

Bridging access and quality: Community perceptions of educational excellence under Tanzania's fee-free secondary education policy

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ABSTRACT

Community perceptions play a critical role in the effective implementation of educational policies, particularly in resource-constrained urban contexts such as Tanzania, where rapid policy expansion can strain institutional capacity. Guided by socio-ecological theory and informed by the human capital perspective, this study examined multilevel factors shaping community perceptions of the Fee-Free Education Policy (FFEP) and its influence on perceived educational quality in public secondary schools in urban Tanzania. The socio-ecological framework conceptualizes educational outcomes as interactions among individual, relational, institutional, and community-level factors. A convergent mixed-methods design was employed, combining quantitative data from 239 students analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) with qualitative insights from 20 semi-structured interviews with head teachers and academic staff. The measurement model demonstrated strong reliability and validity, while the structural model explained 26.1% of the variance in perceived educational quality ($R^2 = 0.261$). The results revealed that parental involvement ($\beta = 0.322$, $p < 0.001$) and community material contributions ($\beta = 0.252$, $p < 0.001$) were the strongest predictors of perceived educational quality, highlighting the central role of relational and organizational dynamics. In contrast, socioeconomic status ($\beta = 0.110$, $p = 0.252$) and policy awareness ($\beta = 0.092$, $p = 0.116$) did not show significant direct effects. Qualitative findings contextualized and extended these results through four key themes: the access quality paradox, socioeconomic constraints as structural mediators of parental involvement, leadership variability as a critical implementation moderator, and the unmet expectations narrative reflecting gaps between policy promises and implementation realities. These insights reveal that socioeconomic conditions influence educational quality indirectly through parental engagement and resource contributions, while leadership practices and resource constraints shape the effectiveness of policy implementation. The study concludes that improving educational quality under the FFEP requires moving beyond policy awareness toward strengthening community engagement mechanisms, enhancing resource mobilization, and addressing systemic capacity constraints. Building adaptive school leadership, aligning policy communication with implementation realities, and establishing continuous monitoring systems are essential for sustaining both equity and quality. The findings underscore the importance of participatory, system-oriented approaches that integrate community involvement into school-level governance to support sustainable educational outcomes in rapidly expanding education systems.

Keywords: Community Perceptions, Educational Quality, Fee-Free Education Policy, Mixed-Methods Research, Policy Implementation, Stakeholder Engagement, Secondary Schools, Tanzania

I. INTRODUCTION

Globally, education is recognized as a fundamental human right and a key driver of social and economic transformation (Donkoh et al., 2023). The Universal Declaration of Human Rights (United Nations, 1948) explicitly states that elementary education should be free and compulsory for all. In this study, the term "fee-free education" is used as the official policy designation adopted in Tanzania's Education and Training Policy 2014 and relevant government circulars, consistent with scholarly and policy documentation (Shukia, 2021; Kepha, 2018). Fee-free education policies have been adopted by numerous nations as strategic instruments to reduce economic barriers, promote inclusive access, and enhance human capital development (Bray & Kwo, 2013; Haidari, 2021). Furthermore, international frameworks such as the Sustainable Development Goal 4 (SDG 4) emphasize not only universal access to education but also the provision of inclusive and equitable quality education for all (Advocates for International Development, 2022).

In response to these imperatives, many countries have introduced policies aimed at reducing financial barriers to schooling, particularly at the basic and secondary education levels. While such policies have successfully expanded access and school enrolment rates, empirical evidence from both developed and developing countries indicates that improvements in access do not automatically translate into improvements in educational quality (Limukii et al., 2012; Gayardon, 2018). Challenges such as overcrowded classrooms, inadequate teaching and learning resources, and

weakened instructional supervision have raised significant concerns about the sustainability of quality education under universal access policies (Effiong & Akpan, 2020; Ayeh, 2024).

In Sub-Saharan Africa, the introduction of fee-free or tuition-abolition policies has been a central strategy for achieving universal basic and secondary education. Several African nations, such as Uganda, Malawi, and Kenya, have demonstrated notable enrolment gains following the adoption of these policies (Tooley et al., 2008; Oranga et al., 2020). For example, Uganda's introduction of universal secondary education in 2007 led to a significant increase in enrolment, while Malawi saw a 50% surge in primary school attendance after implementing its free primary education policy in 1994. However, these gains have often been accompanied by significant quality-related challenges, including high pupil-teacher ratios, strained infrastructure, teacher shortages, and declining learning outcomes (Effiong & Akpan, 2020; Ayeh, 2024).

Although many Sub-Saharan African countries have abolished school fees to expand access to primary and secondary education, evidence demonstrates that expanded enrolment frequently occurs without corresponding improvements in educational quality. Regional and international evidence indicates that while free education policies have expanded access, they are often accompanied by persistent challenges such as teacher shortages, overcrowded classrooms, and weak learning outcomes in Sub-Saharan Africa (United Nations Scientific, Environmental and Cultural Organization [UNESCO], 2024). Similarly, research on sustainable development goals in Sub-Saharan Africa concludes that while enrolments rose under fee-free policies, quality education remains elusive due to systemic barriers such as insufficient resources and poor instructional conditions (Zickafoose et al., 2024).

Tanzania's policy landscape reflects a similar trajectory. Since independence, the government has implemented several reforms aimed at removing financial barriers to education. Early measures, such as the abolition of secondary school fees in 1963 under Julius Nyerere's leadership, were complemented decades later by the Primary Education Development Plan (PEDP) (2002–2006) and the Secondary Education Development Plan (SEDP) (2004–2009) (URT, 2004; URT, 2014). The landmark Education and Training Policy (ETP) 2014 institutionalized "Fee-Free Basic Education," extending government-funded education from primary to lower secondary levels. This policy was operationalized from 2015 through successive ministerial circulars (HakiElimu, 2017; URT, 2016). The policy triggered a dramatic 85.6% increase in national enrolment within its early implementation years (TEN/MET, 2018), signalling substantial progress toward the goal of universal education access.

However, the reality on the ground reveals a complex and contested picture. The rapid influx of students has severely strained existing infrastructure, leading to overcrowded classrooms, acute furniture shortages, and inadequate teaching and learning materials (Mashala, 2019; Lucumay & Matete, 2024). Teacher-to-student ratios have worsened in some regions, and professional development opportunities remain limited, constraining the ability of educators to adapt to the demands of larger and increasingly diverse classroom populations (Godda, 2018; Lyanga & Chen, 2020).

Community perceptions are pivotal in understanding this implementation gap. Policies do not exist in isolation; their success depends fundamentally on how they are interpreted, accepted, and supported by the very communities they intend to serve (Epstein, 2011). Positive perceptions can foster meaningful community engagement, encourage sustained parental involvement, and strengthen productive school-community partnerships. Conversely, negative perceptions fuelled by unfulfilled promises, unmet resource needs, or observable declines in educational standards can erode community trust and weaken collective commitment to achieving policy goals.

Against this backdrop, this study seeks to explore community perceptions and local realities of the Fee-Free Education Policy implementation in secondary schools in Tanzania. Specifically, the study aims to uncover both the perceived benefits and the underlying challenges associated with its implementation, providing a balanced account of success stories, unmet expectations, and areas requiring reform. By capturing the voices and experiences of the community, the study aspires to bridge the critical gap between policy design and ground-level realities, offering actionable insights that can inform government strategies, improve resource allocation mechanisms, and enhance the long-term sustainability of fee-free education in Tanzania and similar contexts across Sub-Saharan Africa.

