

Examine key risk factors undermining teacher resilience in Morogoro Municipality, Tanzania: Implications for support and policy reform

Edgar Costantine, Juma Saidi Mwinjuma and Joyce Nemes

*Department of Educational Management and Policy Studies, College of Education,
The University of Dodoma, 1 Benjamin Mkapa Rd., 41218 Iyumbu, Dodoma, Tanzania*

Abstract. This study examined the key risk factors affecting teacher resilience in selected secondary schools in Tanzania using a mixed-methods approach. A total of 239 respondents were involved, with data collected from 234 teachers through questionnaires and interviews with five key informants. Both quantitative and qualitative methods were used in the analysis process through descriptive and thematic analysis, respectively. Findings revealed that several risk factors significantly undermine teacher resilience, categorized into high and low-influence groups. High-impact factors include excessive workloads, inadequate support systems, and challenging student behaviours, all contributing to stress and potential burnout. Lower-impact factors were less urgent, such as occasional administrative tasks. The study emphasizes the need for targeted interventions to enhance teacher resilience, highlighting a critical gap in existing policies that often overlook effective support mechanisms. Over 64% of educators cited excessive workloads, inadequate support, and challenging student interactions as primary stressors. The research recommends that policymakers focus on manageable workloads, professional development, and fostering a supportive school culture, aiming to align policy with practice to improve both teacher well-being and student outcomes.

Keywords: risk factors, undermining, teachers' resilience, support, policy reforms

1. Introduction

In the evolving landscape of Tanzania's education system, teacher resilience has emerged as a critical factor influencing not only educators' professional longevity but also the overall quality of student learning outcomes. Resilience among teachers is shaped by a complex interplay of personal traits and systemic challenges that they face in their daily roles [12]. This study aims to examine the key risk factors that undermine teachers' resilience in Tanzania, thereby filling a significant knowledge gap in the existing literature regarding the specific challenges educators encounter in this context. Understanding these factors is vital, as they have direct implications for support mechanisms and policy reform essential for fostering a robust educational environment [23]. Resilience varies contextually, as it can be ecological or rather psychological.

Ecological psychological resilience refers to the ability of individuals and communities to adapt and thrive amidst environmental and psychological challenges, emphasizing the interplay between personal coping mechanisms and broader social-ecological contexts [52]. It highlights how external resources, like social support, interact with internal traits to foster resilience [49]. In this study, resilience is important as it allows

ORCID: 0000-0001-8742-0582 (J. S. Mwinjuma); 0000-0001-6843-4751 (J. Nemes)

✉ edgarsimbe3@gmail.com (E. Costantine); jsmwinjuma@gmail.com (J. S. Mwinjuma);

xusper@yahoo.co.uk (J. Nemes)

🌐 https://www.udom.ac.tz/staff/staff_profile?id=VG5wQmVnPT0= (J. S. Mwinjuma);

https://www.udom.ac.tz/staff/staff_profile?id=VFZSUk13PT0= (J. Nemes)

*Educational
Dimension*



© Copyright for this article by its authors, published by the Academy of Cognitive and Natural Sciences. This is an Open Access article distributed under the terms of the Creative Commons License Attribution 4.0 International (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

for a comprehensive analysis of how teachers' resilience is shaped by both individual strategies and the surrounding ecological factors, informing targeted interventions and policy reforms to enhance support systems in educational settings, including Tanzania and Morogoro Municipality in particular.

Resilience is the process that occurs over time in the context of a person's interaction, and thus, the adverse situation usually catalyzes the creation of resilience conditions in their daily life [50]. Weber [52] asserted that resilience, as a psychological construct, should always be utilized, particularly when there is a changing situation that needs positive adaptation strategies within the context of a significant range of adversity. In such a context, the roles and performance of teachers in schools have become more diversified, and their workloads have also increased substantially, which may have threatened their sense of professional autonomy. Masten and Powell [29], reported that teachers' resilience is a vital element in classroom success and teacher retention in the education context that should be encouraged, strengthened and motivated positively in today's Tanzanian education context for the effective policy implementation process. Resilience is also used concomitantly with positive coping strategies as well as adaptations resulting from the daily events at the workplace [4, 9, 50].

The effectiveness of an education system is deeply linked to the quality, stability, and efficiency of its teachers, alongside the nature of the teaching-learning environment [47]. Policymakers emphasize the necessity of providing quality education for all, recognizing that the health of the education system hinges on the well-being of its teachers. Despite international frameworks such as the Southern African Development Community (SADC) protocol [39] and the Dakar Framework for Action [45] advocating for inclusive and equitable education, the teaching profession in Tanzania faces numerous challenges that contribute to high levels of stress and burnout among educators [47]. This disconnect highlights a critical gap in understanding how these systemic issues specifically affect teacher resilience in the local context and Morogoro Municipality in particular.

Research across countries has shown that the stressful conditions inherent in the teaching profession can significantly undermine teachers' effectiveness, indicating a pressing need for resilience as a buffer for enhancing teachers' retention [2, 9, 25, 55]. Factors such as overcrowded classrooms, excessive workloads, and time pressures are prevalent in Tanzanian secondary schools, with student-to-teacher ratios often far exceeding recommended standards of 35:1 and 45:1 for secondary and primary schools respectively [16, 28]. These challenges not only hinder the application of effective teaching strategies but also create an environment rife with anxiety and frustration, impacting teachers' ability to maintain their resilience. However, there is a lack of targeted research exploring how these specific conditions uniquely affect Tanzanian teachers, signalling a gap that this study aims to address.

In addition to classroom challenges, systemic issues such as inadequate infrastructure, limited teaching resources, and low morale due to unsatisfactory compensation and promotion contribute to a problematic teaching landscape in Tanzania [24, 30, 47]. The 2014 education policy, which aimed at providing fee-free education, has inadvertently placed additional pressures on teachers, who must navigate resource shortages and insufficient support for students with diverse needs [28]. These systemic factors create significant barriers to job satisfaction and professional commitment, ultimately undermining teacher resilience. Identifying and examining these barriers is crucial for informing effective support systems and policy reforms geared towards education development.

Moreover, the inadequate integration of technology in the teaching and learning process remains a significant challenge, as many teachers lack the necessary skills

and resources to effectively utilize information and communication technology (ICT) in their classrooms [34, 35, 48]. This technological gap exacerbates the difficulties faced by teachers, particularly in large class settings. Coupled with issues such as low salaries, bureaucratic obstacles, and a lack of recognition for their contributions, these factors create an environment that threatens both teacher and student well-being [1, 27]. However, there remains a notable absence of research focused on how these specific challenges impact teacher resilience in Tanzania, and Morogoro Municipality in particular, of which this study has such focus.

