serving as role models for younger generations. However, the extent to which ODL realises these benefits for female learners, especially in semi-urban areas like Morogoro, remains underexplored, necessitating an in-depth investigation of their lived experiences. The benefits of open and distance learning in widening access to education among females cannot be disputed (Masih & Denis, 2021; Shekar, 2023; Ukaigwe *et al.*, 2025). Since the early 1990s, Tanzania has experienced steady growth in Open and Distance Learning (ODL) offerings, largely driven by investments from the government and development partners. The National Open and Distance Learning policy of 2002 underscored ODL's strategic importance for addressing geographic isolation and resource limitations in the formal education system. IAE has subsequently established a network of regional and district centres, yet persistent infrastructure gaps, such as intermittent electricity supply and limited internet connectivity, challenge most of the sub-Saharan African countries and hinder effective delivery, particularly in semi-urban and rural districts (Mukuni, 2019).

While the policy framework emphasises gender equality, socio-cultural norms constrain women's participation in ODL. According to Prosper (2020), it is generally noted that even when female learner enrolls in ODL institutions, it is the males who own and use computers and the Internet more than females. Prosper further observed that male learners spend more time online, take more technology classes, and show more motivation to learn digital skills. Thus, limited access and use of educational technologies further impede the development of digital literacy skills and their engagement with online learning platforms and digital resources (Haleem *et al.*, 2022; Anasel & Swai, 2023). In contrast, a study by Ukaigwe *et al.* (2025) revealed that Open and Distance Learning helped female learners to be conversant and competent in using computers and internet. Again; Deuri and Gogoi (2025) indicate that ODL programmes positively impact women's empowerment and improve their digital literacy. Such differences might be due to geographical differences or ODL education tier to which the learners were studying. Generally, most female learners encountered constraints on ICT and digital applications.

The cumulative costs of tuition fees, travel to study centres, and procurement of textbooks and digital devices represent significant financial barriers for

adult learners, with women disproportionately affected due to limited control over household resources (Swai, 2010). Moreover, IAE centres in Morogoro lack essential learner support services such as childcare facilities, gender sensitive counselling, and targeted ICT training, which exacerbate the challenges female students face when engaging in ODL environments. Entrenched gender roles and community expectations significantly restrict women's educational opportunities in Tanzania. In many communities, women are primarily viewed as homemakers, a perception that discourages long-term investment in their education and often leads to social stigma when they seek to enroll in diploma programmes. Even when enrolled, household responsibilities frequently interfere with attendance, cause lateness, and contribute to poorer academic outcomes (Karisa & Mwikamba, 2024; Peter, 2017). These cultural pressures are particularly discouraging for women in male-dominated fields, further undermining their motivation and persistence in Open and Distance Learning (ODL) programmes. This study addresses the central research question: What are the key impediments female adult learners encounter in accessing diploma-level education through Open and Distance Learning at the Institute of Adult Education centres in Morogoro region, Tanzania? While existing literature acknowledges general barriers to ODL enrolment and participation (Atriza *et al.*, 2023; Pasque & Nicholson, 2023), few studies focus on the experiences of female adult learners pursuing diploma qualifications in Tanzania. For instance, Mbunda (2022) examined the benefits of ODL for female learners, and Mbega (2017) investigated the impact of cultural norms on female access.

Most studies outside Tanzania, and even within, such as those by Anasel and Swai (2023), Ariwijaya and Ningsih (2020), and Msuya and Temu (2019), concentrate primarily on university-level ODL. This highlights a gap in comprehensive, gender-specific research at the diploma level, particularly studies employing triangulated perspectives and theoretical frameworks. By exploring women lived experiences at two IAE ODL centres in Morogoro using a phenomenological qualitative design, this study aims to generate actionable insights for educators, policymakers, and community stakeholders to promote gender equity in distance education.

Theoretical Framework

This study is grounded in two complementary theoretical frameworks: liberal feminism and distance education theory. These frameworks offer a dual lens to examine gender-based inequities and the pedagogical dynamics that influence female learners' experiences within Open and Distance Learning (ODL) environments.

Liberal Feminism Theory

Liberal feminism advocates for the removal of legal and institutional barriers to gender equality, emphasising equal rights and opportunities for women and men within existing societal structures. Key proponents of this theory include Mary Wollstonecraft, whose seminal work *A Vindication of the Rights of Woman* (1792) argued for women's right to education, and John Stuart Mill, co-author (with Harriet Taylor Mill) of *The Subjection of Women* (1869), which critiqued legal inequalities and called for the full civic participation of women. The core principle of liberal feminist theory is equality before the law and in social, economic, and educational institutions. This theory is relevant to this study because it highlights the right to education. It further indicates how personal, cultural, and institutional impediments violate women's entitlement to equal access and underscores the need for policy and practice reforms in ODL programmes.

Distance Education Theory

Distance education theory examines the unique learning features that happen when the teacher and learner are geographically separated. Foundational contributors to distance education theory include Otto Peters, who conceptualised education as an industrialised process; Holmberg (1986), who emphasized the importance of learner autonomy and empathetic communication; Keegan (1988), who identified structural, transactional, and didactic forms of independence; and Rumble (1986), who distinguished distance teaching from conventional classroom instruction. At its core, distance education theory promotes flexible, self-directed learning environments that empower learners to control their study's pace, location, and mode. The theory is relevant to this study because it illuminates how ODL's inherent flexibility can both enable and constrain female learners, depending on factors such as digital literacy, resource availability, and institutional support.

Combining liberal feminism with distance education theory allows this study to identify gendered barriers. Liberal feminism directs attention to how socio-cultural norms and institutional practices systematically disadvantage women. On the other hand, distance education theory clarifies the mechanisms through which ODL's flexibility may mitigate or exacerbate these barriers. Insights from both theories guide recommendations for gender-sensitive ODL practices such as targeted digital literacy training, equitable resource distribution, and inclusive support services that uphold women's right to education while leveraging ODL's strengths. This theoretical framework thus provides a robust foundation for analysing the lived experiences of female adult learners in Morogoro ODL centres and

proposing interventions that promote equitable, high-quality distance education.

Empirical Literature Review

Globally, Open and Distance Learning (ODL) has emerged as a transformative approach to widening access to education, especially for marginalized populations such as female adult learners. Despite its potential to democratize learning, ODL remains fraught with challenges, particularly regarding accessibility, retention, and learner support for women. This section critically reviews empirical studies conducted across three contexts: developed countries, developing countries, and Tanzania. The reviewed studies shed light on key barriers female adult learners encounter in accessing education through ODL. The review starts with the studies in developed countries, followed by those from developing countries and lastly, the studies from Tanzania. Laterza *et al.* (2020) assessed the effects of internet access's temporal and spatial flexibility and household responsibilities on females' participation in digital distance learning. These scholars found that temporal and spatial flexibility was valued, but inconsistent internet access and household responsibilities hindered female participation, especially when they wanted to balance learning and caregiving roles. This implies that flexible scheduling alone is insufficient without reliable infrastructure and support networks. A study by Winfield, Hughes, and Huffman (2023) examined non-traditional adult learners in the post-COVID-19 context, focusing on the application of national standards for online teaching in human service education. The study was conducted in the United States with 150 non-traditional adult students (aged 25 and above) and employed a mixed-methods design. The findings revealed that situational barriers such as homeschooling duties and full-time work were amplified for women, reducing study time and increasing dropout risk. This implies that ODL programmes must integrate parental support services and adaptive course designs. Nonetheless, Balancing Act Research Group (2021) claims that peer support and mentor networks in persistence and emotional support play a crucial role in minimising feelings of isolation among female learners in ODL institutions. Their research contradicts the Balancing Act Research Group's findings in that it sought to establish the role of peer support and mentor networks as mediators of female participation in ODL. Their research assessed key barriers to female adult learners accessing education through ODL.

Rabourn, BrckaLorenz, and Xu's (2018) study offered an elaborate explanation of barriers and facilitators in online female adult learning using an exploratory research design. The researcher found that technology self-

efficacy and perceived academic integration predicted persistence, with female learners reporting lower digital confidence. The sentiments are further supported in Ahmed's (2020) study, which concurs with Rabourn, BrckaLorenz, and Xu (2018) that sufficient digital skills led to learning motivation and persistence, with participants citing a formal ICT training. Likewise, Bulugu and Nkebukwa's (2024) study on that technophobia and intermittent power supply were major barriers to female learners in ODL institutions in Tanzania. This implies that infrastructure upgrades and confidence-building workshops are critical.

Kumar and Singh (2018) studied "financial barriers to women's participation in open distance learning in India using a quantitative survey of 200 female adult learners enrolled in State Open University diploma programmes. The study revealed that tuition fees and travel costs were the top deterrents, and women often deprioritised education expenditures within household budgets. This is in line with Msuya and Temu's (2019) study on financial constraints and dropout rates among female ODL learners in Tanzania, where they found a significant correlation ($r=-0.62$, $p<0.01$) between financial hardship and course withdrawal. This implies the importance of micro-grant schemes and subsidised study materials in ODL institutions.

Time management has been found to be a challenge among female distance learners in Kenya (Ochieng *et al.*, 2019). Some female learners are constrained by domestic chores and childcare duties, which significantly reduce study hours for women compared to men. This implies that ODL providers should offer asynchronous modules and childcare support services. Likewise, cultural expectations that women prioritise household duties over study have contributed to irregular participation in diploma ODL programmes in Morogoro (Mbega, 2017). A study on barriers to women's participation in diploma Open and Distance Learning (ODL) programmes in Morogoro by Mbega (2017) employed qualitative interviews with 20 female learners. The study found that cultural expectations, particularly prioritising household duties over education, contributed to irregular participation in ODL. The findings suggest that community sensitisation campaigns are essential for challenging and shifting entrenched gender norms that hinder women's consistent engagement in diploma-level studies across diverse contexts, common impediments for female adult learners in Open and Distance Learning (ODL) include time management challenges, limited digital literacy, financial constraints, cultural norms, and inadequate institutional support. These recurring barriers highlight the need for holistic and gender-responsive interventions to improve access, retention, and success for women pursuing diploma-level education through distance learning.

Methodology

This study adopted a qualitative research approach, emphasising understanding the meanings that participants assign to their lived experiences and social realities (Cohen *et al.*, 2011). Specifically, a phenomenological research design was employed to explore and describe the lived experiences of individuals concerning a specific phenomenon, in this case, the impediments encountered by female adult learners in accessing education through Open and Distance Learning (ODL) (Creswell, 2014).

Study Area and Participants

The study was conducted in Morogoro region, which was selected due to its notably low enrolment rate of female learners in Open and Distance Learning (ODL) centres compared to their male counterparts. For instance, during the 2016/2017 and 2017/2018 academic years, only 50 out of 130 diploma programme students (38.5%) were female, while 80 (61.5%) were male (IAE, 2018). This gender disparity is particularly concerning given the fact that Morogoro hosts multiple ODL centres under the Institute of Adult Education (IAE). A total of 32 participants were purposively selected for the study, comprising 20 female learners, 10 ODL facilitators, one District Adult Education Officer, and one IAE Regional Resident Tutor.

Table 1
Categories and Sample Sizes of Participants

Category of Respondent	Centre A	Centre B	Sample Size
Female learners	12	8	20
Facilitators	6	4	10
District Adult Education Officer	-	-	1
IAE Regional Resident Tutor	-	-	1
Total			32

Source: Field Data (2024).

Sampling Techniques

Participants and ODL centres were purposively selected, aligning with Padilla-Diaz (2015), who states that purposive sampling is central to phenomenological studies. This method enabled the researchers to engage information-rich participants who were well-versed in ODL-related experiences (Magwa & Magwa, 2015). The two selected centres, Centre A and Centre B, were the only institutions offering ODL programmes under IAE in the region. Female learners were selected using stratified purposive sampling, ensuring homogeneity within specific subgroups (Patton, 2002; Suri, 2011). Facilitators were also purposively selected with assistance from the resident tutor, based on their availability and close engagement with

female learners (Singh & Masuku, 2014). The District Adult Education Officer and Regional Resident Tutor were purposively chosen due to their institutional roles and expertise in adult education.

Data Collection Methods

The primary method for data collection was semi-structured interviews administered to the facilitators, District Adult Education Officer, and Regional Resident Tutor. This allowed flexibility to probe emerging themes (Creswell, 2013). Responses were recorded using voice recorders and field notebooks. Another method was Focus Group Discussions (FGDs), which were conducted with female learners 10 from Centre A and 10 from Centre B, 10 female learners from Centre A and 10 from Centre B, and 10 facilitators. FGDs enabled interactive exploration of perceptions about ODL accessibility and impediments.

Data Analysis

Data were analysed using thematic analysis, a method for identifying, analysing, and reporting patterns (themes) within qualitative data. The analysis followed the steps by Braun and Clarke (2006) which include familiarization with the data through repeated listening of audio recordings and review of field notes; manual transcription of verbal data; generation of initial codes using colored pens and highlighters; grouping of codes into potential themes and sub-themes. Then the themes were reviewed and refined to ensure internal coherence and alignment with research objectives. To ensure trustworthiness, the study addressed the following criteria: To achieve credibility, we prolonged engagement (one month of fieldwork) to build rapport and gain contextual understanding. To ensure transferability, we provided a thick description of the research setting, methodology, and processes to allow contextual generalisation (Anney, 2014; Nowell *et al.*, 2017). Audit trail, code-recode strategy, and stepwise replication were done to ensure the dependability of the data. Confirmability was ensured through reflexivity, triangulation of data sources (semi-structured interviews and FGDs), and objective interpretation of participants' views. On the other hand, ethical considerations were upheld. Research clearance was obtained from the Open University of Tanzania, with research permits granted by relevant regional and district authorities. Informed consent was secured from all participants, who were fully briefed and voluntarily agreed to participate. Pseudonyms ensured anonymity, referring to participants by roles rather than names. Interviews and focus group discussions were scheduled in advance to accommodate participants' convenience.

Results and Discussion

This section presents and discusses the study's findings in alignment with the research question, which aimed to unfold the key impediments encountered by female adult learners in accessing diploma-level education through Open and Distance Learning in Tanzania. The findings revealed that female learners enrolled in Open and Distance Learning (ODL) programmes faced several individual-level challenges. These included managing multiple responsibilities, low socio-economic status that limited their ability to afford tuition, lack of self-confidence, pregnancy-related interruptions, limited time for self-study at home, mistrust from spouses, and, in some cases, outright denial of support for their educational advancement. Furthermore, female learners were often burdened with multiple responsibilities arising from traditional gender roles, which negatively affected their academic performance. One resident tutor observed that:

I think female learners are challenged by family responsibilities such as cooking, formal employment, and self-employment duties aimed at contributing to the family income. This is unlike male learners who, although employed, are less involved in domestic chores (Interview with the resident tutor).

Similarly, another facilitator added:

Women, especially those who are married, face many household chores. These responsibilities can lead to missing classes, exams, or even postponing studies. For example, a mother cannot attend class if her child is unwell (FGD with facilitators).

Female learners echoed similar sentiments. A participant from Centre A said:

As a woman, I must complete all family duties before I can study. These chores exhaust me, affecting both my college and home study time. The family duties such as domestic chores deprive my private studies time at home (FGD with the female ODL learners, center A).

Another from Centre B elaborated:

I must attend various social and family responsibilities, including funerals and weddings, whether my husband is present or away. Coupled with my job and studies, this overwhelms me mentally thus failing to concentrate fully with my studies (FGD with the female ODL learners, Centre B).