1.1 Research Objectives

- (i) To evaluate the impact of socio-ecological factors at the community level such as parental involvement, material contributions, community values, socioeconomic status, and awareness of policies—on the perceived quality of education in fee-free secondary schools.
- (ii) To investigate the correlation between the expansion of enrolment following policy changes and community perceptions regarding educational quality in urban secondary schools.
- (iii) To analyze the ways in which school leadership practices and the differences between urban and peri-urban contexts influence the relationship between community engagement and the perceived excellence of education

II. LITERATURE REVIEW

2.1 Theoretical Framework

This study is guided by Systems Theory (ST) and the Socio-Ecological Systems (SES) framework, which together provide complementary perspectives for understanding the multilevel determinants of students' academic performance and community perceptions under the fee-free education policy.

2.1.1 Systems Theory

Systems Theory, developed in the 1940s and formalized in the 1950s by Ludwig von Bertalanffy (Rhodes, 2011), conceptualizes a system as a set of interconnected and interdependent components that function as a whole. The theory emphasizes that the behavior and performance of any system cannot be fully understood by examining its parts in isolation, but rather through analyzing the interactions among those parts. It is grounded in the principle that the whole is greater than the sum of its parts. In the educational context, Systems Theory views schools as dynamic systems where elements such as management structures, human resources, infrastructure, and students' backgrounds interact to influence educational outcomes. It further suggests that policies, such as the fee-free education policy, act as external shocks that require schools to adapt by reconfiguring internal components to maintain effective functioning (Sager & Gofen, 2022; Seraw & Lu, 2020).

2.1.2 The Socio-Ecological Systems (SES)

The Socio-Ecological Systems (SES) framework, as advanced by Elinor Ostrom (2009), provides a structured approach for analyzing how factors at multiple levels interact to shape outcomes. The SES framework recognizes that educational performance and community perceptions are influenced by a complex interplay of individual, household, school, community, and policy-level factors. In this study, individual students' perceptions and academic outcomes are shaped by household socioeconomic status, parental involvement, community values toward education, school-level resources and conditions, and awareness of the fee-free education policy. These factors operate within a broader institutional environment and collectively influence perceived educational quality and student performance.

By integrating Systems Theory and the SES framework, the study captures both the internal dynamics of the education system and the broader contextual influences, enabling a holistic analysis of how multilevel interactions shape educational outcomes. This combined framework also helps identify critical leverage points for policy intervention, recognizing that effective improvements in educational performance require coordinated actions across multiple levels rather than isolated efforts.

2.2 Empirical Review

2.2.1 Socio-Ecological Factors and Perceived Quality of Education

Empirical evidence demonstrates that socio-ecological factors such as parental involvement, socioeconomic status, and community participation significantly influence educational quality. Parental involvement has been widely recognized as a key determinant of students' academic success and school effectiveness. Studies show that when parents actively engage in their children's education, students tend to perform better and develop positive learning behaviours (Epstein, 2011; Mncube, 2010).

Socioeconomic status also plays a crucial role in shaping educational outcomes. Learners from higher-income households benefit from access to educational resources, including books, tutoring, and conducive learning environments, compared to those from disadvantaged backgrounds (Sirin, 2005; Chowa et al., 2013). In Tanzania, evidence suggests that despite the introduction of fee-free education, household poverty continues to limit students' access to essential learning materials, thereby affecting the perceived quality of education (HakiElimu, 2017).

Community participation further strengthens school performance by enhancing accountability and resource mobilization. Empirical evidence shows that when communities actively engage in school activities, decision-making, and resource support, it leads to improved school governance and student outcomes. For instance, Epstein (2011) emphasizes that effective school-family-community partnerships contribute to better student achievement and school improvement through shared responsibility. Similarly, World Bank (2018) found that community involvement in education increases transparency and accountability in school management, particularly in developing countries. In the Tanzanian context, (HakiElimu, 2017) reports that community engagement plays a critical role in supporting school resources and monitoring the implementation of the fee-free education policy. Moreover, policy awareness among parents and community members enhances their ability to support educational initiatives (URT, 2016).

Recent studies also highlight that socio-ecological inequalities remain a major barrier to achieving quality education in Sub-Saharan Africa. Limited funding, poverty, and unequal resource distribution continue to affect learning outcomes across the region (Zickafoose et al., 2024). Most existing studies focus on academic performance, with limited

attention given to how socio-ecological factors influence community perceptions of educational quality, particularly in fee-free education contexts.

2.2.2 Enrolment Expansion and Community Perceptions of Educational Quality

The introduction of fee-free education policies has significantly increased access to education across Sub-Saharan Africa. In Tanzania, the implementation of fee-free basic education led to a substantial rise in enrolment, particularly among children from low-income households (World Bank, 2023; URT, 2016). However, the rapid expansion of enrolment has placed pressure on existing educational resources. Empirical studies indicate that increased enrolment has resulted in overcrowded classrooms, shortages of teachers, and inadequate infrastructure, which negatively affect the quality of education (Lucumay & Matete, 2024).

Similarly, research shows that while fee-free education improves access and equity, it often leads to challenges in maintaining educational standards if resource allocation does not match enrolment growth (UNESCO, 2024; World Bank, 2023). Evidence from recent studies in Tanzania further indicates that although enrolment has increased significantly, sustaining quality education requires investment in teacher capacity, infrastructure, and learning materials (Twaweza, 2017; URT, 2025). Although there is substantial evidence on enrolment expansion and academic outcomes, limited studies examine how communities perceive the trade-off between increased access and educational quality, especially in urban secondary schools.

2.2.3 School Leadership, Community Engagement, and Urban–Peri-Urban Differences

School leadership plays a central role in mediating the relationship between community engagement and educational quality. Effective leadership practices including instructional supervision, stakeholder collaboration, and resource management are associated with improved school performance (Leithwood et al., 2006; Bush & Glover, 2014). Empirical studies also emphasize that strong collaboration between school leaders and communities enhances accountability and improves educational outcomes. Schools that actively involve parents and local communities in decision-making processes tend to create supportive learning environments (Epstein, 2011; Mncube, 2010).

Recent evidence highlights that leadership capacity is particularly important in contexts experiencing rapid enrolment growth. School leaders are required to manage increased workloads, limited resources, and infrastructure constraints while maintaining quality standards (Lucumay & Matete, 2024). Furthermore, disparities between urban and peri-urban schools significantly influence educational quality. Urban schools often face overcrowding and high student-teacher ratios, while peri-urban schools experience limited infrastructure and shortages of qualified teachers (UNESCO, 2024; World Bank, 2023).

Recent regional studies confirm that structural inequalities and governance challenges continue to hinder the achievement of quality education across Sub-Saharan Africa (Zickafoose et al., 2024). There is limited empirical evidence comparing how school leadership and community engagement operate differently across urban and peri-urban contexts, particularly in shaping perceived educational quality.

2.2.4 Synthesis of Empirical Review and Research Gap

Despite the substantial body of literature on socio-economic factors, enrolment expansion, and school leadership, significant gaps remain in understanding how these elements interact within a unified analytical framework. Most existing studies examine these factors in isolation, with limited attention given to their simultaneous and multilevel interactions, particularly in shaping community perceptions of educational quality in urban secondary school contexts. Furthermore, few studies have employed advanced analytical approaches capable of capturing complex relationships among socio-ecological variables. This limits the ability to generate comprehensive and predictive insights into how community-level dynamics influence educational outcomes under the fee-free education policy.

