Factors Contributing to Low Results in Ethiopian Students' National Examination: A Review

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Abstract

The study aims to investigate the factors influencing low student performance in Ethiopia's national examination of 2015. It seeks to understand the impact of inadequate access to quality education resources, including textbooks and teaching materials, as well as socioeconomic aspects like poverty and parental education level on academic achievement. Additionally, it explores the contribution of teaching methods and pedagogical approaches used in Ethiopian schools, alongside the effect of infrastructure and technology availability on student performance. To achieve its objective, the study will utilize a desk review methodology and qualitative research methods to systematically analyze existing literature and documents relating to the research topic. In conclusion, the research aims to examine multifaceted elements impacting student outcomes and to offer actionable insights to enhance educational performance in Ethiopia. The evidence suggests systemic issues within Ethiopia's education system contributing to poor student performance. These include limited access to quality education resources, socioeconomic factors, teaching methods, and facilities. The recommendations underscore the need for a multifaceted and tailored approach to elevate students' performance in Ethiopia's national examination. Key suggestions include promoting equity, enhancing teaching methods, providing equitable infrastructure, and continuous curriculum review. Addressing inadequate access to educational resources and enhancing the capacity of school principals are also crucial. Furthermore, there is a call for further research and analysis to pinpoint specific factors contributing to low performance and to craft effective improvement strategies.

Keywords: Factors, Low Results, Students' National Examination

Introduction

Access to high-quality educational resources, such as textbooks and instructional materials, significantly influences students' academic success in Ethiopia. Scarce access negatively impacts learning outcomes and exam performance (Abdulahi, 2016; Pasek & Jones, 2015). Additionally, research demonstrates that poverty and parental education level play a pivotal role in children's academic success as children from disadvantaged socioeconomic backgrounds often encounter obstacles hindering their educational development and test performance (Nathan & Thapa, 2020; Teklu & Arefayne, 2019).

Instructors' teaching methods and pedagogical approaches significantly impact students' academic performance (Mulugeta, Manaye, & Tadesse, 2016; Samson, 2013). Insufficient infrastructure and restricted access to resources can also affect students' learning results, motivation, and engagement (Belay, 2019; Tefera, 2017). Therefore, the purpose of this study aimed to understand the unique impact of these key factors on Ethiopian students' low examination outcomes in the 2015 national test.

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Statement of the problem

In Ethiopia, national examination results are an important measure of students' educational attainment as well as a standard for assessing the efficiency of the education system (Teshome, M., & Astatke, A. 2017). However, the poor performance of Ethiopian pupils in their national test in 2015 raises questions about the underlying conditions that contributed to this outcome.

Understanding the factors affecting Ethiopian students' performance on the national test is crucial for improving their educational outcomes. Investigating these elements can help address the challenges within the educational system and ultimately enhance academic achievement for all students.

Research Question

What are the key factors that contributed to the low results of students' national examination in Ethiopia, and how do they uniquely impact academic performance in the Ethiopian context of the 2015 national test?

Research Objective

To identify and analyze the key factors that contributed to the low results of the students' national examination in Ethiopia.

Theoretical Review

The objective of this theoretical study is to investigate the several elements that have been noted in the literature as possible causes of low student performance on the national test.

In the Context of Ethiopia

The impact of inadequate access to quality education resources on students' performance in the national examination

In Ethiopia, students' academic success is greatly influenced by the accessibility and availability of high-quality educational resources, such as teaching materials and textbooks, especially when it comes to national exams.

Availability and Accessibility of Education Resources

Numerous scholarly works underscore the significance of sufficient availability of educational resources in augmenting the learning results of pupils (Tesfaye, 2018; Seid, 2016). However, due to issues including inadequate infrastructure and financial resources, access to high-quality textbooks and instructional materials is still difficult in Ethiopia (Hailu & Moreda, 2016).