These interview narratives underscore the significant impact of gendered domestic and social responsibilities on female learners' ability to fully engage in Open and Distance Learning (ODL) programmes. The participants' experiences reveal how deeply entrenched cultural expectations around women's roles as caregivers, homemakers, and participants in social obligations interfere with their academic commitments. These obligations reduce the time available for study and contribute to mental exhaustion and

decreased academic focus. These findings are consistent with Ariwijaya and NingSih (2020), who noted that the educational progress of married female students often suffers due to domestic roles. However, it is important to acknowledge variability among learners; some benefit from domestic help or live in nuclear rather than extended families. On the other hand, pregnancy emerged as a significant constraint, often interfering with academic schedules.

One learner shared:

Pregnancy is another obstacle impeding studies. I was pregnant in my first year and had to postpone exams due to health issues. I was given a bed rest and so could not proceed with studies until when I resumed in the next year (FGD with the female ODL learners, Centre B).

This challenge, though substantial, varied depending on age and life circumstances, with older women or those not currently pregnant experiencing fewer disruptions. While pregnancy may not be regarded as a disease, yet it takes a toll on women's time.

Similarly, husbands' lack of support driven by jealousy, mistrust, or cultural beliefs also hindered female learners within the ODL mode. One learner noted:

My husband thought our children should be prioritised in education spending. He often insisted that I focus solely on family duties rather than spending family resources, which could be used by children. Though I keep on studying, he is always furious whenever I go back home late due to taking part in group discussions. It seems he is jealous and not trusting me (FGD with the female ODL learners, Centre A).

This narrative highlight how patriarchal attitudes and a lack of spousal support can undermine women's participation in ODL. It underscores the need for community and household-level sensitisation to promote shared support for women's education. These findings align with research by Furnborough (2012), Peter (2017), Abimbola *et al.* (2015), and others, who emphasised that female adult learners struggle to balance professional, domestic, and academic responsibilities. Gudhlanga *et al.* (2012) and Ncube & Mudau (2014) also reported that unsupportive spouses often restricted women's participation in educational activities like group discussions. Despite this, not all participants experienced such challenges. Some did not cite jealousy or mistrust from their partners as barriers, indicating variability in experiences.

During the interview, financial hardship was a recurring challenge. Many female learners mentioned that they lacked access to government loans and had to self-finance their studies. A resident tutor stated:

Even with such affordable tuition fees, many learners struggle to pay on time because they depend on their or their husbands' salaries. They are thus private sponsored who are also parents requiring to take care their children's education (Interview with resident tutor).

A facilitator added:

Low income is a common issue. Most learners are primary school teachers whose salaries must support their entire households. It is thus hard for them to foot college fees at the same time take care of their families (FGD with a facilitator, Centre A).

A learner further explained:

My salary supports both my family and tuition fees. My husband handles the children's fees, but I still face difficulties affording everything on my studies. If he could have supported me, I could fully concentrate with studies (FGD with the female ODL learners, Centre B).

These interview narratives illustrate how financial dependency and limited household income constrain women's ability to fund their education. Even with affordable tuition, competing responsibilities such as supporting families and children's education—create financial strain. This underscores the need for targeted financial support, such as scholarships or fee waivers, specifically designed for female adult learners balancing education and family obligations. These findings corroborate Chawinga and Zozie (2016), who noted similar challenges at Mzuni. They are also akin to those by Njihia *et al.* (2016) who identified financial limitations as a critical barrier in e-learning. Galusha (2012) also noted that ODL learners, often adults with multiple obligations, lack the financial resources to sustain their education.

Again, the experience varied in which some learners had economically stable spouses who could support their studies. However, lack of confidence emerged as a notable issue. A District Adult Education Officer remarked:

Some women underestimate their academic potential. Empowerment is necessary to help them realize that they are as capable as men. Others could pay tuition fees timely but less hardworking though intelligent. I am sure If they worked hard, they could perform wonders in their examinations (Interview with District Adult Education).

With the same sentiments, a facilitator commented:

Low confidence is prevalent to some of our learners. Often, only males make presentations of their assignments during class sessions. Female learners seem to feel shy and are less confident to make presentations in front of the class (Interview with a Facilitator in center B).

Learners confirmed this view. One of the study participants noted:

I sometimes feel shy speaking in front of the class, especially speaking in English language. I normally stay quiet during group discussions as I believe others, particularly men, are more articulate than I (FGD with the female ODL learners, Centre A).

These sentiments reflect entrenched gender norms that associate academic confidence with male dominance. As Ray (2019) observed, low confidence in female learners' spans class, social, and cultural boundaries. Enhancing learner support is crucial to boosting self-efficacy in ODL contexts. Nevertheless, not all learners lacked confidence; some demonstrated strong self-assurance, suggesting this challenge is not universal.

Implications of the Findings to Liberal Feminism and Distance Education

Liberal feminism is grounded in the principle that women should enjoy the same legal rights, access to opportunities, and institutional freedoms as men. It advocates for the removal of systemic barriers that hinder women's full participation in public life, including education, employment, and political engagement. Within the framework of liberal feminism, education is seen as a fundamental pathway to individual autonomy, social mobility, and empowerment. These values are particularly salient in the context of Open and Distance Learning (ODL), given that distance education is often positioned as a flexible and inclusive model capable of widening access for marginalised groups, including women. However, the findings of this study underscore several persistent gendered constraints that limit the participation and success of female learners in ODL, thereby challenging the egalitarian potential of this educational mode.

Gender Roles and Domestic Responsibilities

The findings reveal that entrenched social expectations surrounding women's roles as primary caregivers continue to hinder their educational engagement, even in flexible learning environments such as ODL. Liberal feminism critiques the naturalisation of caregiving and domestic work as inherently female responsibilities and argues for their redistribution within households and society. The study highlights how the so-called "flexible" learning environments fail to accommodate women's disproportionate time and emotional burdens. From a liberal feminist perspective, this implies the need for institutional interventions such as assignment extensions, childcare support, and gender-sensitive curriculum designs that explicitly acknowledge and address these disparities.

Pregnancy and Reproductive Roles

Pregnancy and related reproductive responsibilities were reported as factors that negatively affect women's academic continuity and progress. Liberal feminism asserts that reproductive roles should not be grounds for educational exclusion or marginalization. Rather, institutions must proactively accommodate such roles through policies that include maternity leave, flexible attendance and participation requirements, and exam deferrals. Failure to do so constitutes indirect discrimination, further entrenching educational inequities.

Patriarchal Control: Husbands' Jealousy and Mistrust

Another critical finding relates to the influence of spousal attitudes, particularly jealousy and mistrust, which often manifest as restrictions on women's mobility, time, and autonomy in making educational decisions. From a liberal feminist perspective, such patriarchal controls are viewed as violations of women's autonomy and fundamental human rights. These dynamics underscore the importance of legal protections and public awareness initiatives aimed at transforming harmful gender norms and promoting women's agency in personal development.

Economic Dependency and Financial Constraints

Economic dependency emerged as a significant barrier for female ODL learners. Many participants reported relying on spousal income or minimal personal earnings, which limited their ability to afford educational expenses such as tuition, data, and learning materials. From a liberal feminist perspective, equal economic access and financial independence are essential prerequisites for genuine educational choice and meaningful participation. Addressing these constraints necessitates the provision of scholarships, subsidized internet access, and targeted financial support mechanisms for women in distance education.

Low Confidence and Internalized Inferiority

The prevalence of low self-confidence among female learners reflects broader social conditioning that discourages assertiveness in women and reinforces male dominance in intellectual and academic spaces. Liberal feminism interprets this phenomenon as a product of unequal socialisation processes and calls for systemic empowerment strategies. These may include leadership development programmes, mentorship opportunities, and learning environments that actively encourage female participation and voice.

Digital Literacy and Technological Access

Limited computer skills and inadequate access to digital tools were cited as impediments to successful ODL engagement. Given the increasing centrality

of technology in educational delivery, liberal feminism emphasises the right to digital inclusion as a core component of educational equity. Institutions must provide women with equal opportunities to develop technological competencies through accessible training programmes and infrastructure support.

Synthesis: Distance Education, Equity, and Liberal Feminist Thought

Although ODL is widely regarded as a mechanism for democratizing education, the findings of this study suggest that structural gender inequalities persist and, in many cases, are replicated within virtual learning environments. From a liberal feminist standpoint, it is not sufficient to guarantee formal access to education without addressing the deeper socio-cultural and institutional constraints that disproportionately affect women. Thus, the overarching implication is that distance education cannot fulfill its transformative promise unless restructured through a gender-sensitive lens. Equity in distance education requires open access and the active dismantling of social, economic, and technological barriers that inhibit female learners' full and meaningful participation. Liberal feminism offers a critical framework for reimagining ODL in ways that advance both gender justice and educational inclusion.

Conclusion

This study concludes that Open and Distance Learning (ODL) remains a viable pathway for enabling female learners to pursue education while balancing family and work responsibilities. However, the persistent bottlenecks identified in this study, ranging from cultural expectations to economic and technological barriers, must be strategically addressed to enhance access and success for women in ODL programmes. Grounded in the principles of liberal feminism, which advocate for equal access to opportunities and institutional reforms to dismantle systemic discrimination, this study proposes several actionable recommendations. ODL institutions should adopt and implement gender-responsive policies that directly address the challenges faced by female learners, such as flexible learning schedules, maternal leave provisions, and academic accommodations for pregnant and parenting students. Governments and educational institutions should introduce targeted scholarships, fee waivers, and grant programmes to reduce financial barriers, particularly for single mothers and learners from low-income backgrounds. Furthermore, given the centrality of ICT in ODL, institutions should provide compulsory digital literacy training for female learners and expand access to mobile-compatible platforms and offline resources for students in remote or underserved areas.

Several areas merit continued scholarly investigation to inform effective policy and practice further. Future research should explore the long-term educational trajectories of women in ODL programmes to identify key turning points, coping mechanisms, and dropout factors across different sociocultural contexts. Empirical studies assessing the effectiveness of gender-sensitive interventions, such as mentorship programmes, digital skills training, and flexible learning models, on women's academic achievement in ODL are essential. Additionally, comparative research across diverse institutions and cultural environments could yield valuable insights into best practices, innovations, and persistent challenges in promoting gender equity in distance education.

References

- Abimbola, A. E., Omolara, O. O., & Fatimah, Y. T. (2015). Assessing the impact of open and distance learning (ODL) in enhancing the status of women in Lagos State. *Procedia-Social and Behavioral Sciences*. 174 (1) 1512-1520.
- Anney, V. A. (2014). Ensuring the quality of the findings on qualitative research: Looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERPS)*, 5(2), 272-281.
- Anasel, M. G., & Swai, I. L. (2023). Factors to determine the adoption of online teaching in Tanzania's Universities during the COVID-19 pandemic. *PLOS One*, 18(10), e0292065. <https://doi.org/10.1371/journal.pone.0292065>.
- Ariwijaya, T., & Ningsih, L. F. Y. (2020). Adult learners' barriers of learning: the world of married women. *COUNS-EDU: The International Journal of Counselling and Education*, 5(2), 81-86.
- Atriza, U; Hamidah, M & Norazzila, S (2023). Factors influencing the enrolment of female learners in Open Distance Learning (ODL) Programmes at the Open University of Malaysia (OUM). *ANP Journal of Social Sciences and Humanities*, 4 (2)24–31.
- Balancing Act Research Group. (2021). A phenomenological study of female adult learners balancing family, work, and graduate studies. *Graduate Education Quarterly*, 14(3), 210–225.
- Braun, V. & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101. <http://dx.doi.org/10.1191/1478088706qp063oa>
- Bulugu, P. P., & Nkebukwa, L. (2024). The adoption and use of digital literacy programmes in selected tertiary institutions of Tanzania. *Indonesian Journal of Social Research*, 6(1), 24–31.

- Chawinga, W. D., & Zozie, P. A. (2016). Increasing access to higher education through open and distance learning: Empirical findings from Mzuzu University, of *Research in Open and Distributed Learning*, 17, 1-20 <https://doi.org/10.19173/irrodl.v17i4.2409>
- Cohen, L., Manion, L., & Morrison, K. (2011.). *Research Methods in education*: London: Routledge.
- Creswell. J. W. (2014). *Research design: Qualitative, quantitative and Mixed method approaches*. (4th ed). SAGE Publications Inc.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Sage.
- Deuri, R. & Gogoi, D. (2025). Women's empowerment through ODL in Assam: A pathway to achieving SDG 4 and SDG 5. *International Journal of Research and Innovation in Social Sciences*, 9, special Issue, 1501- 1508.
- Furnborough, C. (2012). Making the most of others: Autonomous independence in Adult beginner distance language learners. *Distance Education*, 33(1), 99-116.
- Galusha, J. M. (2012). Barriers to learning in Distance Education. Information Analyses, University of Southern Mississippi <http://www.infrastruction.com/barrier.htm>
- Gudhlanga, E. S., Magadza, S. N., & Mafa, O. (2012.). Challenges and Opportunities for Women Participating in Open and Distance Learning at the Zimbabwe Open University: A Case of Matebele land North and Bulawayo Region. *International Woman Online Journal of Distance Education*, 1(1), 35-47.
- Haleema, A., Javaida, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3(275-285).
- Holmberg, B. (1986). *Growth and Structure of Distance Education*. Croon Helm.
- Karisa, E. & Mwikamba, G. (2024). Effects of Gender Roles on the Education of Pupils in Ewuaso Kedong Division of Kajiado County. *The Strategic Journal of Business & Change Management*, 11 (4),1367 – 1376.
- Keegan, D. (1988). Problems in Defining the Field of Distance Education. *The American Journal of Distance Education*, 2(2), 4-11.
- Kumar, A., & Singh, R. (2018). Financial barriers to women's participation in open distance learning in India. *International Review of Education*, 64(4), 531–547.
- Laterza, E., Salvatore, L., & Fanizza, G. (2020). *Digital distance learning: a question of flexibility in time and space? New Journal of Distance Learning*, 18(2), 75–89.

- Magwa, W., & Magwa, S. (2015). Re-thinking Ethical Issues in Academic Research: Perspectives in Zimbabwe. *International Advanced Journal of Teaching and Learning*, 1(2), 7-16.
- Masih, A. & Denis, N. (2021). Online Distance Learning and its Impact on Women Empowerment in India. *Journal of Emerging Technologies and Innovative Research*, 8(8), 298-305.
- Maxwell, J. A. & Chmiel, M. (2014) Generalization in and from qualitative analysis. In: Flick, U. (Ed) *The SAGE Handbook of Qualitative Data Analysis*, SAGE Publications Inc. 540-553.
<https://doi.org/10.4135/9781446282243.n37>
- Mbega, D. (2017). Barriers to women's participation in diploma ODL programmes in Morogoro. *Tanzanian Journal of Adult Education*, 10(1), 22–38.
- Mbunda, N. D. (2022). Open and Distance Learning among Female Students in Tanzania: Empirical Voices from Learners at the Institute of Adult Education. *European Journal of Research and Reflection in Educational Sciences*, 10 (3), 37-45.
- Mill, J. S. (1869). The subjection of women. Longmans, Green, Reader, and Dyer. <https://doi.org/10.1037/12288-000>.
- Mukuni, J. (2019). Challenges of educational digital infrastructure in Africa: A tale of hope and disillusionment. *Journal of African Studies and Development*, 11(5)59-63.
- Msuya, E., & Temu, A. (2019). Financial constraints and dropout rates among female ODL learners in Tanzania. *Journal of Educational Finance*, 45(3), 112–129.
- Ncube, D., & Mudau, T. J. (2016). Assessing the challenges faced by female students in open and distance learning (ODL) institutions: A case of the Zimbabwe open university (Matabeleland south region). *Global journal of advanced research*, 3(10), 958 - 969.
- Njihia, M., Mwaniki, E. W., Ileri, A. K., & Chege, F. (2016). Uptake of Open Distance and E-Learning: A Case of Kenyatta University, Kenya. A conference Paper.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *The International Journal of Qualitative Methods*, 16(1), 1-13.
- Ochieng, W., Njoroge, P., & Kamau, J. (2019). Time management challenges among female distance learners in Kenya. *African Journal of Open and Distance Learning*, 5(2), 99–118.
- Padilla-Diaz, M. (2015). Phenomenology in Educational Qualitative Research: Philosophy as Science or Philosophical Science? *International Journal of Educational Excellence*, 1(2), 101-110.