To address these gaps, the present study adopts a socio-ecological systems framework integrated with Partial Least Squares Structural Equation Modeling (PLS-SEM) to examine the relationships among community-level factors, enrolment dynamics, school leadership practices, and perceived educational quality. This approach enables a more holistic and robust analysis of the interconnected determinants of education quality. By doing so, the study responds directly to calls for more rigorous, multilevel, and predictive approaches in educational policy evaluation.

III. METHODOLOGY

3.1 Research Design

This study adopted a cross-sectional design with a convergent mixed-methods approach to explore Fee-Free Policy perceptions in Morogoro's urban and peri-urban secondary schools. The quantitative component used PLS-SEM to map structural relationships between socio-ecological predictors and perceived educational quality; the qualitative component employed semi-structured interviews to contextualize these quantitative patterns with rich explanatory detail and local understanding. The SES framework framed the integration of both data streams, capturing multilevel

influences on community perceptions. This design capitalizes on quantitative precision for hypothesis testing alongside qualitative depth for explanatory nuance, mitigating the limitations of singular methodological approaches in complex policy contexts (Creswell & Plano Clark, 2017). By converging findings from both methods, the study provides a comprehensive view of perceptual dynamics and implementation realities, enhancing transferability to similar urban African educational settings.

3.2 Study Area

The study was conducted in Morogoro Municipality in eastern Tanzania, covering approximately 531 square kilometers, with a population of 471,409 according to the 2022 Population and Housing Census (URT, 2022). The municipality hosts both public and private secondary schools with diverse socio-economic and infrastructural contexts, making it suitable for examining educational policy implementation. Morogoro was purposively selected because its mix of urban and peri-urban schools, variation in enrollment and performance, and documented implementation challenges provide an ideal setting to investigate the study objectives. This includes the influence of community-level socio-ecological factors on perceived educational quality, the relationship between enrollment expansion and community perceptions, and how school leadership and contextual differences affect the link between community engagement and educational outcomes (Lazaro & Matiku, 2022).

3.3 Target Population

The study targeted three groups of respondents from public secondary schools in Morogoro Municipality. Students from Forms One to Four formed the primary quantitative sample, as they are directly affected by the Fee-Free Education Policy and their academic performance represents the main outcome of interest. Head teachers, responsible for school administration and policy implementation, provided insights into institutional management, leadership practices, and challenges in enforcing the policy. Academic teachers of core subjects English, Mathematics, and the sciences (Biology, Chemistry, and Physics) contributed perspectives on instructional delivery, classroom-level constraints, and factors influencing student achievement. This multi-respondent approach enabled the study to capture both individual and institution-level determinants of educational outcomes, ensuring comprehensive analysis of community perceptions and school performance.

3.4 Sampling and Data Collection Procedures

The research was conducted in Morogoro Municipality, an urban and peri-urban area of Tanzania selected for its diverse mix of secondary schools operating across varied socio-economic contexts. Twelve public secondary schools were purposively selected to ensure adequate representation of different performance levels and distinct community settings, reflecting the range of implementation contexts across urban Tanzania.

Within these schools, three categories of participants were engaged: students, head teachers, and academic teachers. Students ($n = 239$) were surveyed using structured questionnaires containing both closed-ended and open-ended items. The closed-ended questions gathered demographic and background information necessary for analysis; the open-ended questions invited students to share their perceptions of school conditions, community support, and observable policy impacts. Head teachers ($n = 12$) and academic teachers ($n = 8$) were selected through purposive sampling due to their central roles in school governance and classroom instructional delivery, respectively. Semi-structured interviews were conducted with these groups, focusing on community awareness of the policy, patterns of parental involvement, perceived policy effectiveness, infrastructure challenges encountered, teacher workload, and mechanisms of community engagement in school development initiatives. This combination of participant perspectives and data sources enabled a multi-dimensional understanding of community realities and implementation experiences.

Table 1

Participants and Data Collection Tools

Participant Group	Number	Data Collection Tool	Main Focus Areas
Students	239	Structured questionnaire	Perceptions of infrastructure, teacher quality, parental support, policy effects
Head Teachers	12	Semi-structured interview	Community awareness, policy implementation challenges, resource constraints, local support mechanisms
Academic Teachers	8	Semi-structured interview	Classroom realities, resource constraints, student engagement, teaching workload impacts
Total Interviews	20	Semi-structured	Qualitative contextualization of quantitative patterns

The purposive selection of 12 secondary schools was guided by theoretical diversity rather than statistical power considerations, reflecting PLS-SEM's established flexibility for exploratory analyses in small-to-moderate samples



(Hair et al., 2017). With 239 students, the achieved sample exceeds PLS-SEM's minimum rule-of-thumb recommendation ($10 \times$ number of predictor variables; here, 6 predictor variables $\times 10 = 60$ minimum), ensuring stable and reliable path coefficient estimates (Sarstedt et al., 2020). For the qualitative component, data saturation was achieved through 20 interviews (12 head teachers and 8 academic teachers); systematic thematic coding identified no substantively new themes after the 18th interview, confirming that adequate data saturation had been reached (Braun & Clarke, 2006). This combined approach strategically balances quantitative statistical precision with qualitative explanatory depth, appropriate for exploratory policy research in African educational contexts.

3.5 Hypotheses Development

Drawing from the SES framework and the empirical literature synthesized above, the following five hypotheses posit positive direct effects of the five exogenous constructs on the endogenous outcome of perceived Educational Quality (EQ), reflecting multilevel influences on policy outcomes. These hypotheses are grounded in established evidence linking relational engagement, resource availability, and organizational factors to enhanced perceptions and educational performance (Epstein, 2011; Mashala, 2019).

Table 2
Study Hypotheses and Supporting Evidence

Hypothesis	Prediction	Supporting Evidence
H1	Parent Involvement (PI) has a positive significant direct effect on Educational Quality (EQ)	Extensive research demonstrates that active parental roles substantially boost student academic outcomes and foster policy buy-in, particularly in resource-scarce urban contexts (Desforges & Abouchaar, 2003; Epstein, 2011)
H2	Community Values for Education (CV) has a positive significant direct effect on Educational Quality (EQ)	Aligned with evidence that communal prioritization of education fosters supportive environments, amplifying policy effectiveness through positive social norms and peer influence (Mwaura, 2018)
H3	Material Contributions (MC) has a positive significant direct effect on Educational Quality (EQ)	Backed by research indicating that tangible material inputs directly mitigate visible infrastructure gaps and resource shortages, directly elevating quality perceptions (Epstein, 2001; Mashala, 2019)
H4	Policy Awareness (PA) has a positive significant direct effect on Educational Quality (EQ)	Informed by findings that informed stakeholders better appreciate policy benefits and rationales, though effects may be moderated by implementation fidelity (HakiElimu, 2017)
H5	Socioeconomic Status (SES) has a positive significant direct effect on Educational Quality (EQ)	Consistent with equity analyses linking household resources to engagement capacity and educational outcomes, underscoring structural economic enablers of involvement (Lucumay & Matete, 2024)

These hypotheses guide the structural equation model, tested via path coefficients in PLS-SEM, allowing for predictive assessment of the perceptual drivers and mechanisms in Tanzania's fee-free policy context.

3.6 Measurement Indicators and Reliability Testing

Five exogenous socio-ecological constructs (PI, CV, MC, PA, SES) and one endogenous outcome construct (Educational Quality, EQ) used 5-point Likert scales (ranging from "Strongly Disagree" to "Strongly Agree"), adapted for the Tanzanian context drawing on validated measurement frameworks (Epstein, 2011; Ostrom, 2009). The measurement indicators for each construct are as follows:

Parent Involvement (PI):

PI1—Parents attend school meetings; PI2—Parents follow student academic progress; PI3—Parents communicate with teachers; PI4—Parents support homework; PI5—Parents encourage education importance.