Impact on Learning and Performance

Studies show that students' academic performance is significantly impacted when they do not have enough access to high-quality educational materials. According to Tesfaye (2018), pupils with less access to instructional tools and textbooks performed worse on the national test than students with adequate resources. It was shown that students' understanding, study habits, and general performance were all hampered by a lack of resources.

Influence on Teaching and Instruction

Limited access to educational materials has an influence not just on students but also on teaching and instruction. Teachers encountered difficulties in preparing courses and efficiently presenting information when there was a lack of high-quality teaching resources, according to Hailu and Moreda (2016). This, in turn, has an influence on the quality of instruction and, as a result, on students' knowledge and performance.

Socioeconomic Factors and Resource Disparity

According to research, there is a link between socioeconomic variables and access to educational resources. According to Seid (2016), students from lower socioeconomic backgrounds frequently experience more obstacles in obtaining quality textbooks and instructional materials. This difference may exacerbate the achievement gap between students' from various socioeconomic backgrounds.

The influence of socioeconomic factors on students' academic achievement in the national examination

Poverty and Academic Achievement

Numerous studies have found a link between poverty and academic success. Alemu and his colleagues (2021) discovered that students' from economically disadvantaged backgrounds have worse academic performance and test scores in Ethiopia. Poverty generates difficult circumstances that can limit access to quality educational resources, contribute to decreased school attendance, and negatively impact learning outcomes (Bedaso et al., 2019).

Parental Education Level and Academic Achievement

Another important socioeconomic aspect that has been found to significantly affect students' academic success is their parents' educational attainment. According to research, parents' level of education has a significant impact on their children's desire for learning, goals for their careers, access to resources, and level of support from their schools (Braun et al., 2016). Pupils who have better educated parents are more likely to score highly on the national test (Debele et al., 2021).

The Mediating Role of Parental Involvement

Parental engagement may operate as a bridge between socioeconomic variables and academic success in students'. Adequate parental participation, which includes parental support, advice, and encouragement, has been linked to better academic performance (Debele et al., 2021). It can operate as a mitigating factor for the harmful impacts of poverty and poor parental education levels on children' academic progress.

Cultural and Systemic Influences

Cultural and systemic elements can interact with socioeconomic considerations to impact students' academic performance. Cultural views and norms, for example, might influence parental expectations, educational ideals, and student motivation (Alambo, 2017). Systemic variables, such as unequal resource allocation and discrepancies in school quality, might exacerbate the socioeconomic success gap (Bedaso et al., 2019).

The role of teaching methods and pedagogical approaches employed by teachers in Ethiopian schools

The role of teaching methods and pedagogical approaches in students' academic achievement is a critical aspect of educational research.

Traditional Teaching Methods and Rote Learning

Traditional teaching approaches such as rote learning and teacher-centered instruction have been recognised as factors contributing to low academic attainment in Ethiopia (Getahun et al., 2019). Memorization and passive learning are frequently prioritised above critical thinking, problem solving, and deeper knowledge in these approaches.

Lack of Active Learning Strategies

According to studies, active learning practises are rarely used in Ethiopian schools. Active learning entails involving students in the learning process through interactive activities, conversations, and hands-on activities (Gebremichael & Reddy, 2020). The absence of these techniques may jeopardise students' capacity to acquire higher-order thinking abilities, which are required for success on the national test.

Insufficient Teacher Training and Professional Development

According to certain research, Ethiopian teachers' low access to professional development opportunities and inadequate training are factors in their unsuccessful educational practises (Belachew & Waritu, 2021). Insufficient training might lead educators to stick with antiquated techniques that are at odds with contemporary teaching methodologies.

Language of Instruction

Studies reveal that a linguistic divide between educators and learners might impede successful communication, understanding, and academic performance (Kinde, 2016). This language barrier may make it more difficult to apply effective teaching techniques and may have a detrimental impact on students' learning objectives.