- Pasque, P. A., & Nicholson, S. E. (2023). *Empowering Women in Higher Education and Student Affairs: Theory, Research, Narratives, and Practice from Feminist Perspectives*. Routledge.
- Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods* (3rd ed.). Sage.
- Peter, H. (2017). The Role of Open and Distance Learning (ODL) In Promoting Gender Balance: A Case of the Open University of Tanzania. Master's Dissertation in Open and Distance Learning. The Open University of Tanzania.
- Rabourn, K., BrckaLorenz, A., & Xu, Y. J. (2018). Barriers and facilitators in online adult learning: retention factors and the role of gender. *Journal of Online Education*, 5(1), 30–47.
- Ray, S. (2019). Women Empowerment through Open and Distance Learning in India. *Scholarly Research Journal for Interdisciplinary Studies*, 6(49), 11796-11802.
- Rumble, G. (1986). *The Distance Teaching Universities*. Coom Helm.
- Shekar, C. (2023). The Role of Open and Distance Learning in Gender Equality and Women Empowerment in India. *Revista electronica de veteriniria*. 24 (2), 580-585.
- Singh, A. S., & Masuku, M. B. (2014). Sampling Techniques and Determination of Sample Size in Applied Statistics Research: An Overview. *International Journal of Economics, Commerce and Management*, 2(11), 1-22.
- Suri, H. (2011). Purposeful Sampling in Qualitative Research Synthesis. *Qualitative Research Journal*, 11, 63-75.
- Swai, E. V. (2010). *Beyond Women's Empowerment in Africa Exploring Dislocation and Agency*. Palgrave MacMillan Press.
- Ukaigwe, J.A; Liadi, H.O; Ezeanya, C.U & Olaniyi, O. M. (2025). Exploring the role of open and distance education in empowering women technological skills in Nigeria. *African Journal of Science, Technology, Innovation and Development*, 1-10. <https://doi.org/10.1080/20421338.2025.2474892>
- Winfield, C., Hughes, K., & Huffman, J. (2023). Non-traditional adult learners after COVID-19: applying national standards for online teaching in human service education. *Journal of Human Services*, 42(2), 58–72.
- Wollstonecraft, M. A. (1995). *Vindication of the Rights of Men and A Vindication of the Rights of Woman*. Ed. Sylvana Tomaselli. Cambridge University Press.
- .

Barriers to Girls' Access and Participation in Secondary Education: A Case Study of Agro-Pastoral Communities in Tarime District, Tanzania

Bhoke K. Kiranga & Abdallah Jacob Seni

Department of Educational Foundations and Continuing Education
The University of Dodoma

*Corresponding Author: ajseni@gmail.com

<https://orcid.org/0000-0003-0904-5267>

Abstract

This article explores the various bottlenecks that girls in agro-pastoral communities encounter in accessing and participating in secondary education. It examines gender disparities in enrolment within the sampled schools to highlight issues related to gender equity. A qualitative research approach was employed, using a case study design to allow for in-depth exploration of the contextual challenges. Purposive sampling was used to select 30 participants, comprising fourteen (14) female students, fourteen (14) teachers, and two (2) Heads of Schools. Interview, FGD and Documentary reviews were used as methods of data collection. Data were analysed using thematic analysis. The findings revealed that girls' access to secondary education was low compared to boys. There were 257 girls (44.9%) compared to 315 boys (55.1%), showing a difference of 58 students (10.1%). As per respective schools, the enrolment stood at 170 (45.9%) girls compared to 200 (54.1%) boys in school A indicating a disparity of 30 (8.1%) students. School B had 87 girls (43.1%) and 115 (56.9%) boys indicating a disparity of 28 (13.8%) students. Furthermore, girls faced a range of challenges that hindered their participation in secondary education. These included the burden of domestic chores, long distances between home and school, early marriage and pregnancies, and entrenched cultural practices that disadvantage girls. Establishing schools within a five-kilometre radius of communities could significantly reduce travel burdens and help mitigate many of these barriers. Equally important is the implementation of structured mentorship programmes aimed at empowering girls and supporting their academic progress. In this context, actionable measures such as strategic government partnerships with NGOs and sustained policy advocacy are essential. Such initiatives can support the transformation of community attitudes, promote gender parity, and ensure equitable access to education. Future research may consider examining the effectiveness of community-based interventions in dismantling cultural barriers that restrict girls' educational opportunities.

Keywords: Bottlenecks, girls' education, secondary education, pastoral communities

Introduction

Education is one of the most powerful instruments for reducing poverty and inequality and for laying the foundation for sustainable economic growth globally. It prominently features in global indicators for evaluating national development, including the components of the United Nations' Human Development Index (Agbaire, 2020). Educating girls has enormous social and economic returns and is widely recognised as a key driver of national development across all sectors. Following the relative success in the universalisation of primary education, as reflected in Millennium Development Goal (MDG) 2, there is a pressing need to replicate similar commitments to ensure girls' access to and participation in secondary education. This aligns with Millennium Development Goal 3, which sought to promote gender equality and empower women. Target 3A focused on eliminating gender disparity in primary and secondary education by 2015. The Sustainable Development Goals (SDGs) have replaced the MDGs and represent the current global agenda through 2030.

The SDGs aim to ensure that all girls and boys complete free, equitable, and quality primary and secondary education, as outlined in Goals 3 and 4 (UN, 2018). Despite global and national efforts to promote gender equality in education, girls in agro-pastoral communities in Tanzania continue to encounter significant barriers to accessing and participating in secondary education. Consequently, the commendable goals of broadening access, improving retention, and enhancing participation for girls have yet to be fully realised. Feminist scholars have consistently identified the challenges in accessing secondary education as a consequence of the systemic marginalisation of girls. While numerous initiatives have been undertaken to improve girls' access and participation, a substantial gender gap persists, with girls continuing to lag behind their male counterpart (UNICEF, 2015; Somani, 2017).

In Sub-Saharan Africa, it is estimated that 15 million girls between the ages of 6 and 17 are not attending school (World Bank, 2020). Furthermore, it has been reported that in Africa, only 76 girls are enrolled in secondary school for every 100 boys. Out of the girls who start school, only 36% successfully complete the full schooling cycle (UNICEF, 2020). Furthermore, girls continue to face severe disadvantage and exclusion in education systems throughout their lives.

Seni (2013) asserts that historically, traditional African education systems reinforced gender-based roles and inequalities. During the colonial era in Tanzania as in many other African countries boys enjoyed greater access to education and resources. Colonial education was discriminatory and

privilege-based, primarily benefiting a select few, particularly the sons of influential families. In contrast, girls were largely sidelined in the educational system; even the daughters of chiefs were frequently denied access to formal schooling. Alienation of parents' preferences for boys more than girls in educational matters persisted in the past and has continued to persist even today especially in rural areas. Additionally, it is observed that boys have wider opportunities after leaving school than girls whose courses are limited to teaching and nursing. Some are even left out. However, it is widely acknowledged that domestic responsibilities significantly hinder girls' education. In particular, older girls within families are often at a disadvantage, as they are expected to care for younger siblings and contribute to household chores. The presence of younger siblings typically increases the burden of domestic work for girls, thereby limiting their ability to attend school regularly. These responsibilities frequently lead to absenteeism, which undermines girls' full and active participation in their education. The gaps in the access to education between men and women occurs in many societies. Various efforts have been made to eliminate such gaps and bring equality to both genders.

Ennaji (2018) asserts that different treaties and declarations have been introduced to reduce the existing gap. The International Bill of Human Rights has consistently advocated for gender equality through various global instruments and conferences. Notably, this includes the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) (1979), which calls for the eradication of gender-based discrimination and the promotion of equal rights for women and girls in all spheres, including education (1979) and the Convention on the Rights of the Child (1989), both of which affirm the right to education and gender equality. Furthermore, the Declaration of Jomtien, the Dakar Framework for Action, and, more recently, the Sustainable Development Goals (SDGs) all reflect a shared global commitment to promoting children's welfare, improving access to education, and enhancing its quality. Both developed and developing countries have acknowledged the critical importance of girls' education. Nevertheless, societal preferences that prioritise the education of boys continue to persist, despite ongoing efforts to achieve educational equality. In previous years, a major concern in education was the underperformance of girls in mathematics and science subject. Over the years progress has been made in improving access to education. It is important to emphasize that there is no inherent disadvantage in educating girls. However various cultural and economic constraints have historically limited their educational opportunities. The reports from the President's Office – Regional Administration and Local Government (PO-RALG) for 2017, 2018, and 2019 indicate a steady increase

in secondary school enrolment for both girls and boys in Tarime District. Table 1 illustrates the enrolment trends over the past three years.

Table 1
Students' Enrolment in Secondary Schools by Sex in Tarime

Year	Male	Female	Total
2019	7,963	6,346	14,309
2018	3,662	2,563	6,224
2017	3,138	2,190	5, 328
Total	14,762	11,099	25,861

Source: URT (2017, 2018, 2019).

From Table 1 it is noted that despite the general increase in secondary school enrolment in Tarime there remains a significant gap between the number of enrolled girls and that of enrolled boys in the district. In recent years the government has undertaken significant measures to enhance educational access by establishing schools in remote regions and renovating older institutions. Although these efforts have contributed to increased overall enrolment, the participation of girls continues to lag behind that of boys highlighting persistent gender disparities in education access. Idriss (2011) reports that the contradiction of educating girls in pastoralist society results to lower enrolment, retention, completion and achievement rates compared to boys within the communities. On the other hand, Mtey (2020); Senga (2024); and Malipula 2024 report that the major barriers to education access are rooted in cultural practices along with parents' perceptions attitudes and family academic backgrounds regarding the education of the girl child. These factors collectively contribute to the continued lag of females behind males in educational attainment.

The issue of gender inequality is historical and has persisted before, during, and after the colonial period. In an effort to ensure that girls are afforded the opportunity to access education, the World Conference on Education for All (EFA), held in Jomtien, Thailand, emphasised the adoption of complementary and supplementary programmes for marginalised groups who were unable to access education through the traditional system (UN, 1990). The Constitution of the United Republic of Tanzania, adopted in 1977 and subsequently amended, recognises the right to education. According to Article 11, every person has the right to access education, and every citizen shall be free to pursue education in a field suited to their merit and ability (URT, 1977). The Ministry of Education, through the Education Act of 1978 as well as the Education and Training Policies (ETP) of 1995 and 2014, outlines the vision, mission, and objectives of education, including directives

on key educational matters such as the “compulsory enrolment and attendance” of both girls and boys. However, if the barriers to secondary education for girls within pastoralist communities persist, this may lead to adverse outcomes, including the continued marginalisation of girls in education and an imbalance in present and future sociocultural livelihoods. Notably, while most existing research has concentrated on nomadic pastoral communities, this study fills an important gap by focusing specifically on agro-pastoral communities, which present unique socioeconomic and cultural factors influencing girls' education.

The study, therefore aims to address the issue of girls' access to secondary education within agro-pastoral communities by focusing on three key objectives. Firstly, it seeks to examine the enrolment status of girls in secondary schools, with attention to current trends, disparities, and patterns. Secondly, it aims to identify the barriers that hinder girls' access to and participation in secondary education, including sociocultural, economic, and institutional challenges. Thirdly, the study intends to propose practical and context-specific recommendations to address these challenges and enhance educational opportunities for girls.

The findings of this study are expected to benefit a range of stakeholders, including teachers, policymakers, parents, and students. For teachers, the study offers insights into how to effectively address gender issues within the educational context, equipping them with strategies to promote gender equity in the classroom. For parents, the findings serve to deepen their understanding of the importance of educating girls, while also reinforcing the principle that all children regardless of gender have an equal right to education. Policymakers will gain a clearer picture of the specific challenges girls face in accessing education within pastoral societies, which can inform the development of more inclusive and responsive educational policies. Furthermore, the research contributes to the broader body of literature on girls' access to education, particularly within agro-pastoral contexts, helping to fill existing knowledge gaps and guide future studies.

Theoretical Framework

This study was guided by sociocultural theory developed by Lev Vygotsky in 1896-1934. Sociocultural theory explores the influence of society on individual development, emphasising the role of social interaction, collective problem-solving, social structures, divisions, and cultural traditions in shaping human behaviour and cognition. Based on the theory, it is believed that parents, caregivers and the culture of a given society play an important role in developing an individual (Lukuwi & Seni, 2022; Kamanzi & Seni, 2024). The sociocultural theory not only focuses on how adults and peers

influence individual learning, but also on how cultural beliefs and attitudes affect instruction and learning. According to Vygotsky (1978), children are born with basic biological constraints in their minds that is adaptive to the culture in which they live. This means that every culture offers the child the tools that help them structure their fundamental cognitive skills to the environment. For Vygotsky, the environment and society in which a child grows up has a major influence on what and how they think and perceive matters.

The sociocultural theory is founded on two main principles. First, is the concept of the more knowledgeable other (MKO) an individual who possesses a greater understanding or higher level of skill than the learner. In the context of society, this MKO may be a teacher, parent, or any adult figure. The second principle is the Zone of Proximal Development (ZPD), which refers to the gap between what a learner can accomplish independently and what they can achieve with appropriate support and guidance. This concept underscores the importance of guided learning and the potential for development through social interaction. Sociocultural theory places strong emphasis on how social and cultural factors shape individual development, highlighting that cognitive growth is influenced not only by personal capabilities but also by the social environment and cultural context. Although originally developed with young children in mind, the theory remains highly relevant to secondary school students, particularly in relation to cultural practices and their influence on education. In agro-pastoral communities, for instance, students are often surrounded by adults who uphold strong cultural traditions, which can significantly affect learners' educational experiences and outcomes by shaping their attitudes, expectations, and engagement with schooling.

Accordingly, this study analysed how community practices regarding girls' access to schooling and their participation in educational processes are shaped by cultural norms, values, and social relations involving the girl child, through the lens of sociocultural theory. Since one of the major assumptions of the theory is the connection and influence that culture plays on an individual, the relationship of these principles is pertinent in understanding how the society encourages or discourages girls from accessing and participating in secondary education with a view to propose actionable policy and practice recommendations. This theoretical framework informed the formulation of the research questions and guided the selection of appropriate data collection methods aimed at generating evidence to address those questions. It also informed the subsequent analysis and discussion of the findings through highlighting the major tenets of the theory.

It should be noted that, the right to education for all is enshrined in several international frameworks, including the United Nations Convention on the Rights of the Child and the United Nations Convention on the Elimination of all forms of discrimination against Women. Sustainable Development Goal (SDG) 4 emphasises inclusive and equitable quality education for all, while SDG 5 focuses on achieving gender equality and empowering women and girls. Moreover, access to quality education plays a critical role in advancing several other SDGs. Specifically, education enhances employment opportunities (SDG 8), helps to break the cycle of poverty (SDG 1), contributes to reducing inequalities (SDG 10), and supports improvements in health (SDG 3) and nutrition (SDG 2). Thus, promoting girls' access to education is not only a matter of equity but also a strategic investment in sustainable development.

State Parties to these Conventions have an obligation to guarantee the realisation of the right to education for all, and to ensure that boys and girls are treated equally in accessing this right. As a result of sustained global efforts, significant progress has been made in narrowing the gender gap in education during this century. Gender equality and universal education have been identified as key priorities within the Millennium Development Goals (MDGs) and the subsequent Sustainable Development Goals (SDGs), recognising their critical role in promoting equity in education. However, female students are still constrained with societal reasons; hence making them fail to progress in education in several sub-Saharan African and South Asian countries (UNICEF, 2020). One of the primary contributors to educational inequality in these countries is the gender-based division of family roles.