Despite the recognition of resilience as a vital characteristic for teachers, there is a significant knowledge gap regarding the particular risk factors affecting teacher resilience in the Tanzanian context, particularly in Morogoro Municipality. While existing studies highlight the importance of resilience in alleviating stress and enhancing job satisfaction, they often do not delve into the unique challenges faced by Tanzanian educators and their implications for resilience development in specific secondary school context [3, 5, 55]. This study seeks to bridge this gap by identifying key risk factors that undermine teacher resilience in Tanzania, providing insights that can inform targeted support mechanisms and necessary policy reforms. This study contributes to the growing body of literature on teacher resilience by providing empirical evidence from the unique context of Tanzanian secondary schools.

Therefore, understanding the resilience of teachers within the Tanzanian education system is essential for developing effective strategies to support educators in their daily demanding roles. By examining the specific risk factors that undermine teacher resilience, this study advocates for policy reforms that prioritize workload management, professional development, and a supportive school culture to enhance teacher well-being and ultimately improve student outcomes.

2. Theoretical framework of the study

2.1. Polidore's resilience theory

Resilience theory provides insights into how teachers adapt to challenges within their social environments [56]. Polidore's resilience theory (PRT) [37] highlights two perspectives: the developmental perspective, which sees resilience as a cultivated process rather than an inherent trait [18], and the ecological perspective, focusing on the impact of external environments and social interactions. Moore [32] emphasizes that resilience is determined by individuals' responses to adversity, enabling recovery and success despite difficulties. Resilient individuals take responsibility, embrace change positively, foster relationships, and maintain optimism and flexibility [44]. In this study, PRT provides a foundational framework for understanding how teachers navigate the challenges they face in their educational environments. By emphasizing that resilience is cultivated through social interactions and ecological factors rather than being an innate trait, PRT is particularly relevant in the Tanzanian context, where educators often encounter significant adversities, such as limited resources and high student-to-teacher ratios. The theory highlights the importance of fostering relationships and creating supportive networks among teachers, which can enhance their ability to recover from setbacks and adapt to changes. This understanding can guide policy reforms aimed at strengthening collaborative practices and mentoring programs that bolster teacher resilience, ultimately improving educational outcomes in Morogoro Municipality.

2.2. Conservation of resources theory

Conservation of resources theory (CRT), developed by Holmgreen et al. [14], emphasizes the significance of resource management in enhancing individual well-being,

alleviating stress, and promoting resilience, especially within human resources management. The theory suggests that individuals actively pursue and sustain vital resources, whether personal, familial, social, or material, to navigate stress and challenges effectively. CRT complements PRT by shedding light on the management of resources that are crucial for sustaining teacher resilience. In the context of Morogoro Municipality, where teachers may face constraints such as inadequate materials and emotional support, CRT emphasizes the need to identify and nurture essential resources, such as self-efficacy, optimism, and social support. By focusing on effective resource management, the study can highlight how teachers can better cope with stressors and challenges, thereby enhancing their resilience. The implications for support and policy reform are significant, as stakeholders can develop targeted interventions that equip teachers with the necessary resources and coping strategies, fostering a more resilient teaching workforce. Ultimately, integrating both theories provides a comprehensive understanding of the risk factors affecting teacher resilience and offers actionable insights for enhancing support systems within the educational landscape of Tanzania.

3. Methodology

This study utilized a pragmatism worldview philosophy, informed by the works of Charles Peirce [36], William James [15], and John Dewey [8], emphasizing the importance of selecting methodological approaches that are most effective for the specific research problem [6]. Pragmatists assert that reality is shaped by environmental contexts and human experiences [7]. Creswell and Creswell [6] outlines key assumptions of pragmatism, including a focus on the consequences of actions, a problem-centred approach, a pluralistic perspective, and real-world application. Pragmatism's emphasis on addressing real-world problems directly influenced the selection of a mixed research approach with a convergent parallel design for the study. The researchers adopted a mixed-methods research approach that allowed conducting data collection and analysis concurrently, which enhances data accuracy [20, 31]. Specifically, the convergent parallel research design was implemented to integrate quantitative and qualitative data throughout the research process for a more comprehensive understanding of the issue. This design allows for the simultaneous collection and analysis of both quantitative and qualitative data, facilitating a comprehensive understanding of the multifaceted challenges teachers face. By integrating diverse data sources, the convergent parallel approach aligns with pragmatism's goal of generating practical solutions that are grounded in the lived experiences of teachers. This methodological flexibility enables researchers to explore the complexities of teacher resilience, identify key risk factors, and ultimately inform targeted support and policy reforms that are responsive to the immediate needs of the educational community in Morogoro and Tanzania as a whole. The target population included secondary school teachers, heads of schools, and the Municipal Education Officer, with a total sample size of 239 participants (234 quantitative and 5 qualitative). Two sampling techniques, probability (through simple random techniques) and non-probability sampling (through purposive techniques with key informants), were used. Randomization was achieved by employing simple random sampling techniques, where random numbers were generated during data collection to select participants. Non-probability techniques are based on the criteria that such participants have rich information based on their positions (head of schools and the municipal education officer) that could provide rich information that is highly needed for the study. Data were collected through questionnaires and interviews and analyzed descriptively using frequency and percentage, as well as thematically. To ensure validity, the research instruments were reviewed by four

experts from the University of Dodoma and the University of Dar-es-salaam, whose feedback was incorporated to improve the tools before field deployment. All the tools were tested through a pilot study with five participants to ensure their accuracy before the actual data collection process. This has ensured the validity and reliability of the tools and the findings as well.

4. Results and discussion

4.1. Risk factors undermining teachers' resilience

Understanding the knowledge that respondents possess regarding various risk factors that may undermine teachers' resilience is essential for evaluating their ability to thrive in challenging educational contexts. This awareness not only empowers teachers to recognize the specific challenges they face but also fosters a proactive approach to coping with these difficulties. By identifying the risk factors pertinent to their experiences, teachers can develop targeted strategies to mitigate stressors and enhance their resilience. For instance, if teachers are aware that excessive workloads or lack of administrative support are significant threats to their well-being, they may seek collaborative solutions, engage in time management practices, or advocate for policy changes that promote a healthier work environment. The literature has extensively catalogued these risk factors, drawing from empirical studies that validate their prevalence in teachers' daily lives. This body of research serves as a crucial foundation for understanding how these factors manifest in the teaching profession and their varying degrees of impact on resilience.

The findings summarized in table 1 reveal that a majority of the identified risk

Table 1

Risk factors lowering teachers' resilience (survey data, 2023).