Community Values for Education (CV):

CV1—Community prioritizes education; CV2—Local leaders support education; CV3—Community respects education; CV4—Education discussed positively in community; CV5—Community encourages school attendance.

Material Contributions (MC):

MC1—Community provides infrastructure support; MC2—Parents donate learning materials; MC3—Community contributes to maintenance; MC4—Community provides volunteer work.

Policy Awareness (PA):

PA1—Students understand policy goals; PA2—Students aware of policy benefits; PA3—Students informed about policy changes; PA4—Students know their rights under the policy.

Socioeconomic Status (SES):

SES1—Family income adequacy; SES2—Parent education level; SES3—Home resources availability; SES4—Access to basic needs.

Educational Quality (EQ):

EQ1—Teaching quality; EQ2—Learning outcomes; EQ3—Classroom environment; EQ4—Student engagement; EQ5—Academic performance.

These operationalisations draw from established and validated measurement scales, ensuring content validity while incorporating local contextual nuances such as post-policy resource strains and urban infrastructure challenges (Mashala, 2019). The 5-point Likert format facilitates latent variable modelling and path analysis, capturing perceptual intensities reliably across the study population as shown in Figure 1.

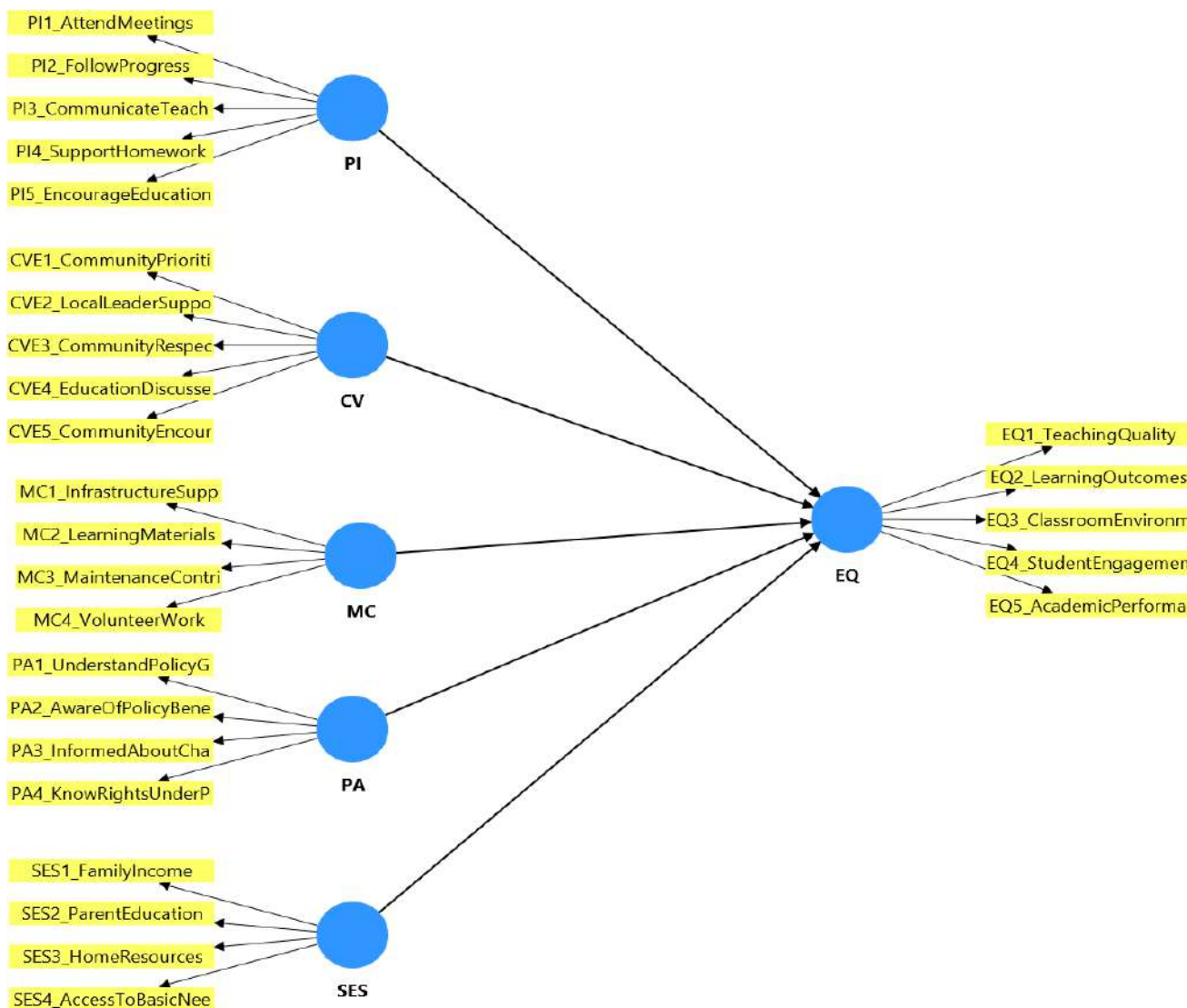


Figure 1
Structural Partial Least Square Model Results

3.6.1 Reliability of Individual Indicators

Preliminary results on table 1 shows that all loadings exceed the threshold of 0.70, confirming indicator reliability. These outer loadings, as per PLS-SEM conventions, demonstrate that each item effectively reflects its latent construct, with values exceeding the 0.70 threshold recommended for retaining indicators in reflective models (Hair et al., 2019). This ensures the measurement model's robustness, minimizing measurement error and supporting subsequent structural inferences. Lower loadings, such as SES1 (0.812), were retained due to theoretical relevance despite being marginally above the cutoff, a decision aligned with guidelines for exploratory contexts (Sarstedt et al., 2020).

Table 3*Reliability testing Outer Loadings*

Indicator	Construct	Outer loading
PI1_AttendMeetings	PI	0.964
PI2_FollowProgress	PI	0.965
PI3_CommunicateTeachers	PI	0.963
PI4_SupportHomework	PI	0.957
PI5_EncourageEducation	PI	0.957
CVE1_CommunityPrioritizesEd	CV	0.913
CVE2_LocalLeaderSupport	CV	0.921
CVE3_CommunityRespectEducation	CV	0.929
CVE4_EducationDiscussedPositively	CV	0.914
CVE5_CommunityEncouragesAttendance	CV	0.913
MC1_InfrastructureSupport	MC	0.944
MC2_LearningMaterialsDonation	MC	0.950
MC3_MaintenanceContribution	MC	0.938
MC4_VolunteerWork	MC	0.946
PA1_UnderstandPolicyGoals	PA	0.943
PA2_AwareOfPolicyBenefits	PA	0.939
PA3_InformedAboutChanges	PA	0.948
PA4_KnowRightsUnderPolicy	PA	0.930
SES1_FamilyIncome	SES	0.812
SES2_ParentEducation	SES	0.913
SES3_HomeResources	SES	0.930
SES4_AccessToBasicNeeds	SES	0.928
EQ1_TeachingQuality	EQ	0.850
EQ2_LearningOutcomes	EQ	0.863
EQ3_ClassroomEnvironment	EQ	0.830
EQ4_StudentEngagement	EQ	0.851
EQ5_AcademicPerformance	EQ	0.836

3.7 Data Analysis Procedures

Quantitative Analysis: PLS-SEM in SmartPLS 4 (Ringle et al., 2024) assessed both the structural model (paths from exogenous constructs to EQ) and the measurement model (reliability and validity of constructs). Bootstrapping with 5,000 resamples tested the statistical significance of path coefficients; evaluation criteria included: indicator loadings > 0.70, Average Variance Extracted (AVE) > 0.50, Heterotrait-Monotrait ratio (HTMT) < 0.85, Variance Inflation Factors (VIF) < 5, and model R² > 0.10 (Hair et al., 2022). The choice of PLS-SEM over covariance-based SEM stems from its suitability for predictive-oriented research with non-normal data distributions and smaller-to-moderate sample sizes, as are prevalent in educational policy studies (Hair et al., 2017). Bootstrapping provides non-parametric inference that does not assume multivariate normality, enhancing confidence in path significance estimates (Sarstedt et al., 2017). Harman's single-factor test ruled out common method variance bias, a concern in self-reported survey data.