In many developing contexts, domestic responsibilities such as cooking, cleaning, washing, child-rearing, and fetching water are typically assigned to women and girls. These expectations place a disproportionate burden on girls, often limiting their time and opportunities to attend school or engage fully in learning activities (Dhital *et al.*, 2021). The widespread practice of assigning household chores to girls in pastoral communities, including those in Tanzania, reinforces the findings of Dhital *et al.* (2021) who highlight the impact of domestic responsibilities on girls' access to and participation in education. In Tanzania, the Constitution of the United Republic of Tanzania in particular Article 13 contains a comprehensive non-discrimination clause. Also, the Law of the Child Act of 2009, particularly Article 5 prohibits discrimination against children. Similarly, the Law of the Child Act prohibits female genital mutilation and Act No.4 of Sexual Offence (Special Provision) Act of 1998 is also contrary to FGM. Despite all these legal and policy commitments that have been emphasised overtime, challenges in girls' access

to and participation in education persist, underscoring the ongoing prevalence of gender disparities in secondary schools—including among agro-pastoral communities.

One of the major question this study asks is, why focus on girls' education among agro- pastoral communities? The argument is that, pastoral communities which are divided into the nomadic, semi-nomadic, or sedentary communities are marginalised minority. The nomadic pastoralists in Tanzania are Maasai tribe who occupy the Ngorongoro, Monduli, Simanjiro, Arumeru, Arusha and Longido districts. They also occupy parts of Tanga region (Mkomazi) and Coast region in Bagamoyo district (Chalinze). Currently, some Maasai are also found in Morogoro, Mbeya and Iringa regions (Olekambainei, 2013). The Kurya are sedentary pastoralists residing in the Tarime District and are best characterised as agro-pastoralists, as they engage in both farming and livestock rearing. In contrast, the groups typically considered to be “pure” pastoral communities in Tanzania include the Maasai, the Ilparakuyo (also known as the Baraguyu), the Wakwavi (or Kwavi), and the Datoga of whom the Barbaig represent the largest subgroup. Notably, the Kurya, along with the Maasai, Baraguyu, Sandawe, Wakwavi, and Datoga, are all male-dominated societies where men are the primary decision-makers, a dynamic that significantly influences gender roles and access to resources, including education (Mtey, 2020; Senga, 2024 and Malipula, 2024). On the other hand, women in these societies have limited or no voice in decision-making processes, do not typically own assets, and consequently have minimal influence over key family decisions such as whether or not to send their daughters to school (Senga, 2024). The implication of having male dominance in the agro-pastoral communities and pastorals at large, is important in understanding the root cause of boys' preferences at the expense of girls on education among the Kurya in particular.

Agro-pastorals have been regarded as one of the powerless and marginal segments of society, the need to manage overgrazing and overstocking by controlling pastoral activities through education (Mtey, 2020; Senga, 2024 and Malipula, 2024). Similarly, their direct contribution to food production call for a need to educate them so that they can produce more. To this effect, the lack of education among agro-pastoral remains to be a concern to all nations, developed or underdeveloped (Mfum-Mensah, 2023). This paper builds on the understanding that the agro-pastoral societies such as the Kurya are one of the communities which require intervention as far as girls' education is concerned. The paper however, differs from others as it concerns an agro pastoral rather than purely pastoral communities (Mtey, 2020; Senga, 2024 & Malipula, 2024).

Girls in agro-pastoral communities are subject to a more puzzling situation than boys due to marginalisation on gender grounds and as members of pastoralist communities. As a result, they have limited opportunity to undertake formal education, thus resulting in high rates of illiteracy and low rates of enrolment. They also have low retention and completion rates at all levels of education compared with boys. Investing on their education may capacitate them to realise their fullest potential. While the rationales for educating children and girls among the agro-pastoral communities are vivid, there remains a contradiction in pronouncements and what is on the ground. Girls in these societies continue to face denial of their right to enrol and survive in secondary education in the names of culture, long distance and so forth.

Common barriers to girls' secondary education access entail early marriage, early childbearing, distance to school, security concerns (school related gender-based violence), cultural values, schooling costs, opportunity costs, negative experience of schooling, menstrual hygiene management and labour market participation (UNICEF, 2014). Boru (2020) conducted a study on Education for Borena Pastoralist Community Children in Ethiopia with a focus to Practices and Challenges. Boru (2020) found out that not all children in the households of Agro-pastoralists were sent to school. Furthermore, herding, culture, and respecting elders were the core contents of informal family education and every child was expected to embrace. It appears that the Agro- pastoral communities have deep rooted culture, as a fundamental aspect and so tough to break or transform.

Glick and Sahn (2016) carried out a study on schooling of girls and boys in West Africa with a focus on the effects of parental education, income and household structure. The study found that there was gender bias or pro-male bias in case of parental investment in children. Parents' preference for sons was found to encourage more of them to invest in their sons' education and other entitlements with a hope of taking care of parents in the future. In fact, parental gender bias investment occurs particularly when parents have limited or lower income and resource, thus making girls to leave school earlier than boys. This is to say that, there is a correlation between a family's financial strength and the likelihood of the daughter's dropout of school.

Furthermore, in Northern Nigeria, Williams (2016) revealed religious misinterpretation, cultural practice, poverty, early marriage, illiteracy, and inadequate school infrastructure as some of the factors militating against girl-child education. Likewise, majority of the parents pointed out that girl-child education was less important because no matter what level of education the girl attained, their hope was to see the girl-child get married. The gender or

pro-male bias on parental investment in children's education is critical in shedding light on the explanation of the existence of impediments in the access to secondary education pointed out in this paper. However, the focus on parental education, income and household structure are not akin to the focus of this paper is to holistically look at the bottlenecks to accessibility of secondary education among girls.

Coleman (2017) conducted research on gender and education in Guinea with a focus to accessibility and maintaining girls in school. She found that culture norms influence parents to keep their female children home from school. Issues such as teen marriage, gender-based violence, funding, and infrastructure were highlighted as impediments to girls' access to education (Coleman, 2017). Despite the fact that the findings by Coleman focused on girls in Guinea generally, they provide a foundation for enquiry on the bottlenecks to girls' education among the agro-pastoral Kurya of Tarime who embrace their culture like other agro-pastoral societies in Africa.

Similarly, Somani (2017) in a study on the importance of educating girls for the overall development of society, identified several global factors contributing to limited awareness about the value of girls' education. These included illiteracy and ignorance, sociocultural beliefs and gender stereotypes, conservative mindsets, misinterpretations of religion, lack of political will and effective advocacy, poverty, limited internet access, absence of female role models and leaders, and the lack of relevant, quality education. Moreover, Somani's findings emphasise the role of culture as a critical factor influencing children's education, particularly that of girls, thereby reinforcing the significance of addressing cultural barriers in efforts to improve educational access.

Despite steady progress being made towards universal access, transition and completion of education for all children in Tanzania at pre and primary levels, there remain considerable inequalities in the participation of girls, particularly at secondary education. Gender roles in the society are socially constructed and the girl child is expected to help in the household work more than the boy child. This limits her time to do school work leading to poor performance. Irresponsible sexual behaviour and harassment of the girls have been reported by a large body of literature to influence girl-child access to education. Research on girl's education and behaviour in Tanzania reveal that Parental level of education influence academic performance of girls, parents with little or no education are always against education and do not enrol them in secondary schools and that teenagers on the streets, in schools, and those whose parents consent to early marriages are prone to indulge in

risky sexual behaviours that could expose them to sexual harassment and abuse (Benedictom *et al.*, 2020; Millanzi *et al.*, 2023).

Family size is also noted as another determinant of girl child access to education. Girls who live with their biological parents are disciplined and have better chances of schooling compared to those who are orphans or living with one parent (Benedictom *et al.*, 2020). Extended families are regarded as a symbol of prestige among the pastorals leading to existence of incapacity to meet all school requirements to all children causing preference of sending boys to school and segregating girls (Senga *et al.*, 2024; Mumin *et al.*, 2023). The argument that girls who get pregnant are expelled from school and the pregnancy is considered to be the girl's fault is inconsistent to appreciation that girls endure a hurdle amidst deep rooted culture of preference for dowry and the long distance from home to school. It also demonstrates a lack of acknowledgement of re-entry programmes to girls who happen to be pregnant. Again, domestic duties for teachers at school and at home, such as fetching water, reinforce gender stereotypes and consume a substantial portion of their time for studying. Literature on girls' education seem to look at challenges impeding girls from accessing and participating in education (Gyawali & Maharjan, 2022; Benedictom *et al.*, 2020) generally, with less particular focus on girls from the agro pastoral communities as focused in this paper.

Cultural Barriers

Ndibalema (2022) used a documentary review to research on a paradox in the accessibility of basic education among minority pastoralist communities in Tanzania. His findings indicated that inappropriate cultural values among parents in pastoralist communities, long distance to school and inappropriate learning environments were some of the inhibitive factors influencing inequalities in accessing basic education in pastoralist communities in the country. Despite the fact that this study looked at girls' education among pastoral communities, the study by Ndibalema had less focus on agro-pastoral communities, in particular the Kurya of Tarime district.

Akweso (2020) researched on factors hindering the Barbaig girls in completion of secondary education focusing Hanang' District as a case. The study particularly examined stakeholders' perceptions concerning girls' education. It also explored the level of girls' participation in secondary education amongst Barbaig community and the challenges facing public efforts towards promotion of girls' education among pastoral communities. Akweso (2020) found that there were mixed perceptions among pastoral community members regarding girls' education. The study revealed also that

girls' participation in pastoral communities was still low although there were indications of slight increase in their number.

The presence of mixed perceptions regarding girls' access to secondary education, suggest a pertinent need for an awareness creation regarding the benefits of sending a girl child to school as it is the case for their counterpart boys. Using quantitative and a cross-sectional research design, Senga *et al.* (2024) researched on girls' access to secondary school education in the Barbaig pastoral community in Hanang District, Manyara Region of Tanzania. Their study revealed that shortage of girls' facilities and services in schools, families' low socioeconomic status, and harmful gender norms, traditions, and practices; were among the challenges facing girls in accessing education. However, the Barbaig as it is for the Maasai pastoral communities, are nomads who could move with their cattle in search of pasture. On the contrary, the Kurya are rather agro-pastoralists who live mainly in Tarime district. Fundamentally, these groups of pastoral communities although they have aspects in common but they vary significantly too. All in all, it seems culture takes a lion share in explaining the denial of schooling among girls in these societies requiring more attention by educational stakeholders.

Olekambainei (2013) researched on Maasai Girls's access to secondary education in Ngorongoro District in Tanzania. Using mixed method, the study revealed that poverty, culture, initiation of rites, early marriage, and long distances to school, and harsh environment as the hindrances that were impeding Masai girls in accessing secondary education. Employing an interpretivist qualitative approach; Pesambili (2020) explored the responses to and perspectives on formal education among the Maasai pastoralists in Monduli, Tanzania. Pesambili (2020) found positive, negative and complementary (coexistence of both) responses regarding formal education of Maasai girls. Negative response to formal education was echoed by preference to a traditional education as it was viewed as capable of equipping them with the knowledge and skills essential for their survival within the pastoral economy. Raymond (2021) used ethnographic approach to study girls' participation in formal education with a focus on Maasai pastoralists in Tanzania and found that there were positive and negative views with regard to girls' schooling. It was revealed that Maasai girls loved schooling but they were hampered by the home and school environments including long distance from home to school and back home. Again, one could establish a trend with culture and long distance from home to school emerging as more pronounced stumbling blocks towards realization of universalising education in the context of agro-pastoral communities.

Mtey (2020) researched on the contribution of power dynamics and women's perceptions to girls' education among pastoral communities in Tanzania with a focus on Maasai as a case. The study by Mtey adopted qualitative research approach and a case study design. The findings revealed that there was a huge difference between men and women among Maasai community members on issues relating to power, decision making, ownership of property and identity all of which affected girls' education. Women could not decide to send their girl children to school due to deformed imbalance in power despite the fact that women had positive attitudes and perceptions towards educating girls. The contribution of power dynamics on child learning aligns to the SCT which puts emphasis on the importance and power of adults, knowledgeable and more capable. In contrast, the SCT, takes the power of an adult and teacher as positively important in guiding learners. All, in all, if these powers are not there, or are used negatively, they are likely to impair the learning of students. Unlike studies by Akweso (2020) and Senga *et al.* (2024) who focused on the Barbaig pastoral community, Olekambaini (2013), Pesambili (2020) and Mtey (2020) who focused on the Maasai; On the contrary, the Kurya are rather agro-pastoralists who live mainly in Tarime district. Fundamentally, these groups of pastoral communities have aspects in common, but they vary significantly. With this perspective in mind, this study examined the enrolment status and impediments to the accessibility of secondary education among girls in agro-pastoral communities with a focus on Kurya of Tarime District.

Studies have focused on the girl-child education generally, girls' academic performance, pastoralists' communities and their effect on quality education, gender gap reduction, education and resolving conflicts in pastoralists, pastoral communities and girls' education, difference between girls' and boys' academic culture and importance of educating girls in mobile pastoralists such as the Maasai and the Datoga. However, little is known about the access to secondary education among girls in the Kurya agro-pastoral community, who are mainly stationed in one district, Tarime. Therefore, this study focused on filling the gap by researching the Kurya Agro-pastoral society on the hindrances in accessing secondary education among girls in Tanzania.

Methodology

This study used a qualitative research approach embedded with a case study design. The rationale for using the case study design was the need to capture in-depth information about the setbacks facing girls in access to secondary education in Tarime District in Mara region in Tanzania. Moreover, the case study allowed the researcher to investigate the issue in a natural setting (Creswell, 2018 & Creswell, 2012) as a qualitative approach enables the

researcher to collect information from the participants in their natural settings (Yin, 2009). This approach allowed a profound understanding of the challenges experienced by girls in enrolling and attending secondary education. The study was conducted in Tarime District, which, according to the reports from the President's Office – Regional Administration and Local Government (PO-RALG) for the years 2017, 2018, and 2019, had the lowest enrolment for girls in the three consecutive years. Tarime district consists of agro-pastoral communities that rely on agriculture and livestock as their economic activities. The cattle provide food, and most importantly, they are used for paying dowry. A total of 30 participants were sampled as indicated in Table 2.

Table 2
Distribution of the participants by gender and FGD/Interview groups, and Sessions

S/N	Participants Category	Involved Secondary school(s)	FGD /Interview & Participants		Gender		FDG/ Interview session Label
			FGD Number	Number of participants	Female	Male	
1	Student Girls	2	Group 1	7	14	0	A
			Group 2	7			B
2	Teachers	2	Group 3	7	8	6	C
			Group 4	7			D
3	Heads of Schools	2	Interview1	1	0	1	A
			Interview2	1	0	1	B
Total				30	22	8	

Source: Field Data, (2023)

Key: FGD = Focus Group Discussion

Sampling procedure: The study employed a non-probability sampling approach, involving non-random selection based on convenience and the diversity of wards. This method facilitated the effective collection of data relevant to the study's objectives. In addition, purposive sampling was used to identify key informants. Girls were selected as the primary participants; given that they were the main focus of the research. Head teachers and teachers were also included, as their sustained interactions with students particularly girls positioned them to offer valuable insights into enrolment patterns and the effectiveness of girls' participation in school. The final sample size of 30 participants was determined upon reaching data saturation.