The effect of infrastructure and facilities on students' performance in the national examination

Classroom Conditions and Academic Achievement

Studies indicate that conducive classroom conditions can positively influence students' academic achievement. Adequate lighting, ventilation, seating arrangements, and appropriate classroom size contribute to a comfortable and conducive learning environment (Wudu & Ditamo, 2019). Enhanced classroom conditions are associated with increased student engagement, focus, and consequently, improved academic performance.

Availability and Utilization of Technology

Research suggests that the availability of technology, such as computers, internet access, and audiovisual aids, allows for innovative and interactive teaching methods (Lemessa, 2018). Integration of technology in the classroom can enhance students' engagement, critical thinking, and information literacy skills, ultimately contributing to improved performance in the national examination.

Infrastructure Disparities

Disparities in infrastructure and facilities between different schools and regions can significantly affect students' academic achievement. Unequal distribution of resources leads to varying levels of access to quality infrastructure, hindering the learning experience for students in schools with inadequate facilities (Wudu & Ditamo, 2019). Such disparity can contribute to inequitable outcomes in the national examination.

Impact of Physical Infrastructure

Aside from classroom conditions, overall physical infrastructure also plays a role in students' academic achievement. The availability and quality of facilities like libraries, laboratories, and sports facilities can have a positive impact on various aspects of education, including research skills, practical knowledge, and physical well-being (Lemessa, 2018). Adequate facilities create opportunities for holistic development and inclusive learning experiences.

Methodology

The study aims to investigate the factors contributing to low student national examination scores in Ethiopia using a desk review methodology and qualitative research methods. A desk review involves gathering and analyzing existing literature and documents on a specific study topic to identify and investigate these factors. The study utilized methods such as defining research objectives, conducting a comprehensive literature search, and extracting key information from selected literature.

The research article employed a thematic analysis approach to synthesize and analyze gathered literature, focusing on identifying common themes, patterns, and factors influencing low student performance in the national examination. This approach aimed to understand prevailing arguments, theories, and empirical evidence related to the identified factors influencing academic outcomes.

Data Analysis

Inadequate availability of high-quality educational resources negatively affects students' academic performance in Ethiopia's national test, particularly in rural and marginalized communities. Students who had restricted access to textbooks and other learning materials did badly on the national test compared to those who had sufficient resources (Abiyot et al., 2019). Instructors in rural areas had difficulty obtaining instructional resources, leading to a lack of preparation for the national test and poor student performance (Admasu et al., 2020). The lack of access to adequate education materials is especially acute in pastoralist areas, where only 5-6% of schools have access to textbooks and power (UNESCO, 2019).

Socioeconomic factors, such as poverty and parental education level, have a significant impact on students' academic achievement in the national examination in Ethiopia. Students from low-income families and those whose parents had low education levels had lower scores in the national examination compared to their peers from higher-income families and those with more educated parents (Alemu et al., 2020; Desta et al., 2018). Poverty and lack of access to basic needs negatively affected students' academic performance, particularly in rural areas where poverty rates are significantly higher than in urban areas (World Bank, 2019).

The teaching methods and pedagogical approaches in Ethiopian schools significantly contribute to students' low performance in national examinations. Tekle et al. (2019) point out the prevalence of traditional methods, leading to passive learning, while Tadesse and Alemu (2019) emphasize the lack of training in modern pedagogical approaches. Additionally, Gebrehiwot et al. (2019) highlight the challenges teachers face in implementing effective pedagogical methods due to limited resources.

The availability of infrastructure and facilities significantly impacts students' performance in Ethiopia's national examination. Alemu and Admasu (2019) point out the negative influence of poor classroom conditions on learning outcomes, while Kassahun et al. (2019) highlight the hindrance caused by the lack of access to technology.