Qualitative Analysis: NVivo 14 software facilitated thematic coding of interview transcripts. Interviews were recorded, transcribed verbatim, and coded inductively for emergent themes related to policy implementation experiences, resource constraints, community engagement patterns, and quality perceptions. A second coder independently coded 25% of transcripts to establish inter-rater reliability (Cohen's kappa = 0.82, indicating strong agreement). Qualitative integration via joint display tables triangulated quantitative and qualitative findings, validating quantitative patterns with illustrative quotations and contextual understanding, aligning with mixed-methods best practices for comprehensive policy insight (Creswell & Plano Clark, 2017).

3.8 Ethical Considerations

Ethical clearance was obtained from Sokoine University of Agriculture Research Ethics Committee prior to data collection (Ref. No. *SUA/ADM/R.1/8/1361*, dated 11th December 2024). Subsequently, a Research Permit was granted by the President's Office Regional Administration and Local Government (Ref. No. *AB.307/323/01/192*, dated 27th December 2024). Further authorization was secured from the District Administrative Secretary (Ref. No. *AB.175/245/01 "S"176*, dated 3rd January 2025) and from the Morogoro Municipal Director (Ref. No. *E.10/MMC-22/VOL III/119*, dated 20th January 2025). These approvals formally permitted the researcher to conduct the study within selected public secondary schools in Morogoro Municipality.

All participants were provided with clear information regarding the study's objectives, procedures, the voluntary nature of their involvement, and data confidentiality through both informational sheets and verbal explanations. They were made aware that they could choose not to answer any questions or withdraw from the study at any time without facing any negative consequences. Each participant submitted written informed consent. For those students under 18 years old (specifically those aged 16-17), parental informed consent was secured prior to their participation, along with the students' assent. All students were aged 16 or older, with the majority (50.2%) falling within the 16-18 age range.

Confidentiality was maintained through assignment of pseudonyms and unique identification codes (students referenced by number, head teachers and academic teachers. All data, including audio recordings and transcripts, were stored on password-protected computers with access restricted to the research team. Data will be securely destroyed two years after study completion in accordance with data protection guidelines. Light refreshments were offered to all participants as appreciation for their time, without constituting coercion given the nominal value (World Medical Association, 2013).

3.9 Limitations

This study has several limitations. First, the cross-sectional design limits the ability to establish causal relationships, as it captures data at one point in time. Second, the focus on Morogoro Municipality may restrict the generalizability of findings to other contexts, particularly rural areas. Third, reliance on self-reported data, especially on attendance and parental involvement, may introduce social desirability bias, although triangulation with qualitative data helped reduce this effect. Fourth, the use of examination results as a measure of academic performance does not fully capture the broader concept of educational excellence, which includes skills and holistic development.

Despite these limitations, the study provides useful insights into how increased access to education under the fee-free policy relates to perceived and actual educational quality from a community perspective.

IV. FINDINGS & DISCUSSION

4.1 Demographic Characteristics of Respondents

The demographic profile of respondents provides important contextual insights for interpreting the study findings. The student sample was relatively balanced across gender and class levels, with a slightly higher proportion of male students (55.2%) compared to female students (44.8%). The distribution across form levels was also fairly even, ensuring representation across different stages of secondary education. This balanced composition enhances the reliability of the findings by minimizing bias associated with overrepresentation of specific groups.

Additionally, the qualitative sample consisted of experienced education professionals, with academic teachers largely falling within mid-career categories and head teachers demonstrating substantial institutional experience. This combination of student perspectives and experienced educators strengthens the credibility of the findings by capturing both user-level experiences and institutional insights regarding the implementation of the fee-free education policy.

Table 4

Demographic Characteristics of Student Respondents (n = 239)

Characteristic	Category	Frequency	Percentage
Gender	Male	132	55.2%
	Female	107	44.8%
Form Level	Form One	65	27.2%
	Form Two	60	25.1%
	Form Three	58	24.3%
	Form Four	56	23.4%
	Total		239

Note: In Tanzania's education system, Form refers to grade levels in secondary school: Form One (Grade 9), Form Two (Grade 10), Form Three (Grade 11), and Form Four (Grade 12). These correspond to the final four years of compulsory secondary education.

4.2 Measurement Model Results: Reliability and Validity

The measurement model assessment confirms the robustness of the constructs used in this study. All indicators demonstrated strong reliability, with outer loadings exceeding the recommended threshold of 0.70, indicating that the measurement items adequately represent their respective latent constructs (Hair et al., 2019). Composite reliability and Cronbach's alpha values also exceeded the acceptable threshold of 0.70, confirming high internal consistency across all constructs (Hair et al., 2022).

Convergent validity was established by Average Variance Extracted (AVE) values exceeding 0.50, indicating that each construct explains more than half of the variance in its indicators. Furthermore, discriminant validity was

confirmed using the Heterotrait-Monotrait (HTMT) ratio, with all values well below the recommended threshold of 0.85, indicating that the constructs are empirically distinct (Sarstedt et al., 2017). Overall, these results validate the suitability of the measurement model for structural analysis and support the reliability of subsequent findings.

Table 5

Construct Reliability and Validity Metrics

Construct	Cronbach's α	AVE	ρ_a	ρ_c	VIF
Parent Involvement (PI)	0.979	0.923	0.979	0.985	1.50
Community Values (CV)	0.953	0.843	0.953	0.964	1.80
Material Contributions (MC)	0.960	0.892	0.960	0.970	1.40
Policy Awareness (PA)	0.956	0.884	0.956	0.967	1.60
Socioeconomic Status (SES)	0.919	0.805	0.919	0.946	1.30
Educational Quality (EQ)	0.901	0.716	0.901	0.928	—

Note: AVE = Average Variance Extracted; ρ_a = Dijkstra's reliability coefficient; ρ_c = Composite reliability; VIF = Variance Inflation Factor. All values meet or exceed conventional thresholds for reliability ($\alpha, \rho > 0.70$) and validity (AVE > 0.50, VIF < 5).

Indicator Reliability: The measurement model was evaluated to ensure the reliability and validity of the constructs prior to examining structural relationships. Indicator reliability was assessed through outer loadings of the manifest variables. Consistent with the recommended threshold of 0.70 for reflective constructs (Hair et al., 2019), all indicators exhibited strong loadings, confirming that each survey item reliably represents its intended latent construct. For example, Parent Involvement (PI) indicators ranged from 0.957 to 0.965, demonstrating excellent reliability, while SES1 (Family Income = 0.812) was retained due to its theoretical relevance and the multifaceted nature of socioeconomic status (Sarstedt et al., 2020). These results indicate that all indicators contribute meaningfully to their constructs, supporting the assessment of construct reliability and subsequent structural analysis.