Data collection methods: Data collection methods included interviews, focus group discussions (FGDs), and documentary reviews. The researcher conducted a total of four FGDs across two secondary schools, with each school hosting two FGDs. This arrangement allowed the researcher sufficient

time to facilitate the discussions effectively and to gather comprehensive and reliable information. The use of multiple FGDs also supported the triangulation of data, enhancing the credibility and depth of the findings. Ary, Jacobs, Irvine and Walker (2018) regard focus group discussions as a way of collecting data through interviewing a group in interactive way. This type of data collection is useful because it allows the respondents to share ideas on how girls access education freely through interacting with one another in the group discussion. The FGDs for students and teachers comprised of questions regarding the challenges encountered by students in attending and surviving within secondary education. Interviews with Heads of Schools focused on questions related to changes in enrolment status and proposed recommendations, with much of the data being corroborated through document analysis.

Unstructured interviews were employed to allow for in-depth exploration, given their flexibility in probing and capacity to generate rich, voluminous data. These interviews were conducted face-to-face with Heads of Schools and lasted between 45 and 60 minutes. Participants selected their own offices as the preferred venues, ensuring a comfortable and private environment. The interview guides were initially prepared in English and later translated into Kiswahili the lingua franca by two Kiswahili language experts who were lecturers in the Department of Kiswahili at a Tanzanian university. All interviews were conducted in Kiswahili to eliminate language barriers and reduce the risk of data distortion. The sessions were audio recorded using a voice recorder to ensure accurate capture of responses, and supplementary notes were taken to support the verbatim transcripts.

Additionally, documentary review was employed as a data collection method, focusing specifically on admission books and attendance registers. This method was used to triangulate data and reinforce the credibility and consistency of findings. To guide the document analysis, the researchers developed a documentary review checklist. Attendance registers were examined to identify trends in girls' school attendance, while admission books were reviewed to assess enrolment patterns. These documents were accessed through the Heads of Schools.

Trustworthiness, credibility and reliability of data collection were highly considered, in which the researchers conducted peer debriefing, member checking, sustained involvement, and triangulation of data collection methods. These are important characteristics in making sure that qualitative instruments are valid and reliable (Taherdoost, 2016). Data from multiple tools and in-depth information offered means to cultivate strong conclusions on the issues under investigation and strengthen the rigour of the paper.

Data analysis: Data analysis involved an iterative process of consolidating, reducing, interpreting, and abstracting the information provided by participants, with the aim of answering the research questions (Merriam, 2009). In this study, thematic analysis was employed as the method of data analysis, selected for its flexibility and suitability within qualitative research (Babbie, 2013). The process followed Braun and Clarke's (2006) six-phase approach: familiarising oneself with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and finally producing the report. Initial codes were identified using a word-based technique, whereby frequently occurring or repeated words were listed and imported into NVivo software. These words were then categorised based on shared meanings to form preliminary themes. Theme validation involved reviewing, refining, and developing these themes to ensure their relevance and alignment with the study's objectives and research questions (Braun & Clarke, 2006; Clarke & Braun, 2013). The researchers carefully examined written transcripts and audio recordings to identify key content pertinent to the study.

Ethical considerations: Ethical considerations were rigorously observed throughout the research process. Ethics, as defined by Grady (2010), refer to standards of conduct that distinguish between right and wrong. Prior to data collection, the researchers secured ethical clearance from the University of Dodoma and obtained research permits from the Tarime District Council. These permit letters were essential for formally introducing the researchers in the field and facilitating their work without disruptions. Anonymity and confidentiality were strictly maintained, in line with the guidance of Cohen, Manion, and Morrison (2007), who stress that participants' names should not be revealed. To achieve this, positions such as "student" or "head of school" were used to protect identities. Informed consent was obtained from all participants, who were provided with detailed explanations of the study's purpose and their rights. Consent forms were signed, and participants were assured of their freedom to withdraw from the study at any time, without consequence.

Results and Discussion

This section provides findings of the study as per respective study objectives. The study findings exhibit an interplay of challenges surrounding girls in the agro-pastoral communities. The deep-rooted cultural practices such as FGM are linked with teachings for girls as preparation of becoming future mothers. Such teachings often consume a lot of time and lead to educational challenges, including truancy, dropouts, early marriages and teenage pregnancies as they tend to instigate adult feelings before its due time. Similarly, research findings indicated that, boy child preference and deep-

rooted cultural value for dowry have rendered girls prone to failure of enrolling or completing school if at all enrolled.

Enrolment Status across Gender

The study sought to examine the enrolment status in the sampled secondary schools with a view to highlighting the equity issues. Documents review on admission books and attendance registers shed light on the issues under investigation as can be seen in the Table 3.

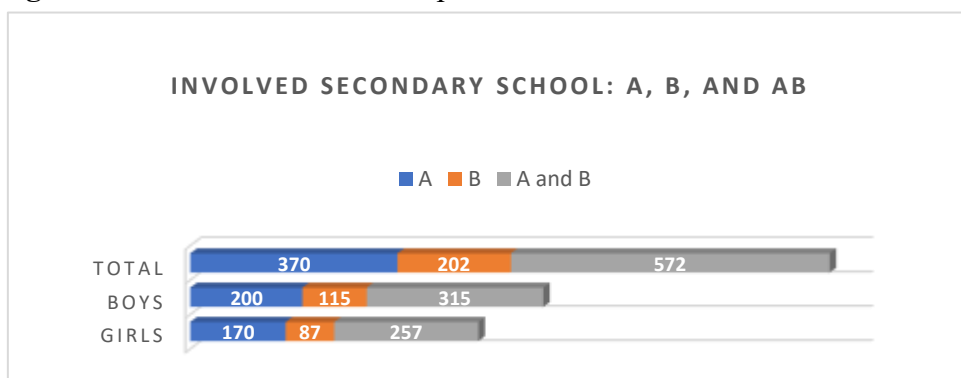
Table 3
Students' Enrolment across Gender as Per School Admission Books

S/N	Involved Secondary school(s)	Gender		Total
		Girls	Boys	
1	A	170	200	370
2	B	87	115	202
Total	A&B	257	315	572

Source: Field Data (2023)

Similarly, student enrolment in the sampled schools is presented in Figure 1, which visually supports and illustrates the key points discussed in this article.

Figure 1: Students' Enrolment as per Gender



Source: Field Data (2023)

The findings from the reviewed school admission books revealed a consistent gender disparity in enrolment across all sampled schools. Out of a total of 572 students, girls accounted for 257 (44.9%), while boys numbered 315 (55.1%). In School A, there were 170 (45.9%) girls and 200 (54.1%) boys, reflecting a gender gap of 30 students (8.1%). Similarly, School B had 87 (43.1%) girls compared to 115 (56.9%) boys, indicating a disparity of 28 students (13.8%). These findings demonstrate that gender parity in secondary school enrolment remains a challenge, with girls consistently lagging behind.

Similar patterns of educational inequality in pastoralist communities have been documented in various studies, including those by Olekambainei (2013), Coleman (2017), Akweso (2020), Gyawali and Maharjan (2022), Benedictom *et al.* (2020), Pesambili (2020), Mtey (2020), and Ndibalema (2022). While gender disparity has been reported in both nomadic and agro-pastoral communities, the findings of this study highlight variation based on educational level and the specific type of pastoral community examined.

Additionally, a review of attendance registers was conducted to assess girls' participation in school following enrolment. The analysis revealed issues of truancy among girls, with some having dropped out entirely. These findings underscore the persistent barriers affecting girls' sustained engagement with education. Detailed results from the documentary review of attendance registers are presented in Table 4.

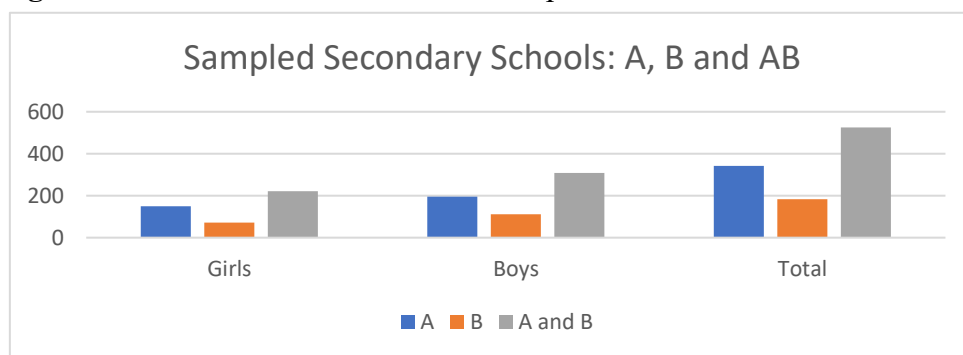
Table 4:
Students' Attendance across Gender as Per Attendance Registers

S/N	Sampled Secondary school(s)	Registered			Students
		Girls	Boys	Total	
1	A	150	196	342	
2	B	72	112	184	
Total	A&B	222	308	526	

Source: Field Data (2023)

In the same scenario, the data on students' attendance are illustrated in Figure 2 subsequently to portray a more vivid presentation for readers to follow the key issues raised in the paper.

Figure 2: Students' Attendance in the sampled schools



Source: Field Data, (2023)

The findings from the reviewed school attendance registers revealed a persistent gender disparity in school attendance across the sampled schools.

In total, girls accounted for 222 (42%) of the students, compared to 308 (58%) boys. In School A, 150 (43%) girls were recorded in attendance, as opposed to 196 (57%) boys reflecting a gender gap of 46 students (13.4%). Similarly, in School B, there were 72 (39.1%) girls and 112 (60.9%) boys, indicating a disparity of 40 students (21.7%). These attendance patterns confirm the trends identified in the admission books, which also indicated that girls were underrepresented in enrolment.

The low level of access to secondary education among agro-pastoral girls aligns with findings by Akweso (2020), who reported similarly low levels of participation in education among girls in pastoral communities. Moreover, these findings are consistent with those of Boru (2020), who highlighted significant barriers to school access among children from the Borena pastoralist community in Ethiopia, with girls particularly disadvantaged in terms of enrolment and attendance.

The Bottlenecks that Girls in Agro-Pastoral Communities Face in Access to Education Domestic cores

During the focus group discussions (FGDs) with girls in the sampled schools, it emerged that they were burdened with numerous domestic chores, including washing clothes, cooking, and performing other household responsibilities traditionally assigned to girls within their communities.

Commenting in relation to domestic chores, one of the participant students had these to say:

In the community that surrounds us, girls lead by having a lot of domestic chores. I do not mean to say that boys do not work. They have some works to do but the nature of their activities does not interfere with their schooling. Sometimes when I go to school my mind might not be attentive enough. This makes some of us opt for dropping out of school to get married or stay at home and look for another alternative (Student A in FGD).

On the other hand, one of the participant teachers had the following to say during FGD session:

While we were growing up, we were raised to believe that as a girl, one has to do domestic chores and FGM to enter into woman hood. We embraced this though currently it is not something to be proud of it. Girls require sufficient study time as it is for boys (FGD with teachers in School B).

These results are in harmony to those by Yara and Otieno (2010) who emphasised that learners from low socioeconomic status families tend to value domestic activities more than schooling. Girls are always burdened with household chores and looking after their siblings. The significant

amount of time student girls spends on domestic chores, often at the expense of their studies, raises important questions about the roles of other family members such as mothers or older sisters who are not in school and why they do not share these responsibilities to allow girls more time for academic engagement. This observation is not to suggest that girls should be exempt from domestic duties altogether, but rather that the extent of their involvement should be balanced in a way that does not compromise their educational opportunities and study time.

It also appears that some respondents in the study location even the knowledgeable ones like teachers were appreciating the fact that the cherishing of domestic chores and deep-rooted cultural practices such as FGM have a long history in the study location and thus it was hard to break. Moreover, there is unawareness that currently, one should not be proud of those practices as they are not consistent with various efforts to bring about equality to all, including girls' accessibility to secondary education. It could thus be said that, though majority of the study participants agree on the existence of deep-rooted cultural practices such as those of overburdening girls with domestic chores, there are variations on how they perceived the practices as some were looking at it as a preparation of girls for future responsible motherhood. Others, however, were looking at it as a deprivation of girls' time for study as opposed to their counterpart boys. While nomadic pastoralists differ slightly from agro-pastoralists in terms of economic activities and mobility patterns, both groups share notable commonalities—particularly in their adherence to gendered domestic roles, where girls are often overwhelmed with household responsibilities. The FGM is also universal in all the categories of pastoral communities.

Distance to school

Long distances between homes and schools were also identified as a significant barrier to girls' access to secondary education in agro-pastoral communities. Interviews with head teachers revealed that the geographical spread and remote location of settlements posed a major challenge for girls' school attendance. It was reported that some students were required to walk considerable distances to and from school each day, which not only led to fatigue but also exposed them to safety risks, thereby discouraging consistent attendance and contributing to dropout rates. In connection to this, during interview, one of the heads of school had these to say:

On their way to and from school, girls face a lot of temptations, some point it is very risky to let a girl walk for a long distance. In fact, it reduces her concentration on the classroom and it even reduces her passion to learn because she is forced to walk a long way just to get to school. Now, this is where the motorcycle drivers come in with their ride which leads to pregnancies and diseases (Interview with the head of school A).

With the same view, during interview, one of the heads of school said:

Given the nature of our environment some students walk a long distance up to five kilometres to school and other five kilometres back home. This makes a total of ten kilometres every day. Keep in mind that there is no breakfast or lunch at school, and studies go all the way to evening hours. There are a couple of girls facing such challenges every day (Interview with the head of school B).

The study's findings on distance as a barrier to girls' access and participation in secondary education align with those of UNESCO (2012) and Olekambainei (2013), which highlight that an increase of just half a kilometre in the distance to school can reduce a girl's likelihood of enrolment by 20 percent. The absence of a nearby secondary school often diminishes both parental and student motivation to pursue further education. Additionally, many poor households are unable to afford the cost of transport or boarding school, further limiting access. Longer distances also exacerbate concerns around safety and security, which in some contexts heighten the risk of early marriage, thereby preventing girls from continuing beyond primary school (UNESCO, 2012). While the issue of distance has been well-documented in studies on nomadic pastoralist communities, its impact appears even more severe among these groups. The mobility of nomadic families in search of pasture often results in girls living in remote areas with no nearby schools, further dispersing educational opportunities and limiting consistent attendance.

Early marriage and pregnancy

Early marriage and pregnancy were also identified as major challenges hindering girls' access to secondary education. Interviews with Heads of Schools revealed that early pregnancies remain a persistent issue, often resulting in girls dropping out before completing their education. However, those responsible for impregnating schoolgirls are rarely held accountable, largely due to corruption and a general lack of awareness regarding the value of girls' education. This situation not only reinforces impunity but also undermines efforts to promote gender equity in education. Furthermore, the presence of cultural practices was revealed as another challenge that was facing girls in accessing secondary education. The results from interview indicate that, culturally, a girl is seen as a source of wealth. That is, once a particular girl undergoes Female Genital Mutilation (FGM) she is seen as a ready stock. Even the parent knows that it is time to receive dowry mostly in the form of cows.

In this regard, one of the participants remarked, "Parents feel that letting us study means they are delaying their chances of receiving cows and becoming wealthy." (FGD with student in school A). This statement reflects the deep-

rooted cultural perception in some agro-pastoral communities, where girls' education is seen as a hindrance to the economic benefits associated with early marriage and bride price. Such views contribute to the low prioritisation of girls' education and reinforce gender-based inequalities in access and participation.