Variable	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Lack of motivation, promotion and low salary	5 (2.14%)	30 (12.82%)	69 (29.49%)	83 (35.47%)	47 (20.09%)
Challenging behavior of learners in the classroom context	6 (2.56%)	39 (16.67%)	49 (20.94%)	79 (33.76%)	61 (26.07%)
Stressful condition at the work place among teachers	4 (1.71%)	34 (14.53%)	53 (22.65%)	94 (40.17%)	49 (20.94%)
High work load	3 (1.28%)	30 (12.82%)	49 (20.94%)	92 (39.32%)	60 (25.64%)
Poor administration and management of the school	6 (2.56%)	26 (11.11%)	52 (22.22%)	105 (44.87%)	45 (19.23%)
Lack of material resources such as desk and chairs	3 (1.28%)	25 (10.68%)	51 (21.79%)	89 (38.03%)	66 (28.21%)
Low economic status among teachers	6 (2.56%)	30 (12.82%)	48 (20.51%)	93 (39.74%)	57 (24.36%)
Meeting diverse needs of learners	6 (2.56%)	26 (11.11%)	49 (20.94%)	84 (35.9%)	69 (29.49%)
Overcrowded classrooms	8 (3.42%)	27 (11.54%)	48 (20.51%)	88 (37.61%)	63 (26.92%)
Frequent curriculum change	7 (2.99%)	28 (11.97%)	47 (20.09%)	81 (34.62%)	71 (30.34%)

factors, as discussed in the literature review, are likely to have a detrimental effect on teachers' resilience. These risk factors have been systematically categorized into two groups: those that exert a high influence and those with a lower impact on resilience, as illustrated in figure 1. High-impact factors often include excessive workload, inadequate support systems, and challenging student behaviours, all of which create significant stress and can lead to burnout. Conversely, low-impact factors may include less immediate concerns, such as occasional administrative tasks or external pressures that, while relevant, do not exert as profound an influence on daily resilience. By categorizing these risk factors, educators and policymakers can prioritize interventions and resource allocation to address the most pressing challenges first. This structured understanding aids in crafting tailored support mechanisms that not only enhance teachers' resilience but also contribute to a more sustainable and effective educational environment overall.

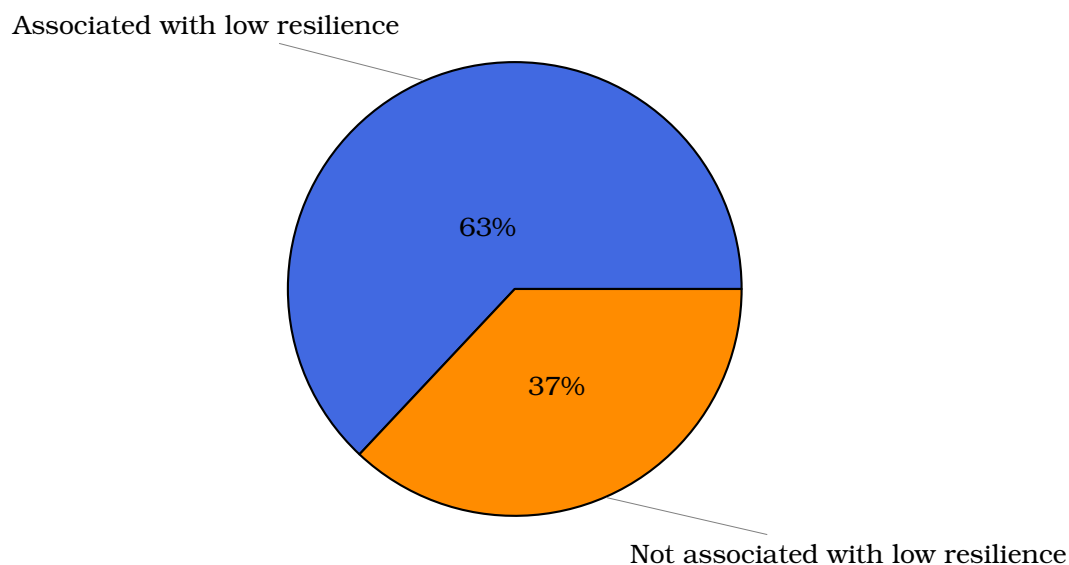


Figure 1: Risk factors lowering teachers' resilience.

The factors that contribute to lowering teachers' resilience are multifaceted and reflect complex challenges within the educational environment. A significant number of respondents indicated that lack of motivation, promotion opportunities, and low salaries were critical issues, with 55.56% either agreeing or strongly agreeing that these factors adversely affected their resilience. Similarly, the challenging behaviour of learners in the classroom was highlighted, with 59.83% acknowledging its negative impact. Stressful workplace conditions also emerged as a significant concern, with 61.11% of participants agreeing that such stressors diminished their resilience. High workloads were noted by 64.96% of respondents as another factor undermining their ability to cope effectively. Additionally, poor administration and management practices were recognized by 64.10% of teachers, indicating a strong correlation between administrative support and teacher resilience. The lack of material resources, such as desks and chairs, was acknowledged by 66.24% of participants, further compounding the issue. Economic challenges, including low economic status among teachers, were cited by 64.10% as a source of stress that affects resilience. Also, meeting the diverse needs of learners and the prevalence of overcrowded classrooms were concerns, with 65.39% and 64.53% of respondents, respectively, identifying these issues as detrimental to their resilience. Lastly, the frequent changes in curriculum were recognized by 64.96% of teachers as a factor that further complicates their

teaching experience. Collectively, these factors illustrate the pressing need for systemic improvements to bolster teachers' resilience in their demanding roles.

The findings from figure 1, which illustrates the distribution of risk factors, reveal that a significant number of respondents rated these factors between 4 and 5, resulting in a total score of 1,476 (63%). In contrast, those who rated the factors between 1 and 3 accounted for a total score of 864, representing 37%. These results indicate that the respondents acknowledged the identified risk factors as having a substantial impact on diminishing teachers' resilience in the selected secondary schools within the study area. These findings were further supported by an in-depth interview with respondents, who, at different paces, reported:

In fact, the lack of a supportive school environment can significantly lower the teachers' ability to work hard. Inadequate support from colleagues and administration contributes to feelings of isolation and frustration, especially in schools where collaboration and mentorship are lacking. This absence of a supportive network causes stress and hinders professional growth. Creating a culture of collaboration and support within schools is essential for fostering a more tolerant teaching workforce. (R1 on 19 June 2023).

Also, R4 stated:

You know, some challenges associated with personal life create emotional and psychological disturbance among teachers. Challenges such as family responsibilities and financial stress can spill over into their professional lives, hence affecting their emotional state (R4 on 22 August 2023).

In a similar vein, Xu [55] posits that the characteristics influencing resilience are closely linked to specific adverse circumstances that can affect an individual's behaviour or outcomes. This relationship suggests that when individuals encounter unfavourable situations, their resilience is likely to be compromised, leading to a diminished capacity to manage stress and adversity.

Moreover, a report from R4 on 22 August 2023 adds to this discussion by providing contemporary insights into the ongoing challenges faced by educators. This report outlines the various external factors contributing to the erosion of resilience among teachers, reinforcing the notion that both historical and recent studies underscore the importance of understanding and addressing these risk factors to foster a more resilient educational environment.

Some factors that cause stress among teachers include high workloads, lack of administrative support, inadequate resources and challenging learners' behaviours, poor working environment, overcrowded classrooms, and poor infrastructures, including classrooms and desks as well as chairs. These can lower the resilience of teachers in different teaching contexts. (R4 on 22 August 2023).