Construct reliability was further evaluated using Composite Reliability (CR) and Cronbach's α , both of which exceeded the recommended 0.70 threshold for all constructs, indicating strong internal consistency. Convergent validity was confirmed as Average Variance Extracted (AVE) values for all constructs were above 0.50, demonstrating that the latent constructs explained a substantial portion of variance in their respective indicators.

Discriminant validity was examined using the Heterotrait-Monotrait (HTMT) ratio, which is recognized as superior to the Fornell-Larcker criterion in PLS-SEM applications (Hair et al., 2019; Sarstedt et al., 2017). All HTMT ratios were well below the 0.85 threshold (Table 6) indicating clear empirical differentiation between constructs despite theoretical conceptual overlap. Notably, modest correlations between exogenous constructs and EQ in the HTMT matrix (e.g., 0.339 between PI and EQ) suggest distinct but theoretically meaningful relationships, supporting the validity of causal interpretation in the structural model.

Overall, the measurement model demonstrates high indicator reliability, strong construct reliability, satisfactory convergent validity, and clear discriminant validity, indicating that the constructs are measured accurately and are empirically distinct. These results provide a solid foundation for interpreting the structural relationships in the subsequent analysis.

Table 6

Heterotrait-Monotrait Ratio (HTMT) Matrix

	PI	CV	MC	PA	SES	EQ
PI	1.000	0.038	0.059	-0.008	0.017	0.339
CV	0.038	1.000	0.012	0.085	-0.051	0.124
MC	0.059	0.012	1.000	0.037	-0.053	0.269
PA	-0.008	0.085	0.037	1.000	-0.042	0.107
SES	0.017	-0.051	-0.053	-0.042	1.000	0.066
EQ	0.339	0.124	0.269	0.107	0.066	1.000

Note: All HTMT values are substantially below the 0.85 threshold, confirming discriminator validity. Values typically > 0.10 indicate adequate construct distinctiveness.

4.3 Structural Model Results and Discussion

The structural model results reveal important insights into the determinants of perceived educational quality under the fee-free education policy. The model explains 26.1% of the variance in perceived educational quality ($R^2 = 0.261$), indicating moderate explanatory power consistent with exploratory PLS-SEM studies in education research (Hair et al., 2022).

Parental involvement (PI) emerged as the strongest predictor of perceived educational quality ($\beta = 0.322, p < 0.001$). This finding is consistent with existing literature emphasizing the importance of parental engagement in enhancing student outcomes and school effectiveness (Epstein, 2011; Mncube, 2010). The result underscores the critical role of relational dynamics within the socio-ecological system, where active communication, monitoring of student progress, and participation in school activities strengthen accountability and improve perceptions of quality.

Material contributions (MC) from the community also demonstrated a significant positive effect ($\beta = 0.252, p < 0.001$), aligning with studies showing that tangible support such as infrastructure, learning materials, and maintenance directly improves educational conditions and stakeholder perceptions (Mashala, 2019; World Bank, 2018). This highlights the importance of visible resource inputs in shaping perceptions of educational quality, particularly in resource-constrained environments.

Community values (CV) toward education exhibited a weaker but statistically significant effect ($\beta = 0.127, p = 0.048$). This finding is consistent with literature suggesting that cultural norms and collective attitudes toward education create supportive environments but may not independently drive educational outcomes (Mwaura, 2018). The relatively small effect size indicates that values alone are insufficient without active engagement and material support.

In contrast, policy awareness (PA) did not show a statistically significant effect ($\beta = 0.092, p = 0.116$), contradicting expectations that awareness enhances policy outcomes (HakiElimu, 2017). This result suggests that awareness without effective implementation may not improve perceptions of quality. Similarly, socioeconomic status (SES) did not demonstrate a significant direct effect ($\beta = 0.110, p = 0.252$), which contrasts with studies linking household resources to educational outcomes (Sirin, 2005; Chowa et al., 2013). However, this finding can be explained by the socio-ecological perspective, where socioeconomic factors influence outcomes indirectly through mediating variables such as parental involvement and material contributions.

“While the structural model identifies the statistical relationships between parental involvement, material contributions, socioeconomic status, policy awareness, and educational quality perceptions, it does not fully explain the mechanisms or contextual realities driving these patterns. To provide richer insight and validate these quantitative findings, qualitative interviews were conducted with head teachers and academic staff. Thematic analysis of these interviews revealed four dominant themes, which illuminate the pathways and contingencies underlying the quantitative results”.

Table 7

Structural Model Path Estimates (Standardized Coefficients)

Path	β	Std. Error	T-Value	p-Value	95% CI Lower	95% CI Upper	f ²	Result
PI → EQ	0.322	0.054	5.963	0.000	0.214	0.429	0.41	Supported (H1)
CV → EQ	0.127	0.064	1.974	0.048	-0.057	0.236	0.03	Supported (H2)
MC → EQ	0.252	0.053	4.761	0.000	0.148	0.355	0.18	Supported (H3)
PA → EQ	0.092	0.058	1.572	0.116	-0.036	0.206	0.02	Not Supported (H4)
SES → EQ	0.110	0.096	1.145	0.252	-0.149	0.230	0.01	Not Supported (H5)

Note: β = Standardized path coefficient; CI = 95% Confidence Interval (bias-corrected); f² = Cohen's effect size (0.02 = small, 0.15 = medium, 0.35 = large); Model R² = 0.261 (26.1% variance explained).