Cultural practices

The study found that certain cultural practices impede girls' access to and participation in secondary education. Similar findings were reported by Borena (2020), who observed that in Ethiopia, children from pastoralist households were often kept out of school due to the cultural emphasis on herding and traditional norms. Interestingly, since respecting elders was the core content of informal family education and every child was expected to embrace, children especially girls from these minority families could not argue or request to be sent to school in the name of culture and respect for elders. It is notable that, despite legal frameworks such as the Law of the Child Act and the Sexual Offences (Special Provisions) Act No. 4 of 1998 which explicitly prohibit and criminalise female genital mutilation (FGM) girls in this agro-pastoral community continue to endure this harmful practice. The physical and psychological pain associated with FGM often disrupts their education, compromising both their school attendance and academic performance.

These hindrances are arguably interconnected, creating a complex web of barriers that collectively limit girls' access to education. The preference for boys over girls often results in the denial of school fees for girls, reinforced by strong cultural norms that prioritise boys' education. Additional challenges include inadequate sanitation facilities in schools, exposure to violence and exploitation within home environments, early marriages, and the lack of female teachers to serve as role models. Together, these factors perpetuate a vicious cycle of gender inequality in education that remains difficult to break. Ndibalema (2022) also found that inappropriate cultural values in pastoralist communities impeded access to education. These findings align with those reported by the Girl Child Network (2004) and Senga *et al.* (2024), which identified culture and traditional practices, particularly Female Genital Mutilation (FGM) and early marriages, as key barriers affecting girls' participation in secondary education. The prevalence of such sociocultural practices has had a profound impact on girls, significantly limiting their ability to remain and thrive in school. In many cases, these conditions ultimately lead to the withdrawal of girls from school altogether.

The research findings suggest that it remains challenging for pastoral communities in the study area to abandon deeply rooted cultural norms, many of which are designed to exert control over the girl child. Female Genital Mutilation (FGM), for example, is commonly performed at an age when girls should be attending secondary school. As a result, the persistence of such practices significantly reduces the likelihood of girls accessing and successfully participating in education. The reality that girls in the investigated agro-pastoral communities face a multitude of societal barriers to both educational access and participation strongly aligns with the core tenets of Socio-Cultural Theory, which underscores the profound influence of social and cultural contexts on individual development and learning outcomes. However, the findings of this study stand in stark contrast to national and international commitments to educational equity, including the Constitution of the United Republic of Tanzania, the Child Development Policy of 2009, the Millennium Development Goals (MDGs), and the more recent Sustainable Development Goals (SDGs). These frameworks explicitly advocate for the promotion of equal access to education for all children, regardless of gender.

The study's findings suggest that girls' education is not regarded as a priority in the studied communities. Instead, cultural practices such as early marriage and the pursuit of dowries often in the form of cattle appear to overshadow the potential benefits of educating girls. Even when girls are enrolled in secondary school, their participation is undermined by numerous obstacles. These include long distances from home to school, excessive domestic responsibilities, early marriage and pregnancy, and entrenched cultural beliefs that place greater value on dowries than on a girl's educational aspirations.

It is also correct to infer that the Education and Training Policy of 2014 (United Republic of Tanzania, 2014) and the Fee Free Education Policy outlined in the government Circulars of 2015 and 2016 (URT, 2015a; URT, 2015b; URT, 2016) all with emphasis of widening access to basic and secondary education by removing school fees at primary and secondary education are yet to yield a 100% attainment. This study argues that, unless we guarantee education to vulnerable sections of the society such as the agro-Pastorals, our quest to see all children in school will remain a day dream.

The findings of this study reveal a strong interplay among the various challenges facing girls in agro-pastoral communities, where cultural practices such as preference for boys and the high value placed on dowries—intensify the burden of domestic chores and ultimately hinder girls' schooling. These

factors often lead to school dropout and early marriage. Similarly, deeply entrenched practices such as female genital mutilation (FGM) pose significant health risks and consume valuable learning time through teachings that prepare girls for traditional maternal roles. These teachings, delivered during FGM rituals, arguably accelerate premature adult thinking and divert girls' focus from their studies, resulting in truancy, dropout, and reduced academic concentration.

Educational stakeholders, including the Tanzanian government, NGOs, and faith-based organisations, can draw on these findings to design targeted interventions. These may include awareness campaigns on the value of girls' education, anti-FGM initiatives through school-based clubs to empower girls to reject harmful cultural practices, and school–parent partnerships aimed at educating parents on the detrimental effects of such traditions. Such multi-stakeholder approaches can help foster supportive environments that enable girls to realise their full educational potential.

Conclusions and Recommendations

Fostering sustainable development requires the education of women and girls, as their empowerment is widely acknowledged as key to driving both national and community development. Equally important is the need to understand and address the barriers that prevent girls from accessing educational opportunities, particularly in disadvantaged contexts such as the pastoralist communities in Tarime District.

Following the findings and discussions, several conclusions can be drawn. Firstly, secondary education remains largely inaccessible for many girls in agro-pastoral communities. These students face numerous challenges related to enrolment, participation, completion, and the attainment of quality secondary education. Secondly, the lack of educational opportunities for girls in these settings contradicts international, continental, and national commitments to education for all. This discrepancy undermines the aims of global frameworks such as the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs), as well as national policies like the Education and Training Policy (2014, revised 2023) and the Fee-Free Education Policy, both of which advocate for improved enrolment and attendance but have yet to yield tangible outcomes in these marginalised areas. While many community members remain strongly influenced by cultural norms and practices, their willingness to send children to school suggests a growing appreciation for the value of education. Nevertheless, the desire to acquire wealth through bride price continues to outweigh the perceived benefits of educating girls.

Based on the study's findings, several actionable recommendations are made. Family members, particularly mothers and extended relatives, should play a more active role in supporting girls by assuming a greater share of household chores. This would alleviate girls' fatigue and enable them to devote more time to their studies. The government should prioritise the construction of secondary schools within a five-kilometre radius of agro-pastoral communities to reduce travel distances and encourage higher enrolment and retention rates. Additionally, emphasis should be placed on establishing boarding schools, as distance alone does not eliminate the burden of domestic responsibilities that girls face upon returning home. Boarding facilities can provide a more conducive learning environment and shield girls from such constraints.

Community sensitisation campaigns are needed to challenge harmful cultural practices, including gender bias, Female Genital Mutilation (FGM), and the prioritisation of dowry in the form of cattle. These efforts are essential to enhance girls' access to and participation in education. Furthermore, girls should be empowered through comprehensive sexuality education and mentorship programmes aimed at discouraging early sexual activity and pregnancies. Female role models particularly teachers and successful women in public and private sectors should be actively engaged to inspire girls and promote the pursuit of education. Lastly, mentorship and empowerment initiatives should be supported through strategic partnerships between the government and non-governmental organisations. These collaborations are vital for providing the advocacy and logistical support necessary to advance girls' education in agro-pastoral communities

References

- Agbaire, J. J. (2020). *Education and development: International insights on exclusions, inclusion and transformational change*. Sevhaage Publishers.
- Akweso, A. A. (2020). *Factors hindering Barbaig girls in completion of secondary education: A case of Hanang' District*. Master's thesis, The Open University of Tanzania.
- Andrew, O., & Etumabo, A. G. (2016). The implication of girl-child education to nation building in the 21st century in Nigeria. *Global Journal of Human Social Science*, 16(3).
- Ary, D., Jacobs, L. C., & Sorensen, C. (2010). *Introduction of research in education* (8th ed.). Cengage Learning.
- Ary, D., Jacobs, L. C., Irvine, C. K. S., & Walker, D. (2018). *Introduction to research in education*. (10th ed). Cengage Learning, Inc.
- Benedictom, C; Piliyesi, E & Anyona, J. (2020). Determinants of girl child academic performance of public day secondary schools at Buchosa

- District, Mwanza Region in Tanzania. *Journal of Popular Education in Africa*, 4(7), 103 – 121.
- Bihariová, E. (2015). 'We don't need no education'. A case study about pastoral Datoga girls in Tanzania. *Ethnologia Actualis*, 15(2), 30–45.
<https://doi.org/10.1515/eas-2015-0015>
- Boru, A. K. (2020). Education for Borena pastoralist community children in Ethiopia: Practices and challenges. *Ethiopian Journal of Education and Sciences*. <http://journals.ju.edu.et/index.php/ejes>
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Bryman, A. & Bell, E. (2007). *Business research methods* (2nd ed). Oxford.
- Babbie, E. R. (2013). *The practice of social research*. Wadsworth Cengage Learning.
- Clarke, V. & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, 26(2), 120-123.
- Cohen, L., Marion, L., & Marrison, K. (2007). *Research methods in education* (6th ed.). Routledge.
- Coleman, R. (2017). Gender and education in Guinea: Increasing accessibility and gender and education in Guinea: Increasing accessibility and maintaining girls in school. *Journal of International Women's Studies*, 18(4), 265-277.
- Creswell, J. W. (2012). *Planning, conducting and evaluating quantitative and qualitative research* (4th ed). Pearson Education Inc.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed-method approaches*. SAGE.
- Dhital, R. P., Ito, T., Kaneko, S., Komatsu, S., & Yoshida, Y. (2021). Household access to water and education for girls: The case of villages in hilly and mountainous areas of Nepal. *Oxford Development Studies*, 50(2), 142–157.
<https://doi.org/10.1080/13600818.2021.1965978>
- Ennaji, M. (2018). Morocco's Experience with Gender Gap Reduction in Education. *Gender and Women's Studies*, 2(1), 1-18.
- Glick, P., & Sahn, D. E. (2015). "Schooling of girls and boys in a West African Country: The effects of parental education, income and household Structure. *Economics of education review Journal*, 19: 63-87
- Gyawali, K & Maharjan, R. K (2022). Effects of sexual harassment on learning activities among teenager girls. *Interdisciplinary Research in Education*, 7(1), 85-94.
- Harber, C. (2014). *Education and international development: Theory, practice and issues*. Oxford: Symposium Books.

- Hussein, A. M. (2016). Effects of pastoralists community on quality education in Mandera County-Kenya. *Journal of Humanities and Social Science*, 21(9), 1-9.
- Idriss, A. (2011). Taking the camel through the eye of a needle: Enhancing pastoral resilience through education policy in Kenya. *Resilience: Interdisciplinary Perspective on Science and Humanitarianism*. (2) 25-38.
- Kamanzi, V. & Seni, A. J. (2024). How teachers in Tanzania understand and implement phonics instructional approach for the teaching of reading in early grades. *Cogent Education*, 11,1. DOI: 10.1080/2331186X.2024.2419702.
- Lukuwi, L. A. & Seni, A. J. (2022). Effectiveness of strategies used in developing accuracy and coherence in writing among public primary school pupils in Namtumbo District, Tanzania. *East African Journal of Education and Social Sciences*, 3(4), 62-75.
- Sande, L. V. D, Dobber, M, Schaik, J. E. V & Steensel, R.V. (2023). Attitudes towards reading amongst kindergarten and Grade 1 children. *European Early Childhood Education Research Journal*, 31(3), 399-420, DOI: 10.1080/1350293X.2022.2108096.
- Malipula, M. M. (2024). An anatomy of participation of pastoralists in land governance: Reflections from the Maasai in Chemba and Kondoa Districts, Tanzania. *UONGOZI Journal of Management and Development Dynamics*, 32(1), 87-106.
- Mfum-Mensah, O. (2023). Fostering educational participation in pastoral communities through non-formal education: *The Ghanaian perspective*. *International Journal of Educational Development*. 23 (6): 661-67.
- Millanzi, W.C; Osaki, K.M & Kibusi, S, M (2023). Attitude and prevalence of early sexual debut and associated risk sexual behaviour among adolescents in Tanzania: Evidence from baseline data in a randomized controlled trial. *BMC Public Health*, 23, 1758 <https://doi.org/10.1186/s12889-023-16623-6>.
- Moore, K. (2020). *The effects of play-based learning on early literacy skills in kindergarten*. Retrieved from <https://sophia.stkate.edu/maed/> 377
- Mtey, A. R. (2020) Contribution of power dynamics and women's perceptions to girls' Education among Pastoral Communities in Tanzania. *Papers in Education and Development*. 38 (1):95-115.
- Mumin, A. S; Ahmad, I & Mwania, P. (2023). Effects of economic factors on girls' academic performance in public secondary schools in Mandera South Sub-County, Mandera County, Kenya. *Journal of Popular Education in Africa*, 7(11), 5-14.
- Ndibalema, P. (2022). A Paradox in the accessibility of basic education among minority pastoralist communities in Tanzania. *Journal on*

- Ethnopolitics and Minority Issues in Europe*. 2(11), 44-68. DOI: <https://doi.org/10.53779/HPRM0030>
- Olekambainei, P. E. (2013). *Maasai girls' access to secondary education in Ngorongoro District in Tanzania*. [Unpublished PhD Thesis, Open University of Tanzania].
- Pesambili, J. C. (2020). Exploring the responses to and perspectives on formal education among the Maasai pastoralists in Monduli, Tanzania. *International Journal of Educational Development* 78, 102267
- Raymond, A. (2021). Girls' participation in formal education: A case of Maasai pastoralists in Tanzania. *Educational Research for Policy and Practice*, 20.
- Senga, F. E., Dede, K. S and Gillo, I. O. (2024). Access to Secondary School Education among Girls from Pastoral Communities: A case of the Barbaig in Hanang District, Manyara Region of Tanzania. *Rural Planning Journal*, 26 (1), <https://doi.org/10.59557/rpj.26.1.2024.67>
- Seni, A. J. (2013). *History and development of education in East Africa*. LAP LAMBERT Academic Publishing.
- Somani, T. (2017). Importance of educating girls for the overall development of society: A global perspective. *Journal of Educational Research and Practice*. 7 (1): 125–139. DOI: 10.5590/JERAP.
- Taherdoost, H. (2016). How to design and create an effective survey/Questionnaire: A step by step guide. *International Journal of Advanced Research in Management*, 5(4): 37-41.
- UNESCO. (2012). *World atlas of gender equality in education*. UNESCO
- UN. (2018). *The 2030 agenda and the sustainable development goals*. ECLAC.
- UNICEF. (2014). *Accelerating secondary education for girls: Focusing on access and retention. Discussion Paper No 1*. UNICEF
- UNICEF. (2020). *Gender and education. Oxford Development Studies*. United Nations. <https://data.unicef.org/topic/gender/gender-disparities-in-education>
- UNICEF (2020). *Girls' education*. Marixie Mercado.
- United Republic of Tanzania. (2009). *The law of the child Act, 2009*, Government Printer.
- United Republic of Tanzania. (1998). *Sexual offence (Special Provision) Act of 1998*. Government Printer.
- United Republic of Tanzania. (2014). *Education and training policy*. Retrieved from <https://www.fkwlearningagenda.com/s/Education-and-Training-Policy-2014-eng-3cln-fixed.docx>
- United Republic of Tanzania. (2015a). *Waraka wa elimu namba 5 wa mwaka 2015 Kufuta ada kwa elimu ya sekondari kidato cha kwanza mpaka*

- cha nne kwa shule za umma na michango yote katika elimu msingi.*
Wizara ya Elimu, Sayansi na Teknolojia.
- United Republic of Tanzania. (2015b). *Waraka wa elimu namba 6 wa mwaka 2015 kuhusu utekelezaji wa elimu msingi bila malipo.* Wizara ya Elimu, Sayansi na Teknolojia,
- United Republic of Tanzania. (2016). *Waraka wa elimu namba 3 wa mwaka 2016 kuhusu utekelezaji wa elimu msingi bila malipo.* Wizara ya Elimu, Sayansi na Teknolojia.
- Williams, D. (2016). *A short survey of education in Northern Nigeria. Kaduna.* Government Press.
- World Bank. (2020). *Learning for all. Investing in people's knowledge and skills to promote development.* World Bank.
- Yin, K. R. (2009). Case study research: Design and methods. *The Canadian Journal of Action Research*, 14(1), 69-71.
- .