Likewise, R9 responded:

You know, there are different factors that can make teachers lose morale in the teaching process, including low salary, high workload, students' behavioural mischief, and lack of promotion and motivation. These factors make teachers lose confidence and morale in performing work effectively in any teaching and learning environment. (A close interview with R9 on 24 August 2023).

On other ground, another participant highlighted:

In our daily activities, various risk factors significantly impact teachers' ability in teaching activities. One major concern is the increased workload associated with teaching. Many teachers are stressed by the demands of lesson planning, grading, administrative responsibilities, and a high workload, which often extend beyond regular school hours. Excessive workload can lead to diminishing their capacity to cope with challenges effectively in the teaching profession. (R10 on 26 August 2023).

In addition to Masten and Powell [29] and Xu [55], other scholars have explored the relationship between risk factors and resilience in educational contexts. For instance, Johnson [17] emphasize that supportive school environments can mitigate the negative impact of external stressors on teachers, suggesting that resilience can be cultivated rather than diminished. Conversely, Smith et al. [41] argues that excessive administrative demands and lack of support can exacerbate stress among educators, further lowering their resilience. This contrast highlights the complexity of resilience, where both supportive and adverse conditions play crucial roles in shaping teachers' responses to challenges. Thus, while some research points to the detrimental effects of risk factors, other studies underline the possibility of fostering resilience through positive interventions.

With respect to the given responses, it is logical to argue that the resilience of teachers is significantly undermined by various risk factors that contribute to stress and burnout. One major factor is the high workload that teachers face, which often includes excessive administrative tasks, lesson planning, and grading, leading to a work-life imbalance [27]. Research indicates that teachers typically are overloaded with work for long hours per week, with many reporting that administrative duties are a primary source of stress [2]. This excessive workload not only diminishes their capacity to engage meaningfully with students but also contributes to emotional exhaustion and decreased job satisfaction, which are critical components of resilience. Furthermore, disruptive student behaviour and a lack of support from parents and colleagues exacerbate the stress teachers experience, creating an environment where they feel isolated and overwhelmed [3, 40]. The cumulative effect of these stressors can lead to a decline in teachers' mental health, making it challenging for them to maintain their resilience in the face of ongoing teaching challenges.

Generally, the findings imply that risk factors that characterize the teaching and learning environment have a negative impact on the resilience development of teachers in their daily undertakings. It is therefore important to identify, address, and ultimately mitigate those risk factors that can help researchers to develop interventions and support systems that enhance the resilience of teachers, helping them to cope better with challenges, as well as remain committed to their teaching profession [3]. Therefore, as it is supported by Drew and Sosnowski [9], understanding and identifying different risk factors that influence the resilience of teachers can provide important insight into the education system, informing education policymakers that aimed at creating a conducive working environment, which in turn contribute to fostering a resilient teaching workforce, as well as maintaining high-quality education and students' academic performance as stipulated in the Education and Training Policy 2014 [47, 51]. Therefore, there is a great correlation between risk factors and the low resilience level of teachers. Hence, there is a need to mitigate those risk factors in the teachers' daily undertakings in order to stabilize their resilience levels in different teaching contexts.

The findings align with PRT and CRT, emphasizing the role of social interactions and effective resource management in overcoming challenges. The data indicate that

stressors like excessive workloads, inadequate administrative support, and problematic student behaviours significantly impact teachers' resilience. Identifying these risk factors allows educators to develop targeted coping strategies and advocate for policy reforms, fostering a more supportive educational environment. These insights highlight the urgent need for systemic improvements in Tanzania's educational context. Factors such as low motivation, inadequate salaries, and poor working conditions severely affect teachers' ability to cope with their responsibilities. The study underscores the importance of prioritizing interventions that address these challenges and promoting collaboration and mentorship to enhance resilience. Ultimately, the findings reinforce the critical link between understanding risk factors and implementing effective support mechanisms to create a resilient teaching workforce, thereby improving educational outcomes in Morogoro Municipality.

However, these findings further highlight a critical policy gap regarding the systemic issues affecting teachers' resilience in the educational context. Despite the recognition of various stressors, including high workloads, inadequate administrative support, and challenging student behaviours, there is a notable absence of effective and sustainable targeted interventions at the policy level that address these challenges comprehensively [19, 30]. This gap is particularly concerning given the increasing demands placed on teachers globally, which may often lead to job dissatisfaction, burnout and attrition [33]. Educational policies need to evolve to incorporate strategies that not only recognize these risk factors but also provide concrete solutions, such as manageable workloads, professional development opportunities, and enhanced support systems.

Moreover, results revealed that economic factors, such as low salaries and limited promotion opportunities, significantly impact teachers' motivation and resilience development. While many educational frameworks, such as UNESCO 2019 Framework for Action [11], emphasize the importance of teacher well-being, there remains a disconnect between these frameworks and actual policy implementation in the local context [43]. Policymakers must prioritize financial incentives and career advancement pathways that can uplift teachers' professional status and morale as suggested by the World Bank [53]. By addressing these economic barriers, educational systems can foster a more motivated and resilient teaching workforce, ultimately benefiting students' academic outcomes.

The results also underscore the necessity for a supportive school culture that promotes collaboration and mentorship among teachers. The lack of a supportive environment contributes to feelings of isolation, which can further diminish resilience among teachers. Effective policies should facilitate professional learning communities and peer support networks, allowing teachers to share experiences and strategies to cope with challenges. This shift towards a more collaborative culture aligns with initiatives outlined in regional educational frameworks like UNO [38] and the SADC protocol of 1997 [39], which altogether, advocates for teacher empowerment and professional learning as fundamental components of educational achievement of the country.

The Dakar Framework of 2000 [45] also underscores the importance of teacher well-being as a critical component of achieving quality education. In Tanzania, where teachers face numerous stressors such as high workloads, inadequate resources, and low salaries, the framework's emphasis on supporting educators is an important aspect of education achievement. Policymakers are encouraged to develop initiatives that prioritize teachers' mental health and job satisfaction [33]. This may result in creating a more sustainable teaching environment that encourages teachers' job motivation and satisfaction.

Likewise, several policies and frameworks have been established in Tanzania to

address teacher well-being and recognize the critical role that teachers play in the educational system. For instance, the National Education and Training Policy 2014 emphasizes the importance of creating supportive working conditions for teachers, which includes improving their remuneration, professional development, and overall job satisfaction [46, 51]. This policy aims to enhance the quality of education by ensuring that teachers are adequately supported in their roles, thereby fostering a more resilient teaching workforce. However, there is a disconnection between policy documents and actual practices of implementation on the ground, which marks a critical gap between policy documents and actual practices. Hence, there is a need to address those inconsistencies in policy issues.