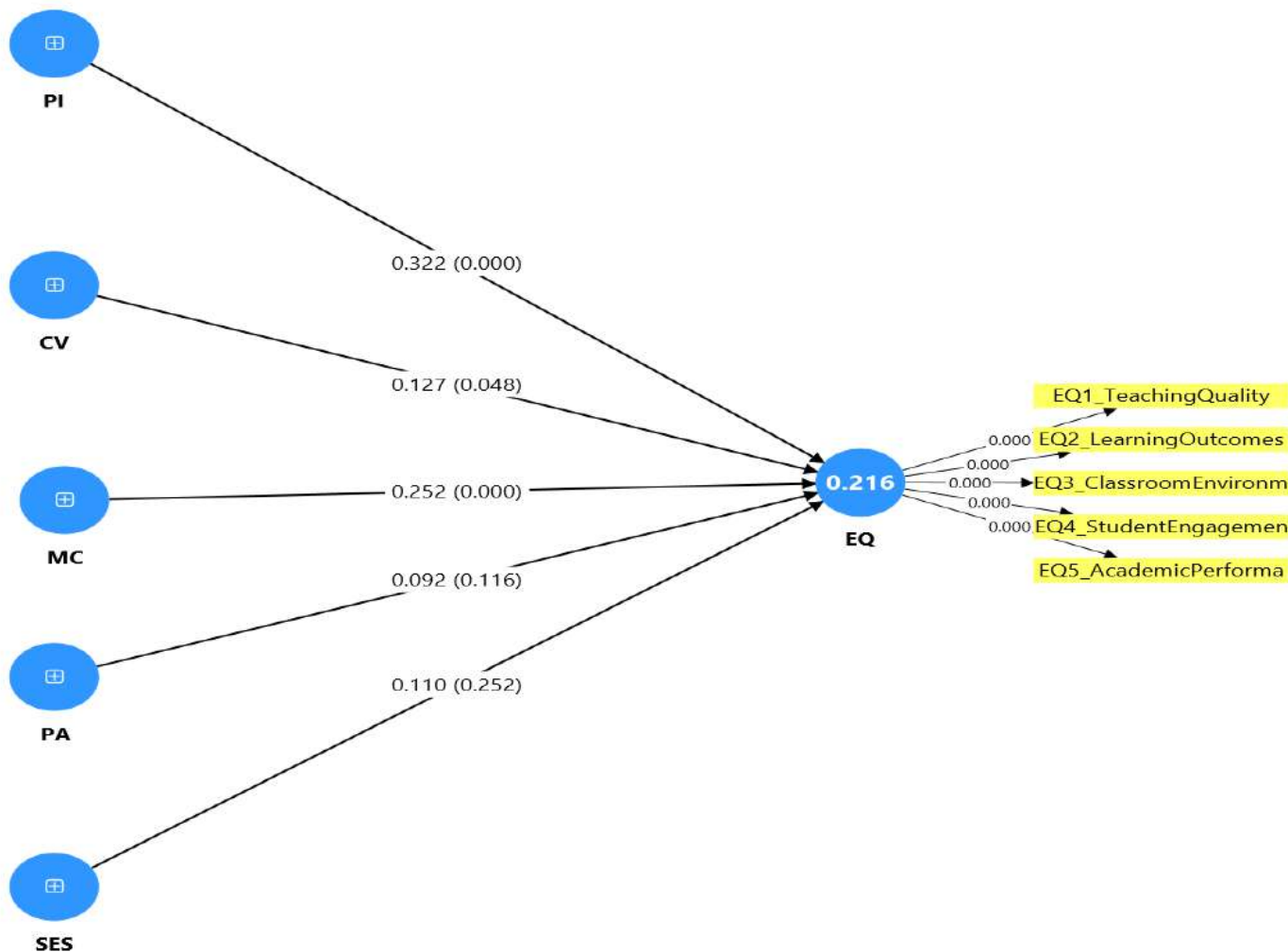


Figure 2
Structural Partial Least Squares Model Results

4.4 Enrolment Expansion and the Access–Quality Paradox

The findings confirm that the fee-free education policy has significantly expanded access to secondary education, consistent with national and international evidence (URT, 2016; World Bank, 2023). However, this expansion has introduced significant challenges for maintaining educational quality.

Both quantitative and qualitative findings highlight the emergence of an “access–quality paradox,” where increased enrolment places pressure on existing resources, leading to overcrowded classrooms, limited infrastructure, and strained teaching capacity. These findings align with prior studies demonstrating that rapid enrolment expansion without proportional resource investment compromises educational quality (Lucumay & Matete, 2024; UNESCO, 2024).

This paradox reflects broader challenges in Sub-Saharan Africa, where policies aimed at increasing access often struggle to sustain quality due to systemic constraints (Zickafoose et al., 2024). The findings suggest that achieving both access and quality requires a balanced approach that integrates enrolment expansion with adequate resource provision.

4.5 School Leadership and Community Engagement Dynamics

The qualitative findings reveal that school leadership plays a critical role in shaping the effectiveness of community engagement and resource mobilization. Although leadership was not explicitly modelled in the structural equation model, evidence suggests that it functions as an important contextual factor influencing the relationship between community engagement and educational quality. This observation is consistent with literature emphasizing that effective leadership enhances collaboration, accountability, and school performance (Leithwood et al., 2006; Bush & Glover, 2014). Schools with proactive leadership demonstrated stronger community engagement and better capacity to mobilize resources, even under similar constraints.

These findings suggest that leadership acts as a facilitating mechanism that amplifies the impact of parental involvement and material contributions. This extends existing research by highlighting the importance of leadership as a contextual variable in socio-ecological systems, particularly in resource-constrained educational settings.

4.6 Integrated Discussion: A Socio-Ecological Perspective

The findings of this study strongly support the socio-ecological systems framework by demonstrating that perceived educational quality is shaped by the interaction of relational, organizational, and structural factors rather than any single determinant. The results indicate that proximal factors particularly parental involvement and material contributions are the most influential drivers of perceived educational quality, highlighting the importance of direct engagement and tangible resource support in shaping how communities evaluate education outcomes. In contrast, community values toward education, while significant, exert only a modest influence, suggesting that normative support alone is insufficient without corresponding action and investment. Furthermore, socioeconomic status and policy awareness do not show significant direct effects, underscoring the complexity of their roles within the socio-ecological system. Consistent with socio-ecological theory, these distal factors appear to operate indirectly through mediating mechanisms such as parental involvement and material contributions. This suggests that economic resources and policy knowledge influence perceptions of educational quality only when they translate into active engagement and observable improvements in school conditions. Additionally, the findings highlight the contextual importance of school leadership and urban–peri-urban differences in shaping how community engagement mechanisms function in practice. Overall, the study demonstrates that improving educational quality under fee-free education policies requires a holistic, multilevel approach that prioritizes active community participation, resource mobilization, and context-sensitive leadership strategies.

4.7 Qualitative Findings: Contextualizing and Extending Quantitative Patterns

Thematic analysis of 20 semi-structured interviews (12 head teachers and 8 academic teachers) revealed four dominant themes that contextualize, extend, and validate the quantitative findings. These qualitative insights illuminate mechanisms underlying quantitative patterns and reveal implementation realities not captured by the structural model.

Theme 1: The Access-Quality Paradox

All respondents acknowledged the policy's unprecedented success in expanding student enrolment and improving access to secondary education but expressed consistent concerns about deteriorating educational quality. One head teacher explained:

"The policy is beautiful in theory; every child should have access to education. But we are now trying to teach 140 students in a classroom built for 40. How can you ensure quality in that environment?" (21.01.2025)

An academic teacher from a peri-urban school added:

"Between 2014 and 2015, we had about 800 students in this school. Today, we have over 3,400. Our buildings haven't changed. The number of teachers hasn't increased proportionally. Yes, more children are in school, but are they learning? That's the real question." (21.01.2025)

This paradox aligns with Systems Theory: the fee-free policy created a sudden exogenous shock to school systems without a simultaneous recalibration of system capacity (classrooms, teachers, materials, infrastructure). A principal summarized:

"The government's heart is in the right place, but the implementation is incomplete. They removed the financial barrier but didn't remove the capacity barriers. We need resources to match the enrolment." (22.01.2025)

Theme 2: Socioeconomic Constraints as Structural Mediators of Parental Involvement

While SES showed no significant direct effect on educational quality in the quantitative model ($\beta = 0.110$, $p = 0.252$), qualitative evidence revealed that SES strongly shapes parental involvement—the strongest quantitative predictor ($\beta = 0.322$). This suggests an indirect mediation pathway, where SES constrains parental involvement and material contributions, which in turn influence quality perceptions.

One teacher explained:

"Parents want to be involved, but many work in informal sectors with no fixed hours or income security. A mother might be selling vegetables in the market during school hours, so she can't attend parent meetings. It's not lack of care or commitment; it's lack of time and economic security." (22.01.2025)

A head teacher added:

"When we ask parents to contribute materials for classroom improvement, many want to help but can't afford it. Some families are spending their last shillings on uniforms and transport." (23.01.2025)



These qualitative insights explain why SES appears non-significant quantitatively: its effects operate indirectly through PI and MC, confirming a Systems Theory perspective where distal structural factors (SES) affect outcomes via proximal relational mechanisms. Interventions should therefore target parental engagement mechanisms and resource support, rather than relying on direct SES influence.

Theme 3: Leadership Variability as a Critical Implementation Moderator

Respondents highlighted significant variation in school leadership effectiveness in managing fee-free policy challenges. Some head teachers actively mobilized community resources and adapted operations, while others were overwhelmed.