Effect of Digital Media on Spelling Skills Among Lower Primary Pupils of Dodoma City in Tanzania

Ambwene Nazarius Kilungeja*, Janeth Kigobe & Theresia Julius Shavega

The Open University of Tanzania

*Corresponding email: Kilungejaambwene@gmail.com

Abstract

This study investigated the effect of digital media, particularly video clips, on enhancing sound-spelling skills among lower primary school pupils (grades one and two) in Dodoma City, Tanzania. The objective was to evaluate how digital media can support early literacy development. An experimental design was employed, involving 160 pupils from two public schools, 80 in the experimental group and 80 in the control group. Stratified sampling was used to select pupils who had received F grades in previous writing assessments. A standardised test was used to collect data before and after the intervention. The study was based on the Cognitive Theory of Multimedia Learning, highlighting the value of integrating visual and auditory content into the learning process. Data were analysed using correlation and the Univariate General Linear Model. Findings showed that pupils who engaged with video clips significantly improved their spelling skills more than those who did not. The analysis also revealed a strong positive relationship between digital media use and spelling performance. The study concludes that incorporating video-based digital media into classroom instruction can effectively enhance spelling skills among early-grade learners. It recommends that education stakeholders, including policymakers and curriculum developers, consider integrating such tools into early literacy programs.

Keywords: Digital media, Enhancing, Writing skills, Lower Primary Pupils.

Introduction

Writing skills are a fundamental component of effective communication, enabling individuals to express their thoughts clearly and coherently (Schmoker, 2018). These skills encompass grammar, punctuation, vocabulary, and sound spelling, all contributing to successful written expression (Alimi, 2020). Proficiency in writing is widely recognized as a hallmark of an educated individual. It remains one of the most highly valued skills in the workforce (Schmoker, 2018). Within the classroom and beyond, writing is a vital tool for learners to articulate their ideas and experiences (Casey, 2023). However, persistent spelling challenges are common among students and professionals, often hindering the quality of written communication (Coronado, 2024).

Globally, writing proficiency remains a significant concern. UNESCO (2017) reported that over 617 million primary school pupils struggle with writing in English, with Sub-Saharan Africa experiencing the highest difficulty rates. Approximately 89% of pupils in this region face challenges in acquiring writing skills, compared to 80% in Central and Southern Asia and 64% in Western Asia and Northern Africa. Furthermore, research by Eklund *et al.* (2015) and Moll *et al.* (2020) highlighted ongoing problems in achieving stable spelling accuracy among learners.

Despite numerous interventions, such as enhancing teaching materials and teacher training for early grades, implementation has been limited and largely ineffective (UNESCO, 2018). Although information and communication technology (ICT) advancements have transformed many educational practices, minimal exploration remains of how digital media, such as audio, video, images, and games, can be leveraged to support writing development in lower primary education (Kafyulilo, 2015). Research suggests that integrating multimedia tools like videos, digital games, and images into instruction can significantly improve pupils' writing, particularly in terms of spelling (Carr, 2020; Ferro, 2019). Digital media also fosters creativity and allows learners to experiment with new forms of expression (CITE). For instance, Kim and Bang (2020) demonstrated that blogs, digital storytelling, and collaborative writing tools increase student engagement and motivation by encouraging frequent writing and broader audience interaction.

In this context, the present study was conducted in Dodoma City, Tanzania, making it the first of its kind in the region. It focused on how video clips could enhance spelling skills among lower primary pupils. Previous studies have examined various digital approaches to writing instruction. Alemi *et al.* (2020) and Rezanejad *et al.* (2022) investigated digital storytelling, improving students' attitudes and writing performance. However, unlike the current study, they focused on general writing rather than spelling. Similarly, Şevik (2020) and Utama *et al.* (2021) explored the impact of digital games on writing among primary-level English as a Foreign Language (EFL) learners. Their results suggested that digital games positively influenced learners' writing abilities, supporting their integration into EFL instruction. In contrast, the present study concentrated on video clips and their specific impact on spelling.

Ahmad *et al.* (2021) and Felanie (2021) examined the use of YouTube videos in teaching descriptive writing in Indonesia. Their findings revealed that visual learners in experimental groups outperformed their auditory peers,

indicating that video content can enhance writing outcomes. While their study centred on descriptive texts, it aligns with the current research focusing on multimedia tools for writing instruction.

Additional studies by Mbwambo (2021) and Maeda and Juma (2024) emphasized the role of digital media in improving early-grade writing abilities. These studies noted that tools like cartoons, instructional videos, projectors, and platforms like YouTube and Twinkl can enhance pupils' engagement and writing proficiency. While Maeda and Juma's work was particularly relevant due to its focus on Dodoma City, the current study extends its findings by concentrating specifically on spelling skills through video clip integration.

Despite ongoing reforms, such as developing ICT policies, teacher training, and improved instructional materials, challenges in writing proficiency among lower primary pupils persist (Coronado, 2024). The potential of digital media tools, such as videos, games, images, blogs, educational apps, and digital storytelling, remains underutilized in this context (Carr, 2020; Ferro, 2019). Therefore, this study aimed to investigate the effect of video clips on spelling development among lower primary pupils in Dodoma City, Tanzania. By focusing on this specific aspect of writing, the study contributes to the growing body of research advocating for digital media integration in early education.

Theoretical framework: Multimedia Learning Theory

The Multimedia Learning Theory, developed by Mayer and Moreno (1999), posits that meaningful and deeper learning occurs when information is presented through multiple channels such as text, audio, video, games, images, and graphics rather than text alone. This theory explains how information is processed in stages through sensory memory, working memory, and finally into long-term memory, thereby enhancing comprehension and retention.

By incorporating digital media into instruction, particularly in subjects like arithmetic or language, abstract concepts can be simplified and made more accessible to learners. The theory provides a cognitive framework for understanding how learners form meaningful connections between words, sounds, and images (Mayer & Moreno, 2003). In a learning environment where pupils engage multiple senses, multimedia resources help create coherent mental models, enabling pupils to grasp complex content better.

Digital media, through its integration of text, sound, graphics, and visuals, offers diverse pathways for learners to interpret and understand information. This multimodal delivery enhances core academic skills, including writing and spelling, by engaging visual and auditory processing channels (Glowalla, Kohnert, Schmidt, & Weigand, 2010). In particular, video clips can reinforce sound-spelling associations by pairing spoken words with visual representations, aiding in memory retention and understanding.

Thus, the Multimedia Learning Theory serves as a valuable foundation for this study, which examined how digital media, specifically video clips, can enhance writing skills, focusing on spelling among lower primary school pupils in Dodoma City, Tanzania. This location was selected due to socioeconomic disparities that limit students' access to digital learning tools both in and out of school (Weda, 2020).

Previous studies have consistently shown that multimedia elements such as videos, educational games, and audio materials enhance comprehension and increase learner motivation and engagement (Gee, 2003; Prensky, 2001). Visual tools help translate abstract phonetic and spelling concepts into more concrete and understandable forms (Arcavi, 2003), while audio-visual materials offer a richer sensory experience that supports stronger memory encoding (Fletcher & Tobias, 2005).

This research was designed to explore the specific role of video clips in developing spelling skills, guided by the assumption that there is a significant relationship between the use of digital media and improved sound-spelling ability in young learners. The goal was to provide empirical evidence on the effectiveness of video-based instruction in enhancing foundational writing skills, thus contributing to the broader discourse on integrating digital media in early childhood education.

Methodology

Participants

The study involved 160 respondents (80 in the control and 80 in the experimental groups) from two public schools in Dodoma City. A convenient sampling technique was used to select the schools by considering the availability of digital devices like projectors and laptops. A stratified sampling technique was used to select a stratum of pupils with F-grade scores in the pre-test, specifically basic sounds and word pronunciation. The pre-test was conducted on all students before the intervention. The students were selected and then divided into two groups, with 50% in the control group and

50% in the experimental group. Out of 160 pupils who participated in the study, 80 were female, and 80 were male. Among the females, 40 were in the control group, and 40 were in the experimental group. Similarly, the males were divided into two groups, with 40 in the control group and 40 in the experimental group. Moreover, 36.25% (n=58) in the experimental group and 13.75% (n=22) in the control group were between 6-7 years old. 13.75% (n=22) in the experimental group and 36.25% (n=58) in the control group were 8-9 years old, making a total of 100% (n=160) of all pupil respondents. In terms of the class level, 30% (n=48) in the experimental group and 20% (n=32) in the control group were in standard one, while 20% (n=32) in the experimental group and 30% (n=48) in the control group were in standard two. 50% (n=80) of the participants in the experimental group were selected from school A, and 50% (n=80) were from school B (see Table 1). The intervention in the experimental group was conducted for eight weeks. During the intervention, students used video clips with spelling writing content to learn spelling writing skills. At the same time, the control group maintained a traditional chalk-and-talk method where the Teacher taught manually.

Data Collection Procedures

The intervention was over ten weeks and structured into three distinct phases. In the first phase, conducted during the first week of February 2023, a pre-test was administered to all participating pupils to assess their existing knowledge of basic sounds and word pronunciation. The test consisted of ten items: three focused on basic sound identification and seven on word pronunciation.

The second phase involved a one-week training program for ten Grade One and Grade Two teachers. The training aimed to equip them with the necessary skills to incorporate videos and digital games into their reading lessons. Teachers were taught to access relevant digital content and integrate it effectively into classroom instruction. Schools provided digital devices such as internet-connected laptops and projectors to facilitate this process.

The third phase consisted of eight weeks of classroom implementation, during which teachers conducted 40-minute daily sessions. These sessions integrated reading instruction with selected digital videos and games focused on basic sounds and word pronunciation.

In the final week of April 2023, a post-test was administered to measure the impact of the intervention. The assessment evaluated improvements in

pupils' ability to recognize sounds and pronounce words accurately, providing insights into the effectiveness of the instructional approach.

Table 1:
Demographic Characteristics by Condition

Characteristics	Category	N	Experimental	N	Control
Gender	Male	40	25%	40	25%
	Female	40	25%	40	25%
Age	6-7 years	58	36.25%	22	13.75%
	8-9 years	22	13.75%	58	36.25%
Class Level	Standard one	48	30%	32	20%
	Standard two	32	20%	48	30%
Schools	School A			80	50%
	School B	80	50%		

Note: Demographic characteristics according to gender, Age, class level and school

Measures

Spelling Skills in Pupils

To evaluate pupils' spelling skills, we designed a standardized test based on the format of the review questions from the 2018 Standard One Pupil textbook published by the Tanzania Institute of Education (TIE). TIE, a Parastatal Organization under the Ministry of Education and Vocational Training (MoEVT), is responsible for ensuring education quality in Tanzania at the preschool, primary, secondary, and teacher training levels. Before the test was given to pupils, the researcher assessed its reliability to ensure consistency.

Reliability Statistic

The alpha coefficient for the six items measuring the spelling skills was .948, suggesting that the items have relative consistency. A reliability coefficient of .70 or higher is considered "acceptable" in most social science research situations (see Table 2).

Table 2:
Cronbach's Alpha of the Items

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Spelling	10.88	51.144	.846	.938
Spelling	11.04	50.261	.917	.929
Spelling	10.92	51.990	.821	.941
Spelling	11.37	55.487	.875	.936
Spelling	11.26	57.177	.738	.949
Spelling	11.37	55.386	.883	.935

Note: The items have relatively high reliability with Cronbach's alpha $\alpha=.948$

This indicates high consistency of the responses.

Statistical Analysis

Data analysis was conducted using SPSS Statistics software, version 30. Two datasets containing identical variables were merged into a single file for analysis. To examine the relationship between the use of digital media (specifically video clips) and the enhancement of spelling skills among lower primary school pupils, a Univariate General Linear Model (GLM) was employed. This statistical method was selected due to the equal sample sizes in both the control and experimental groups, which ensured a relatively homogeneous population, which is an important assumption for the reliability of the GLM results. Unequal sample sizes can compromise the validity of the p-value and, therefore, were intentionally avoided.

Before performing the GLM analysis, preliminary tests were conducted to ensure that key statistical assumptions, including linearity and homogeneity of variances, were met. To assess the homogeneity assumption, Levene's Test for Equality of Variances was applied (see Table 4). The test evaluated the null hypothesis that the variances of the groups were equal. Additionally, the linearity of the relationship between the independent variable (use of digital media) and the dependent variable (spelling skills) was examined to confirm the appropriateness of the GLM approach.

Findings

The means and standard deviations for sound-spelling skills were reported as follows: At **Time 1 (T1)**, the control group scored ($M = 8.8$, $SD = 6.0$), while the experimental group scored ($M = 14.3$, $SD = 7.6$). At **Time 2 (T2)**, the control group had a mean score of ($M = 10.3$, $SD = 7.2$), and the experimental group scored ($M = 17.5$, $SD = 7.4$). These results are presented in **Table 3** and illustrated in **Figure 1**.

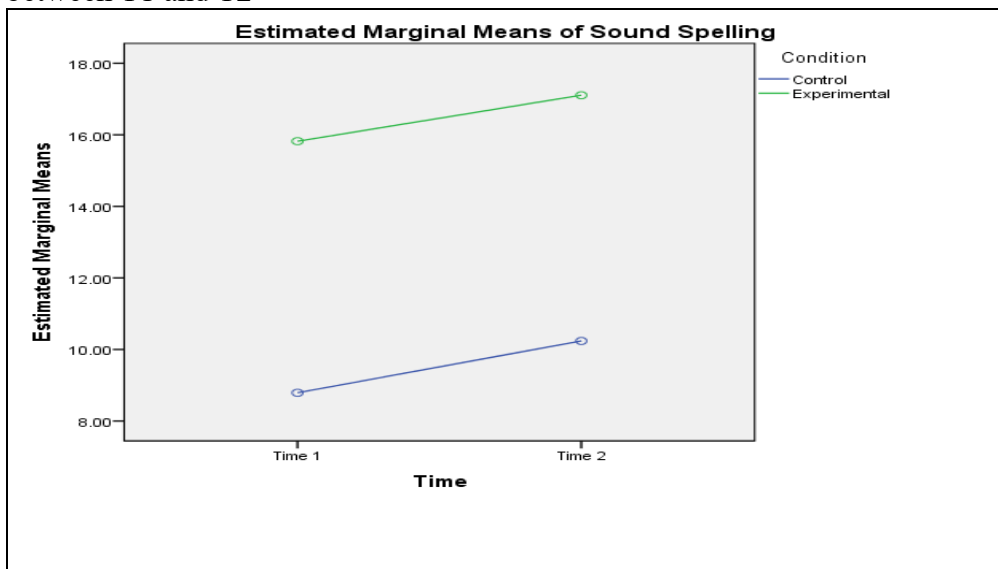
Table 3:

Mean and Standard deviation of Sound Spelling skills between T1 and T2

Condition	Time	M	SD
Control	Time 1	8.8316	5.98048
	Time 2	10.3215	7.23235
Experimental	Time 1	14.3395	7.62888
	Time 2	17.4826	7.38339

Note: Mean of Sound Spelling for the experimental group and control group between T1 and T2

Figure 1: Mean of Spelling for the Experimental Group and Control Group between T1 and T2



Levine's Test of Homogeneity Assumption of Variance

Levine's Test for the Spelling indicates that the null hypothesis was maintained, showing equal error variance between T1 and T2 for the Sounds Spelling $F(3,316) = .992, p = .397$. The p -values being greater than $p > .05$ means that the homogeneity assumption of the variance was met (See Table 4).