4.2. Enhancing teachers' resilience

The distribution of items presented through a Likert scale in table 2 highlights several strategies aimed at enhancing teachers' resilience within the teaching profession. These strategies were derived from an extensive literature review and subsequently tested in the field to gather responses from the participants. The primary objective was to ascertain whether the respondents believed that these strategies could effectively bolster teachers' resilience if adequately implemented. To facilitate this analysis, responses were categorized into two distinct statuses: "adequately", which encompassed ratings of 4 and 5, indicating strong agreement with the effectiveness of the strategies, and "inadequately", which included ratings between 1 and 3, reflecting scepticism or disagreement. By manipulating these two statuses, the researchers were able to calculate their percentage compositions, which are visually represented in figure 2. This analysis not only provides insight into the perceived effectiveness

Table 2

Strategies for enhancing teachers' resilience (survey data, 2023).

Variable	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Creating positive school culture	22 (9.4%)	72 (30.77%)	68 (29.06%)	50 (21.37%)	22 (9.4%)
Fostering positive relationship among teachers	17 (7.26%)	48 (20.51%)	95 (40.6%)	65 (27.78%)	9 (3.85%)
Encouraging time management strategy	11 (4.7%)	61 (26.07%)	90 (38.46%)	50 (21.37%)	22 (9.4%)
Fostering the growth of mindset	5 (2.14%)	52 (22.22%)	89 (38.03%)	75 (32.05%)	13 (5.56%)
Providing coaching and mentoring skills	18 (7.69%)	52 (22.22%)	92 (39.32%)	53 (22.65%)	19 (8.12%)
Setting boundary between work and personal	9 (3.85%)	52 (22.22%)	86 (36.75%)	81 (34.62%)	6 (2.56%)
Flexibility and adaptability	11 (4.7%)	55 (23.5%)	89 (38.03%)	58 (24.79%)	21 (8.97%)
Providing social support	9 (3.85%)	45 (19.23%)	89 (38.03%)	85 (36.32%)	6 (2.56%)
Providing room for professional development	22 (9.4%)	36 (15.38%)	94 (40.17%)	57 (24.36%)	25 (10.68%)
Promotion and motivation	5 (2.14%)	67 (28.63%)	83 (35.47%)	70 (29.91%)	9 (3.85%)

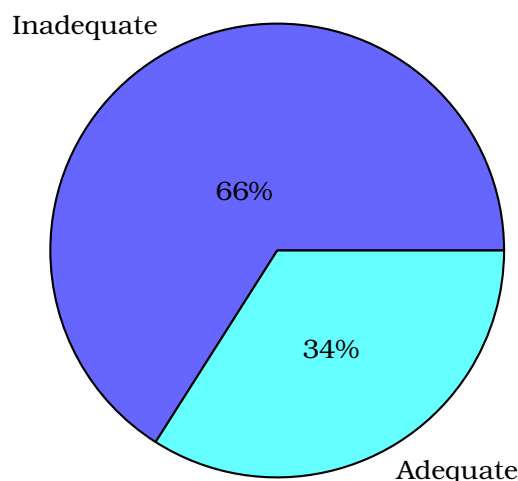


Figure 2: Strategies for enhancing teachers' resilience.

of the proposed resilience-enhancing strategies but also underscores the importance of teachers' feedback in shaping interventions that aim to improve their professional well-being and coping mechanisms in the classroom.

The findings on strategies for enhancing teachers' resilience reveal a complex landscape of perceptions among educators. A significant portion of respondents expressed inadequate, and others indicated adequate strategies enhancing teachers' resilience, with 66% to 34%, respectively. This suggests that while many recognize the importance of these strategies, a substantial number do not feel they are adequately implemented or impactful in their environments. Time management strategies and fostering a growth mindset also garnered mixed responses, indicating that while some teachers see value in these approaches, others remain unconvinced of their effectiveness. The lower rates of strong agreement across most categories highlight a potential gap between the recognition of these resilience-enhancing strategies and their practical application in schools. Notably, the provision of coaching and mentoring skills, along with professional development opportunities, received relatively more positive feedback, suggesting that targeted support and development may be more readily accepted as beneficial. Overall, these findings imply that for resilience-building initiatives to be effective, there needs to be a concerted effort to enhance the implementation of these strategies, ensuring that teachers not only recognize their value but also experience tangible support in their professional settings.

This classification allowed for a clearer analysis of the data, leading to a focused assessment of the perceived effectiveness of the resilience strategies. The subsequent analysis of these two categories, adequate and inadequate, facilitated a percentage distribution evaluation, which is visually represented in figure 2. This representation not only highlights the overall sentiment among respondents but also provides insights into areas where further improvement may be necessary to enhance teachers' resilience.

Based on the findings from the given figure 2, responses indicate low status regarding strategies for enhancing teachers' resilience in the teaching profession. The researchers tested these strategies to examine the responses of teachers and whether they think those strategies can enhance the resilience of teachers if they are well embraced in the context of the teaching profession. The findings have reported that 1543 (66%) rated between 1 to 3 on the given Likert scale, meaning low status, whereas 796 (34%) rated between 4 and 5, meaning high status. The findings show that

the tested strategies have no significant influence on resilience development among teachers. This implies that resilience development is a function of interplay factors, and it varies environmentally over time and space. These responses are possibly due to their inadequate knowledge and understanding of the concept of resilience and its implication in the context of the teaching profession and the teaching and learning process in particular.

However, scholars like Leroux and Théorêt [21] suggested a number of interventions that can be embraced for the purpose of strengthening the resilience level of teachers. To enhance teachers' resilience in the Tanzanian context, several targeted interventions can be implemented at the national and policy level. Firstly, numerous training programs focusing on stress management practices and self-care will be launched, providing teachers with practical skills and strategies that are geared towards managing stress, such as mindfulness techniques, time management skills, and self-reflection exercises. Secondly, support groups and peer mentorship programs should be established that focus on creating a mutually supportive network for teachers by allowing them to share personal experiences, seek advice, and build a sense of oneness as a community.

These platforms can also facilitate the exchange of ideas and coping strategies that promote positive emotional well-being and enhance personal well-being.

On the other hand, Leroux and Théorêt [21] argued that offering professional development opportunities that focus on effective classroom management, the use of effective pedagogical approaches, and student engagement can all help to empower teachers with the required skills and confidence towards navigating challenges in the classroom, thereby increasing their resilience level. Providing well-being programs and resource allocations, such as access to wellness resources, physical activity initiatives, and access to guidance and counselling services, can promote teachers' overall well-being, mental health, and work-life balance in their daily undertakings. Lastly, encouraging effective and transparent leadership opportunities and professional growth through career advancement pathways, recognition programs, and participation in professional networks can contribute to teachers' resilience by fostering a sense of purpose and growth in their careers [55]. By implementing these interventions, the resilience of teachers in the Tanzanian context can be strengthened, leading to improved job satisfaction and teachers' well-being and ultimately enhancing the overall quality of education delivery for students in school regardless of the prevailing working environment.

Furthermore, to enhance teacher resilience, particularly in the Tanzanian context, it is essential to develop a comprehensive support system that addresses both individual and systemic factors affecting education provision. One effective strategy is the implementation of targeted professional development programs that focus on building emotional intelligence, coping strategies, and stress management skills among teachers [42]. Such programs can equip teachers with the tools necessary to navigate the challenges of their profession, thereby fostering resilience. Research indicates that teachers who engage in continuous professional development are better able to manage stress and maintain job satisfaction, which are critical components of resilience [26]. Also, these programs should be tailored to the unique challenges faced by Tanzanian teachers, such as large class sizes and limited resources, ensuring that they are relevant and practical in the local context.

