

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

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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.

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