Table 4
 Levene's Test of Error Variances

Dependent Variable: Spelling			
F	df1	df2	Sig.
.992	3	316	.397

Note: Levine's Tests suggested the null hypothesis that the error variance of the dependent variable is equal across groups was not statistically significant at $p > .05$; thus, the homogeneity assumption of the variance was met

Correlation between Gender, Age, Class Level, and Spelling Skills

The correlations between gender, age, class level, and spelling skills were generally weak and statistically non-significant. However, a statistically significant positive correlation was found between pupils' age and improvement in spelling skills, $r(160) = .217, p = .001$. This suggests that age may be associated with enhanced spelling performance, possibly because older pupils within the sample were more motivated or better able to engage

with videos and digital games during learning. These results are presented in **Table 5**.

Table 5
Correlation between Gender, Age, Class level and Sound Spelling

	1	2	3
1. Gender			
2. Age of the participants	-.007		
3. Class level	.899		
4. Spelling skills	-.039	.075	
	.483	.178	
	-.083	.217**	.044
	.139	.000	.429

**Correlation is significant at the 0.01 level (2-tailed)

Uni-variate General Linear Model output

The output from the Univariate General Linear Model revealed a statistically significant linear relationship between the duration of digital media (video clip) use and sound-spelling skills. The effect was statistically significant at the pupil (participant) level, $F(1, 313) = 85.90, p < .001$, partial $\eta^2 = .215$, indicating a moderate effect size. In contrast, the effects at the class and school levels were not statistically significant. These results are detailed in **Table 4.6**.

Table 6: Univariate General Linear Model Output

Tests of Between-Subjects Effects

Dependent Variable: Spelling Skills

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	6802.565 ^a	6	1133.761	29.849	.000	.364
Intercept	15728.730	1	15728.730	414.100	.000	.570
School Level	.499	1	.499	.013	.909	.000
Class Level	30.940	1	30.940	.815	.367	.003
participants	3262.421	1	3262.421	85.892	.000	.215
Condition	2723.832	1	2723.832	71.712	.000	.186
Time	105.120	1	105.120	2.768	.097	.009
Condition * Time	.375	1	.375	.010	.921	.000
Error	11888.657	313	37.983			
Total	62488.222	320				
Corrected Total	18691.222	319				

a. R Squared = .364 (Adjusted R Squared = .352)

Discussion

This intervention confirmed a clear difference in spelling performance between pupils exposed to video clips and those not. Pupils who used video clips as part of their learning process significantly outperformed their counterparts in the control

group. The findings also revealed a statistically significant linear relationship between using digital media (specifically video clips) and improving writing skills, particularly spelling, among lower primary school pupils.

In alignment with existing literature, this study supports the growing body of evidence on the benefits of integrating video clips into both classroom and out-of-classroom learning environments. The experimental group showed higher mean performance scores than the control group, reinforcing the effectiveness of video-based instruction in developing spelling skills.

These findings are further supported by the Cognitive Theory of Multimedia Learning (Mayer, 2008), which explains how learners construct knowledge by selecting, organizing, and integrating verbal and visual information. Video clips facilitate this process by offering dynamic, engaging content that strengthens memory and comprehension, especially in foundational literacy. In today's digital learning environment, pupils are more responsive to multimedia formats such as videos, audio, and graphics than traditional print-based resources. This interactivity enhances motivation and learning outcomes in spelling instruction.

The current findings also align with prior research. For instance, Ahmad *et al.* (2021) and Felanie (2021) found a positive relationship between video clips and improved spelling skills among pupils. Similarly, Alemi, Givens, and Rezanejad (2022) demonstrated that digital storytelling significantly improved writing attitudes among English as a Foreign Language (EFL) learners in Iran. About their work, the present study suggests that incorporating digital media, particularly video clips, into writing instruction may substantially benefit lower primary pupils' spelling development.

In light of these results, it is recommended that the Tanzanian government take deliberate steps to support primary school teachers by providing access to digital devices and stable internet connectivity. These resources facilitate the integration of video clips into daily instruction and demonstrate a strong commitment to improving foundational literacy nationwide.

Strengths, Limitations, and Future Directions

This study makes a distinctive contribution to educational research in Tanzania by focusing specifically on the impact of digital media, particularly video clips, on spelling skills among lower primary school pupils in Dodoma City. The findings offer practical insights into how such tools can effectively support literacy development.

One strength of the study lies in its potential implications for curriculum reform, particularly in integrating digital content into literacy instruction. The results also highlight opportunities for funding from donors and education stakeholders to supply schools with essential digital resources, including computers, projectors, televisions, and tablets.

However, the study is not without limitations. The short intervention period may have constrained the full potential impact of digital media integration. Moreover, the intervention revealed a significant challenge: many teachers lacked the confidence and technical skills to utilize digital media effectively. While the findings are promising, the study's small sample size limits the generalizability of the results. Future research should consider a larger, more diverse sample and a longer intervention period to assess long-term effects better.

Looking ahead, it is clear that science and technology must play a more central role in Tanzanian primary education. Using video clips to teach spelling is effective and essential in preparing pupils for a digitally driven world. As such, government action is urgently needed to equip teachers with the tools and training necessary to implement digital media in literacy instruction. Doing so will mark a significant step forward in strengthening the country's education system and improving learning outcomes for all pupils.

Conclusion and Recommendations

This study underscores digital media's vital role, particularly video clips, in enhancing writing skills, with a specific focus on spelling, among lower primary school pupils. The findings demonstrate that integrating video clips into classroom instruction significantly improves pupils' spelling abilities, especially within Tanzanian education.

In response to these findings, it is recommended that policymakers, curriculum developers, educators, and other education stakeholders actively promote the integration of video clips into literacy instruction. This approach can enrich pupils' learning experiences and contribute meaningfully to developing foundational writing skills.

To support this integration, digital media should be formally recognized as essential instructional tools in primary education. At the school level, government financial planning should prioritize allocating resources for acquiring digital equipment such as projectors, televisions, computers, and tablets. Investment in such infrastructure is critical for creating technology-enhanced learning environments that support literacy development.

In addition, a comprehensive strategy for teacher training is essential. The government should implement robust capacity-building programs for both pre-service and in-service teachers, focusing on digital literacy and the effective pedagogical use of digital media. Equipping teachers with the necessary skills and confidence to integrate video clips and other media into literacy instruction will be vital for sustained success.

Future research should also consider extending the duration of interventions to maximize the impact of video-based learning on spelling mastery. Longer intervention periods may yield more comprehensive results and ensure deeper learning. Furthermore, it is recommended that educators encourage using interactive and visually engaging tools, such as video clips, digital games, and educational apps, during writing lessons. These tools can help maintain pupils' attention and motivation while providing multisensory learning experiences reinforcing spelling skills.

In conclusion, the findings of this study advocate for the strategic and systemic integration of digital media into early-grade literacy instruction. Doing so has the potential to significantly enhance the spelling and overall writing proficiency of lower primary school pupils and contribute to broader improvements in foundational education in Tanzania.

References

- Ahmada, A., Syarif, H., & Putra, M. I. (2021). The effectiveness of using video clips in teaching writing skills to survival students. *Journal of English Language and Pedagogy*, 1(1), 45–56. <https://doi.org/10.12345/jelp.v1i1.123>
- Alemi, M., & Rezanejad, A. (2022). The role of digital storytelling in EFL students' writing skills and motivation. *Journal of Language and Linguistic Studies*, 18(1), 202–214.
- Alimi, A. O. (2020). *Teaching writing in primary schools: A comparative study in East Africa*. Kenya Literature Bureau.
- Arcavi, A. (2003). The role of visual representations in the learning of mathematics. *Educational Studies in Mathematics*, 52(3), 215–241.
- Casey, M. (2023). *9 strategies for improving writing skills in primary school*. Bedrock Learning. <https://bedrocklearning.org/literacy-blogs/improving-writing-skills-in-primary-school/>
- Carr, B. (2020). Exploring the role of digital tools in developing writing proficiency among students. *International Journal of Digital Literacy and Education*, 8(2), 100–115.

- Coronado, R. L. (2024). The most common spelling errors among learners of English of San Juan Elementary School: Management of causes and remedies. *International Journal of Advanced Multidisciplinary Studies*, 4(5), 521–533.
- Eklund, K. (2015). Literacy skill development of children with familial risk for dyslexia through grades 2, 3, and 8. *Journal of Educational Psychology*, 107(1), 126–140.
- Felanie, R. (2021). Effect of using YouTube videos on students' writing descriptive text across learning styles. *Journal Pendidikan*, 6(1), 109–118.
- Ferro, A. (2019). The impact of digital media on writing skills in primary education. *Journal of Educational Technology*, 15(3), 245–260.
- Fletcher, J. D., & Tobias, S. (2005). The multimedia principle. In R. E. Mayer (Ed.), *The Cambridge handbook of multimedia learning* (pp. 117–133). Cambridge University Press.
- Gee, J. P. (2003). *What video games have to teach us about learning and literacy?* Palgrave Macmillan.
- Kafyulilo, A., Fisser, P., Pieters, J., & Voogt, J. (2015). ICT use in science and mathematics teacher education in Tanzania: Developing technological pedagogical content knowledge. *Australasian Journal of Educational Technology*, 31(4), 381–399.
- Kim, H., & Bang, S. (2020). Digital tools and writing: The impact of blogs and collaborative platforms on student motivation and engagement. *Journal of Educational Technology*, 36(2), 145–160. <https://doi.org/10.12345/jet.2020.145>
- Maeda, E. G., & Juma, Z. R. (2024). The role of media in teaching and learning of reading and writing skills in Dodoma early primary schools, Tanzania. *Journal of Research Innovation and Implication in Education*, 7(4), 120–128.
- Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). Cambridge University Press.
- Mayer, R. E., & Moreno, R. (2003). Nine ways to reduce cognitive load in multimedia learning. *Educational Psychologist*, 38(1), 43–52.
- Mbwambo, J. (2021). *The effect of digital media on the writing skills of secondary school students in Tanzania*. University of Dar es Salaam Press.
- Moll, K., Gangl, M., Banfi, C., Schulte-Körne, G., & Landerl, K. (2020). Stability of deficits in reading fluency and/or spelling. *Scientific Studies of Reading*, 24(3), 241–251.
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1–6. <https://doi.org/10.1108/10748120110424816>

- Şevik, M. (2020). How do games affect the writing skills of young EFL learners? *Educational Research and Reviews*, 15(4), 186–193.
- Schmoker, M. (2018). Demystifying writing, transforming education. *Educational Leadership*, 75(7), 22–27.
- Schmidt-Weigand, F., Kohnert, A., & Glowalla, U. (2010). Explaining the modality and contiguity effects: New insights from investigating students' viewing behavior. *Applied Cognitive Psychology*, 24(2), 226–237.
- UNESCO Institute for Statistics. (2017). *Options for a global composite indicator for education*. United Nations Educational, Scientific and Cultural Organization. <http://uis.unesco.org/en/document/options-global-composite-indicator-education>
- UNICEF. (2020). *How many children and young people have internet access at home? Data and analytics planning and monitoring*. United Nations Children's Fund. <https://www.unicef.org/reports/how-many-children-and-young-people-have-internet-access-home-2020>
- United Republic of Tanzania. (2007). *Education and training policy*. Ministry of Education and Vocational Training.
- United Republic of Tanzania. (2007). *Education and training policy*. Ministry of Education and Vocational Training.
- Utama, I. M. M., Suryasa, I. W., & Ariyanti, N. P. D. (2021). Investigating the use of games in writing class. *Journal of English Language and Pedagogy*, 1(1), 23–31.
- Weda, A. (2020). Exploring the challenges of digital learning in rural Tanzania: A case study of Dodoma Region. *African Journal of Education Studies*, 5(4), 67–81.

ABOUT THE JOURNAL

Scope

Journal of Issues and Practice in Education (JIPE) is a property of the Open University of Tanzania and is operated by the Faculty of Education. JIPE is a peer review journal that publishes original research-based papers of academic interest in education. The types of contribution range from original research papers and review articles.

Original research articles: Research articles that make a substantial original contribution to research practice or policy in any educational research area. Research articles are contributions that have the purpose of publication of original unpublished research which may be reproduced and generalized. They should be between 3000 and 8000 words, excluding tables, Figures and references. The original research article should follow the conventional structure: Introduction, methodology, results/findings and discussion. However, JIPE allows some flexibility.

Book Reviews: *Journal of Issues and Practice in Education (JIPE)* invites original and insightful book reviews that will provide a comprehensive survey of one or several books. Book reviews should include detailed synopses and evaluations of the books and give an account of the books' aims, strengths and limitations. As appropriate, review should evaluate critically the contributions of the books to the field of education. Book reviews should be about 1000-2000 words.

Frequency

JIPE is a bi-annual journal (published in June and December), with a possibility of special issues based on the Faculty of Education and/or Open University of Tanzania (OUT) academic interests and mandate.

Submission of Manuscripts

Manuscripts must be submitted with a cover letter stating that all authors (in case of multiple authors) agree with the content and approve of its submission to the journal. Only materials that have never been published or being submitted for publication elsewhere will be considered. All submissions will be critically peer-reviewed by at least two anonymous reviewers who will be looking for originality, relevance, clarity, appropriateness of the methods, validity of data, reasonability of the conclusion and support from data.

Manuscripts that are written in English should be submitted in electronic form to:

Editor-in-Chief

Journal of Issues and Practice in Education (JIPE)

The Open University of Tanzania

P. O. Box 23409

Dar es Salaam

TANZANIA

through **Open Journal System (OJS)**

e-mails: jipe@out.ac.tz
jipeout@gmail.com

There are no submission fees or page charges; manuscripts will be received anytime of the year.

The Editorial Board reserves the right to accept or reject any manuscript and also reserves the right to edit the manuscripts as it sees fit. Authors may be contacted for clarification when necessary.

Manuscript Preparation - JIPE

Page format

Page set-up of the manuscripts should be on A4 or 8.5" x 11 "paper, typed double-spaced (24-26 lines per page), with margins of top 25mm, bottom 25mm left 40mm and right 20mm.

Font

The font size of main text shall be 12 in Times New Roman

Manuscripts should be arranged in the order of: title page, abstract (structured summary) including up to five keywords, main text, acknowledgements (if applicable), references, tables and figure.

Title Page

This page must include the following information:

- The title of the manuscript which should be concise, specific, informative and clear.
- Should be in bold, using font 14.
- The names (spelled out in full) of the author(s) of the manuscript including their corresponding affiliation(s) should be indicated immediately below the title.
- A complete mailing address (including the e-mail) of the person to whom

all correspondence regarding the manuscript should be addressed and must also be indicated.

Abstract

The first page following the title page should contain an abstract. Abstract should contain up to 250 words mainly of the object and main findings of the paper. Three to five keywords representing concepts of the paper may be written at the end of the abstract. The Abstract shall be in *italics*.

Main Text

In the main text:

Introduction: Should describe the objective of the reported work and provide relevant background information.

Methodology/Materials and methods (Where the study/research dictates): This part should identify the paradigms/approach, population, area of study, procedures employed and any other relevant input to the realization of the study.

Results: This section should explain all the important findings and provide information about the reliability of the results. Here, the use of tables and figures is allowed, but the use of text to emphasize important points is encouraged.

Discussion: It should describe the implications of the findings and any conclusions based on the findings. Abbreviations in the body of the paper should be used after having been initially explained. If statistical analysis is applicable, it is important that the procedure is carried out following appropriate methods.

Tables and Figures

Tables and figures should be as close as possible to the text explaining the concept. Tables should be numbered in the order in which they are mentioned in the text. A Table caption must be presented in upper case at the top and Figure caption should be typed in bold immediately below the Figure. Explain in footnotes all non-standard abbreviations used in each table.

Pagination

The page numbers should appear at the Centre of the bottom edge of the page.

Reference style:

All references should adhere to the latest version of APA format.

Footnotes

They should be kept to a minimum. Two or more consecutive references to the same source should, where possible, be grouped in the same note; the reader should be able to follow the article without referring to the notes.