Another crucial strategy involves enhancing the support networks available to teachers. This can be achieved by fostering collaborative environments within schools where teachers can share experiences, resources, and coping strategies [10]. Establishing mentorship programs that connect novice teachers with experienced educators can also provide essential guidance and emotional support. Such initiatives have been

shown to improve teacher retention and job satisfaction, which are vital for building resilience [16]. Additionally, school leadership should prioritize creating a positive school climate that promotes well-being and inclusivity, as supportive relationships with colleagues and administrators significantly contribute to teachers' resilience [13]. However, there remains a policy gap in recognizing and institutionalizing these support systems within the Tanzanian education framework, which often overlooks the importance of teacher well-being in educational reforms.

In that case, addressing the broader systemic issues that impact teacher resilience is imperative in the education profession. Policymakers should focus on improving working conditions, such as reducing class sizes and providing adequate teaching resources, which can alleviate some of the stressors that teachers face in their daily undertakings. Moreover, integrating mental health support services within schools can provide teachers with immediate access to professional help when needed [22]. The World Bank emphasizes the importance of investing in teacher support systems as a means to enhance their well-being, as well as educational outcomes [53]. Likewise, the World Health Organization emphasizes the importance of integrating mental health support and resilience-building strategies into educational frameworks to enhance teachers' capacity to cope with stressors and maintain their well-being [54]. Therefore, by aligning educational policies with the needs of teachers, Tanzania can create a more resilient teaching workforce capable of delivering quality education despite the challenges they encounter. Bridging this policy gap is essential for fostering an educational environment that values and supports teacher resilience, ultimately benefiting students and the education system as a whole. Efforts to reduce overcrowded classrooms are in place, but the government still constructs different classrooms to enhance conducive teaching and learning processes further.

5. Conclusion

The findings of this study underscore the multifaceted nature of the risk factors that undermine teachers' resilience within the educational landscape. The data reveals that a significant majority of respondents identified high workloads, lack of administrative support, and challenging student behaviours as critical stressors impacting their ability to thrive. Specifically, 64.96% of participants highlighted high workloads as a primary concern, with many indicating that this not only hampers their capacity to engage effectively with students but also contributes to emotional exhaustion and job dissatisfaction. Furthermore, poor administrative practices and a lack of material resources were recognized by over 64% of respondents as detrimental to their resilience, illustrating the pressing need for systemic changes in school management and resource allocation. The qualitative insights from participants further emphasize the negative impact of isolation and inadequate support, suggesting that a collaborative, supportive school culture is essential for fostering resilience among teachers.

These findings not only illuminate the immediate challenges faced by educators but also reveal a significant policy gap in addressing these issues effectively. Despite the recognition of stressors such as excessive workloads and low salaries, there is a concerning lack of targeted interventions at the policy level to mitigate these challenges. Educational frameworks, while acknowledging the importance of teacher well-being, often fall short in implementation, leaving teachers to navigate their demanding roles without adequate support. To address these systemic issues, policymakers must prioritize strategies that enhance teacher motivation and resilience, such as manageable workloads, professional development opportunities, and a supportive work environment. By bridging the gap between policy and practice, educational systems can create a more resilient teaching workforce, ultimately leading to improved

student outcomes and a more sustainable educational environment.

6. Recommendation

To effectively bolster teachers' resilience in the face of identified risk factors, educational policymakers must implement comprehensive strategies that address the systemic issues impacting educators. First, schools should prioritize reducing excessive workloads through better task management and delegation, ensuring that teachers have adequate time for lesson planning and student engagement. Additionally, establishing robust administrative support systems is essential; this includes providing ongoing professional development and mentorship opportunities to foster collaboration among educators. Furthermore, addressing economic concerns such as low salaries and limited promotion prospects is vital; offering competitive compensation and clear pathways for career advancement can significantly enhance teacher motivation and job satisfaction. Finally, cultivating a supportive school culture that emphasizes teamwork and peer support can help mitigate feelings of isolation and burnout. By implementing these recommendations, educational systems can create a more resilient workforce, ultimately leading to improved educational outcomes for both teachers and students.

Acknowledgments: *Edgar Costantine:* This study is partly based on the data collected for a PhD study in Morogoro Region in Tanzania in 2023. Special thanks are granted to my supervisors, the government of Tanzania for granting me study leave to pursue a PhD study, and my respondents, who voluntarily provided data to complement this study.

Data availability statement: After publication, it will be available on the public portal.

Declaration on generative AI: During the preparation of this work, the authors used ChatGPT to enhance content and Grammarly to check grammar and spelling. After using these tools, the authors reviewed and edited the content as needed and took full responsibility for the publication's content.

References

- [1] Balanga, U.R.D. and Cabuquin, J.C., 2024. Resilience in the face of adversity: Exploring junior high learners' perspectives and experiences of blended learning during the COVID-19 pandemic. *European Journal of Interactive Multimedia and Education*, 5(1), p.e02402. Available from: <https://doi.org/10.30935/ejimed/14248>.
- [2] Carmel, R. and Badash, M., 2021. Who is the effective teacher? Perceptions of early career English teachers in Israel. *The Language Learning Journal*, 49(5), pp.614–629. Available from: <https://doi.org/10.1080/09571736.2019.1656767>.
- [3] Cornelissen, T.P., 2016. *Exploring the resilience of teachers faced with learners' challenging behaviour in the classroom*. Ph.D. thesis. Stellenbosch University, Stellenbosch. Available from: <https://scholar.sun.ac.za/items/754ccb5a-0d89-46f0-8ab7-524bbd18a920>.
- [4] Costantine, E., Mwinjuma, J.S. and Nemes, J., 2025. Assessing the influence of socio-demographic characteristics on teachers' resilience in Tanzania: A study of selected secondary schools in Morogoro Municipality. *Educational Dimension*, 12, pp.186–203. Available from: <https://doi.org/10.55056/ed.842>.
- [5] Costantine, E., Mwinjuma, J.S. and Nemes, J., 2025. Navigating Adversity: Assessing Teacher Resilience to Challenging Secondary School Environments in Morogoro, Tanzania. *Journal of Multidisciplinary Research and Development*, 2(1), p.12–24. Available from: <https://doi.org/10.56916/jmrd.v2i1.999>.
- [6] Creswell, J.W. and Creswell, J.D., 2018. *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. 5th ed. Los Angeles: SAGE Publications.