An effective head teacher described her proactive approach:

"I organize monthly community meetings, not just parent-teacher conferences. I invite local leaders, businesspeople, and influential community members. I show them the challenges visually—the overcrowded classrooms, the lack of desks and learning materials. When people see reality, they develop motivation and want to help." (23.01.2025)

In contrast, a less proactive head teacher admitted:

"I'm managing a very complex situation with limited support from the district. Sometimes I feel like I'm just trying to keep the school functioning rather than improving quality. The challenges are so large that it's difficult to know where to start with community mobilization." (24.01.2025)

Although leadership was not explicitly modeled in PLS-SEM, qualitative evidence suggests it moderates the effects of PI and MC on educational quality (EQ). Schools with proactive leadership demonstrated stronger community engagement and higher PI → EQ and MC → EQ effects, even under identical resource constraints. This finding suggests future structural modeling could explicitly test leadership as a moderator.

Theme 4: The "Unmet Expectations" Narrative and Policy Implementation Gap

A consistent narrative emerged: communities were disappointed by unfulfilled expectations. One teacher noted:

"When the policy was announced in 2014 and 2015, the government promised that resources would follow—new classrooms, desks, teaching materials, teacher recruitment. It's been over 10 years, and we're still waiting. Classes are more crowded, resources scarcer, but fees are free."(24.01.2025)

A school management committee parent echoed this sentiment:

"We believed that removing fees meant the government would provide everything students need for quality education. But that hasn't happened. Now we have no fees but also no improvements in conditions." (25.01.2025)

This theme **explains quantitative findings for Policy Awareness (PA)**, which did not significantly predict EQ ($\beta = 0.092, p = 0.116$). Awareness alone is insufficient; perceptions depend on **observable resources and implementation fidelity**. Without material improvements, the symbolic value of “fee-free education” erodes, and awareness campaigns will not improve quality perceptions or engagement. The gap between policy promise and reality also undermines motivation for parental involvement and resource contributions.

4.8 Joint Display: Integrated Quantitative-Qualitative Synthesis

Table 8

Joint Display Linking Quantitative Paths, Effect Sizes, and Qualitative Themes

Quantitative Path	β	p-Value	Qualitative Theme(s)	Contextual Illustration	Integration Insight
PI → EQ	0.322	<0.001	Access-Quality Paradox; Unmet Expectations	<i>"Parents actively involved in schools report better quality perceptions despite overcrowding because involvement gives them agency and validates their commitment to education."</i>	Active parental participation creates perception of quality regardless of objective conditions, possibly through psychological investment; involves reciprocal relationship between parent and school
MC → EQ	0.252	<0.001	Material Contributions; Unmet Expectations; Access-Quality Paradox	<i>"Material support (desks, classroom repairs, learning materials) is directly visible to students. When community contributions provide tangible improvements, quality perceptions improve; shortfall in government"</i>	Tangible, visible resource contributions have immediate perceptual impact; absence of expected government resources makes community contributions psychologically salient

				<i>provision amplifies parental frustration."</i>	
CV → EQ	0.127	0.048	Community Values; Access-Quality Paradox	<i>"Strong community cultural support for education principle exists, yet conditional on observable quality improvements; cultural values support enrolment but not quality perception alone."</i>	Communal commitment to education principle provides foundation but requires material validation; values are necessary but insufficient condition for quality perception
PA → EQ	0.092	0.116	Unmet Expectations Narrative; Policy Implementation Gap	<i>"Policy awareness exists broadly; students and families know policy objectives. However, without observable resource delivery and classroom improvements, symbolic value erodes; awareness disconnected from experience."</i>	Knowledge of policy divorced from observable implementation creates cynicism; information campaigns ineffective without material policy delivery; expectations exceeded without resource provision undermines perceptions
SES → EQ	0.110	0.252	Socioeconomic Constraints (Structural Mediator); Leadership Variability	<i>"SES operates indirectly: low-SES families face time and financial barriers to involvement and contributions, which in turn reduce quality perceptions. Leadership effectiveness moderates this relationship by creating accessible pathways to engagement."</i>	SES effects are mediated through PI and MC mechanisms; direct targeting of low-SES families ineffective; interventions must address structural barriers to involvement

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

This study examined community perceptions and the realities of implementing the Fee-Free Education Policy in secondary schools in Morogoro Municipality, Tanzania, drawing insights from students, teachers, and head teachers through a mixed-methods approach combining quantitative structural modeling and qualitative interviews.

The findings indicate that communities generally hold positive views of the policy's core objectives, particularly its success in removing financial barriers, expanding access, and increasing attendance, including among previously marginalized populations, reflecting progress toward SDG 4. However, these achievements are constrained by implementation challenges: rapid student enrollment without corresponding resource expansion has resulted in overcrowded classrooms, limited teaching and learning materials, inadequate furniture, and insufficient teacher professional development, creating an "access-quality paradox."

Quantitative analysis identified parental involvement and community material contributions as the strongest predictors of perceived educational quality, while socioeconomic status, policy awareness, and community values had weaker or indirect effects. Qualitative findings contextualized these results, showing that structural constraints limit parental engagement, leadership variability affects resource mobilization, and unmet expectations undermine trust, explaining why policy awareness alone does not shape perceptions.

Overall, the study highlights that policy success in urban African fee-free education contexts depends primarily on fostering active community engagement, providing tangible resources, and reducing structural barriers, rather than relying solely on policy awareness or communication. Remaining unexplained variance suggests the need to explore additional factors, including peer influences, teacher quality, school leadership capacity, and learning outcomes, in future research.

5.2 Recommendations

Based on the study's integrated quantitative and qualitative findings, several evidence-based recommendations are proposed to strengthen both equity and quality in the implementation of Tanzania's Fee-Free Education Policy.

First, there is a need to enhance flexible community engagement mechanisms. The findings identified parental involvement as a strong driver of perceived educational quality. However, qualitative evidence showed that many parents, particularly those in informal employment and low socioeconomic contexts, face structural barriers such as time constraints and income instability. Schools should therefore adopt inclusive and flexible engagement strategies, including varied meeting schedules, mobile-based communication, and collaboration with local community leaders, to ensure broader participation.

Second, strategic resource mobilization should be institutionalized through partnerships. The study demonstrated that material contributions from the community significantly influence perceptions of educational quality. Given persistent resource constraints in schools, formal collaboration between schools, communities, and external stakeholders

should be strengthened to supplement government efforts. Such partnerships can support the provision of essential infrastructure, teaching materials, and learning resources.

Third, strengthening leadership and management capacity is critical. Qualitative findings revealed substantial variability in how school leaders respond to policy implementation challenges, particularly in mobilizing community support and resources. Education authorities should prioritize leadership development programs for head teachers, focusing on community engagement, resource coordination, and transparent communication practices to enhance accountability and trust.

Fourth, communication strategies around policy expectations and deliverables should be improved. The finding that policy awareness does not significantly influence quality perceptions indicates that awareness alone is insufficient. Schools and education authorities should provide clear, outcome-oriented communication regarding what resources are available, expected timelines, and the roles of different stakeholders. This will help align community expectations with actual policy implementation realities.

Finally, there is a need to establish longitudinal monitoring and adaptive feedback mechanisms. Continuous collection of community perceptions and school-level data can support evidence-based adjustments in policy implementation. Linking feedback to resource allocation and planning processes will enable more responsive and context-sensitive interventions, ensuring that emerging challenges are addressed in a timely manner.

Overall, strengthening community engagement, resource partnerships, leadership capacity, communication strategies, and monitoring systems will contribute significantly to improving educational quality while sustaining expanded access under the Fee-Free Education Policy, particularly in resource-constrained and rapidly growing school environments.

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