- Available from: https://spada.uns.ac.id/pluginfile.php/510378/mod_resource/content/1/creswell.pdf.
- [7] Creswell, J.W. and Plano Clark, V.L., 2017. *Designing and Conducting Mixed Methods Research*. 3rd ed. SAGE Publications.
 - [8] Dewey, J., 1938. *Logic: The theory of inquiry*. New York: Henry Holt and Company. Available from: https://ia601500.us.archive.org/13/items/JohnDeweyLogicTheTheoryOfInquiry/%5BJohn_Dewey%5D_Logic_-_The_Theory_of_Inquiry.pdf.
 - [9] Drew, S.V. and Sosnowski, C., 2019. Emerging Theory of Teacher Resilience: A Situational Analysis. *English Teaching: Practice & Critique*, 18(4), pp.492–507. Available from: <https://doi.org/10.1108/ETPC-12-2018-0118>.
 - [10] Eldridge, M., 2013. *Understanding the Factors that Build Teacher Resilience*. Ph.D. thesis. Institute of Education, University of London. Available from: [https://discovery.ucl.ac.uk/id/eprint/10018166/1/_d6_Shared\\$_SUPP_Library_User%20Services_Circulation_Inter-Library%20Loans_IOE%20ETHOS_ETHOS%20digitised%20by%20ILL_ELDRIDGE,%20M.pdf](https://discovery.ucl.ac.uk/id/eprint/10018166/1/_d6_Shared$_SUPP_Library_User%20Services_Circulation_Inter-Library%20Loans_IOE%20ETHOS_ETHOS%20digitised%20by%20ILL_ELDRIDGE,%20M.pdf).
 - [11] Falk, D., Varni, E., Johna, J.F. and Frisoli, P., 2019. *Landscape Review: Teacher Well-being in Low Resource, Crisis, and Conflict-affected Settings*. Washington, DC: UNESCO. Available from: https://inee.org/sites/default/files/resources/TWB%20Landscape%20Review_August%202019_0.pdf.
 - [12] Gates, Z., 2018. *A Study of the Protective Factors That Foster Resilience in Teachers*. Ph.D. thesis. University of Southern Mississippi. Available from: <https://aquila.usm.edu/dissertations/1540/>.
 - [13] Gu, Q. and Day, C., 2013. Challenges to teacher resilience: conditions count. *British Educational Research Journal*, 39(1), pp.22–44. Available from: <https://doi.org/10.1080/01411926.2011.623152>.
 - [14] Holmgreen, L., Tirone, V., Gerhart, J. and Hobfoll, S.E., 2017. Conservation of Resources Theory. *The Handbook of Stress and Health*. John Wiley & Sons, Ltd, chap. 27, pp.443–457. Available from: <https://doi.org/10.1002/9781118993811.ch27>.
 - [15] James, W., 1907. *Pragmatism: A new name for some old ways of thinking*. Longmans, Green and Co. Available from: <https://doi.org/10.1037/10851-000>.
 - [16] Jensen, M.T., 2021. Pupil-teacher ratio, disciplinary problems, classroom emotional climate, and turnover intention: Evidence from a randomized control trial. *Teaching and Teacher Education*, 105, p.103415. Available from: <https://doi.org/10.1016/j.tate.2021.103415>.
 - [17] Johnson, B., 2008. Teacher–student relationships which promote resilience at school: a micro-level analysis of students’ views. *British Journal of Guidance & Counselling*, 36(4), pp.385–398. Available from: <https://doi.org/10.1080/03069880802364528>.
 - [18] Kaushik, V. and Walsh, C.A., 2019. Pragmatism as a Research Paradigm and Its Implications for Social Work Research. *Social Sciences*, 8(9), p.255. Available from: <https://doi.org/10.3390/socsci8090255>.
 - [19] Kimaro, J.W., 2015. *Strategies to reduce teachers’ turnover in public schools: A case of secondary schools in Morogoro municipality*. Master’s thesis. Mzumbe University.
 - [20] Lelissa, T.B., 2017. *The impact of industry concentration on performance, exploring a comprehensive bank performance model: the case of the Ethiopian banking sector*. Ph.D. thesis. University of South Africa. Available from: <https://uir.unisa.ac.za/handle/10500/23253>.
 - [21] Leroux, M. and Théorêt, M., 2014. Intriguing empirical relations between teachers’ resilience and reflection on practice. *Reflective Practice*, 15(3), pp.289–303.

- Available from: <https://doi.org/10.1080/14623943.2014.900009>.
- [22] Linkov, I., Trump, B.D. and Hynes, W., 2019. *Resilience-based Strategies and Policies to Address Systemic Risks*. (SG/NAEC(2019)5). Organisation for Economic Co-Operation and Development. Available from: [https://one.oecd.org/document/SG/NAEC\(2019\)5/en/pdf](https://one.oecd.org/document/SG/NAEC(2019)5/en/pdf).
 - [23] Liu, F., Chen, H., Xu, J., Wen, Y. and Fang, T., 2021. Exploring the Relationships between Resilience and Turnover Intention in Chinese High School Teachers: Considering the Moderating Role of Job Burnout. *International Journal of Environmental Research and Public Health*, 18(12), p.6418. Available from: <https://doi.org/10.3390/ijerph18126418>.
 - [24] Lucumay, L.S. and Matete, R.E., 2024. Challenges facing the implementation of fee-free education in primary schools in Tanzania. *Heliyon*, 10(2), p.e24172. Available from: <https://doi.org/10.1016/j.heliyon.2024.e24172>.
 - [25] Mansfield, C.F., ed., 2020. *Cultivating Teacher Resilience: International Approaches, Applications and Impact*. Springer Singapore. Available from: <https://doi.org/10.1007/978-981-15-5963-1>.
 - [26] Mansfield, C.F., Beltman, S., Broadley, T. and Weatherby-Fell, N., 2016. Building resilience in teacher education: An evidenced informed framework. *Teaching and Teacher Education*, 54, pp.77–87. Available from: <https://doi.org/10.1016/j.tate.2015.11.016>.
 - [27] Marais, P., 2016. “We can’t believe what we see”: Overcrowded classrooms through the eyes of student teachers. *South African Journal of Education*, 36(2), p.1201. Available from: <https://doi.org/10.15700/saje.v36n2a1201>.
 - [28] Mashala, Y.L., 2019. The Impact of the Implementation of Free Education Policy on Secondary Education in Tanzania. *International Journal of Academic Multidisciplinary Research (IJAMR)*, 3(1), pp.6–14. Available from: <http://ijeais.org/wp-content/uploads/2019/01/IJAMR190102.pdf>.
 - [29] Masten, A.S. and Powell, J.L., 2003. A Resilience Framework for Research, Policy, and Practice. In: S.S. Luthar, ed. *Resilience and Vulnerability: Adaptation in the Context of Childhood Adversities*. Cambridge University Press, chap. 1, pp.1–25. Available from: <https://doi.org/10.1017/CBO9780511615788.003>.
 - [30] Matete, R.E., 2021. Teaching profession and educational accountability in Tanzania. *Heliyon*, 7(7), p.e07611. Available from: <https://doi.org/10.1016/j.heliyon.2021.e07611>.
 - [31] McMillan, J.H. and Schumacher, S., 2000. *Research in Education: A Conceptual Introduction*. 5th ed. Allyn & Bacon.
 - [32] Moore, C., 2019. Resilience Theory: A Summary of the Research (+PDF). Available from: <https://positivepsychology.com/resilience-theory/>.
 - [33] Msuya, O.W., 2016. Exploring levels of job satisfaction among teachers in public secondary schools in Tanzania. *International Journal of Educational Administration and Policy Studies*, 8(2), pp.9–16. Available from: <https://academicjournals.org/journal/IJEAPS/article-abstract/75FD0F658745>.
 - [34] Ndibalema, P., 2015. *Transforming teachers’ professional competence in the use of ICT as a pedagogical tool: An experience of a community of practice learning group model in secondary schools in Tanzania*. Ph.D. thesis. The University of Dodoma, Dodoma. Available from: <http://repository.costech.or.tz:8080/handle/20.500.12661/1545>.
 - [35] Ndibalema, P., 2020. Unlocking the Potential of ICT for Transformative Learning among Youth: A Path to 21st Century Competencies. *Journal of Educational Technology and Online Learning*, 3(3), p.245–271. Available from: <https://doi.org/10.31681/jetol.777647>.
 - [36] Peirce, C.S., 1878. How to Make Our Ideas Clear. *Popular science monthly*,

- 12, pp.286–302. Available from: <https://courses.media.mit.edu/2004spring/mas966/Peirce%201878%20Make%20Ideas%20Clear.pdf>.
- [37] Polidore, E.T., 2004. *The teaching experiences of Lucille Bradley, Maudester Hicks, and Algeno McPherson before, during, and after desegregation in the rural South: A Theoretical Model of Adult Resilience among three African American female educators*. Ph.D. thesis. Sam Houston State University. Available from: <https://www.proquest.com/openview/db4629c4b2002b21f64717675bfc9fe8/1>.
- [38] Rieckmann, M., 2018. Learning to transform the world: key competencies in Education for Sustainable Development. In: A. Leicht, J. Heiss and W.J. Byun, eds. *Issues and trends in Education for Sustainable Development*. Paris: UNESCO, chap. 2, pp.39–59. Available from: <https://unesdoc.unesco.org/ark:/48223/pf0000261802>.
- [39] SADC, 1997. Protocol on Education & Training 1997. Available from: <https://www.sadc.int/document/protocol-education-training-1997>.
- [40] Skaalvik, E.M. and Skaalvik, S., 2015. Job Satisfaction, Stress and Coping Strategies in the Teaching Profession—What Do Teachers Say? *International Education Studies*, 8(3), pp.181–192. Available from: <https://doi.org/10.5539/ies.v8n3p181>.
- [41] Smith, K., Sheridan, L., Duursma, E. and Alonzo, D., 2025. Teachers' emotional labour: the joys, demands, and constraints. *Teachers and Teaching*. Available from: <https://doi.org/10.1080/13540602.2025.2466560>.
- [42] Stavrou, E. and Piki, A., 2024. Cultivating self-efficacy to empower professionals' re-up skilling in cybersecurity. *Information and Computer Security*, 32(4), pp.523–541. Available from: <https://doi.org/10.1108/ICS-02-2024-0038>.
- [43] Subosa, M. and West, M., 2018. *Re-orienting Education Management Information Systems (EMIS) towards inclusive and equitable quality education and lifelong learning*. (Working papers on education policy, 5). Paris: UNESCO. Available from: <https://unesdoc.unesco.org/ark:/48223/pf0000261943>.
- [44] Taylor, J.L., 2013. The Power of Resilience: A Theoretical Model to Empower, Encourage and Retain Teachers. *The Qualitative Report*, 18(35), pp.1–25. Available from: <https://doi.org/10.46743/2160-3715/2013.1474>.
- [45] *The Dakar Framework for Action: Education for All: meeting our collective commitments (including six regional frameworks for action)*, 2000. Paris: UNESCO. Available from: <https://unesdoc.unesco.org/ark:/48223/pf0000121147>.
- [46] The United Republic of Tanzania, 2016. *Information, Communication and Technology Policy (2017) for National Bureau of Statistics*. Dar es Salaam: National Bureau of Statistics. Available from: https://www.nbs.go.tz/nbs/takwimu/ACT/ICT_POLICY_2017.pdf.
- [47] The United Republic of Tanzania and Ministry of Education and Vocational Training, 2010. *Tanzania Education Sector Development Programme: Secondary Education Development Programme II (July 2010 - June 2015): final draft*. Dar Es Salaam. Available from: https://planipolis.iiep.unesco.org/sites/default/files/ressources/tanzania_sedp_2010_2015.pdf.
- [48] The United Republic of Tanzania and Ministry of Works, Transport and Communication, 2016. *National Information and Communication Technology Policy*. Available from: <https://www.tcra.go.tz/uploads/documents/en-1619081524-National%20ICT%20Policy%20of%202016.pdf>.
- [49] Ungar, M., 2006. Resilience across Cultures. *The British Journal of Social Work*, 38(2), pp.218–235. Available from: <https://doi.org/10.1093/bjsw/bcl343>.
- [50] Ungar, M., 2018. Systemic resilience: principles and processes for a science of change in contexts of adversity. *Ecology and Society*, 23(4), p.34. Available from: <https://doi.org/10.5751/ES-10385-230434>.

- [51] United Republic of Tanzania and Ministry of Education, Science and Technology, 2023. *Education and Training Policy 2014*. 2023rd ed. Dodoma: Ministry of Education, Science and Technology. Available from: <https://www.moe.go.tz/sites/default/files/EDUCATION%20AND%20TRAINING%20POLICY%202014%2C%202023%20EDITION.pdf>.
- [52] Weber, B., 1982. P. C. Luthuli, *The Philosophical Foundations of Black Education in South Africa*. Butterworths, Durban-Pretoria 1981. *Vierteljahrsschrift Für Wissenschaftliche Pädagogik*, 58(3), pp.378–380. Available from: <https://doi.org/10.30965/25890581-05803013>.
- [53] *World Development Report 2023: Migrants, Refugees, and Societies*, 2023. (A World Bank Group Flagship Report). Washington, DC: The World Bank. Available from: https://web.archive.org/web/20240901104353if_/https://openknowledge.worldbank.org/server/api/core/bitstreams/18158725-499e-4600-814c-0d0c956aa2a1/content.
- [54] World Health Organization. Regional Office for the Eastern Mediterranean, 2021. *Mental health in schools: a manual*. Available from: <https://iris.who.int/handle/10665/347512>.
- [55] Xu, R., 2021. Book Review: *Cultivating Teacher Resilience: International Approaches, Applications, and Impact*. *Frontiers in Psychology*, 12. Available from: <https://doi.org/10.3389/fpsyg.2021.706751>.
- [56] Zohuri, B., 2015. *Similitude Theory and Applications. Dimensional Analysis and Self-Similarity Methods for Engineers and Scientists*. Cham: Springer International Publishing, pp.93–193. Available from: https://doi.org/10.1007/978-3-319-13476-5_2.