The curriculum and assessment system significantly affect students' performance in Ethiopia's national examination. Tadesse and Asres (2019) highlight the impact of curriculum content and quality on students' understanding and retention of knowledge, while Tsegaye and Abebe (2019) emphasize the influence of assessment methods, stating that the use of multiple-choice questions can limit critical thinking skills. Continuous review and improvement of the curriculum and assessment system are essential to ensure relevance and skill measurement, as well as to equip students with the needed knowledge and skills for success.

Incomplete coverage of the curriculum negatively impacts students' performance in Ethiopia's national examination. Mamo and Assefa (2017) and Tesfaye and Alemu (2019) point out that failure to cover the entire curriculum leads to poor performance, underscoring the significance of timely completion and adequate revision opportunities for students.

The quality of teaching significantly impacts students' academic achievement in the national examination in Ethiopia. Admasu and Teshome (2019) emphasized the correlation between teachers' subject knowledge, teaching materials, and methods, and students' performance. Alemu and Fenta (2018) also highlighted the negative impact of untrained or underqualified teachers on student performance, stressing the need for continuous teacher professional development to enhance teaching skills.

School principals' leadership style is crucial for academic achievement in Ethiopia. Lack of support, capacity constraints, and ineffective leadership skills contribute to poor performance. To improve academic outcomes, regular professional development opportunities for principals are essential. (Alemu Fenta, 2019; Tadesse Assefa, 2018; MoE, 2004; Civil Service Reform Program, 2012; GEQIP plan, 2008).

Students' performance in the national examination in Ethiopia

Ethiopian students have consistently performed below the passing mark on national tests for the past decade, indicating a substandard quality of education (ETNLA, 2017). To improve this, addressing socioeconomic factors, promoting learner-centered teaching, ensuring access to quality infrastructure and technology, and investing in educational resources in rural areas are recommended. Additionally, enhancing school principals' capacity and conducting further research are important for improving academic achievement for all students.

Table 1 Students' performance in the national examination in Ethiopia, 2022 & 2023/ 2014 & 2015E.C/

Stream	Total number of examinees		50% and above			
			2022		2023	
	2022	2023	No.	%	No.	%
Natural Science	339,642	356,878	22,974	6.8	19,017	5.3%
Social science	556,878	488,221	7,060	1.3	8,250	1.7%
Total	**896,520**	**845,099**	**30,034**	**3.3%**	**27,267**	**3.2%**

Source: Document review (MoE Press Release: October 16, 2023)

The table shows the number and percentage of examinees who scored 50% and above in the national examination in Ethiopia in 2022 and 2023, broken down by stream. The Natural Science stream had 22,974 (6.8%) examinees who scored 50% and above in 2022, which decreased to 19,017 (5.3%) in 2023. The Social Science stream had 7,060 (1.3%) examinees who scored 50% and above in 2022, which increased to 8,250 (1.7%) in 2023. Overall, the total number of examinees who scored 50% and above decreased from 30,034 (3.3%) in 2022 to 27,267 (3.2%) in 2023. This suggests that there is a need for interventions to improve academic performance in both streams (MoE: Press Release, October16, 2023).

Conclusion

The existing literature identifies various factors that contribute to low academic performance in the national examination in Ethiopia, including socioeconomic factors, teaching and learning environment, curriculum and assessment strategies, and individual factors. Inadequate access to quality education resources, such as textbooks and teaching materials, is a significant barrier to students' performance. Socioeconomic factors, such as poverty and parental education level, also play a crucial role in shaping students' academic achievement. Traditional teaching methods, insufficient teacher training, and incomplete coverage of the curriculum also negatively affect students' performance.

Recommendations

To improve Ethiopian students' performance on national tests, it is important to address socioeconomic factors and provide comprehensive support. This includes promoting learner-centered teaching, ensuring access to quality infrastructure and technology, and continuously reviewing and improving the curriculum. Additionally, investing in educational resources in rural and marginalized areas, enhancing school principals' capacity, and conducting further research are recommended to enhance academic achievement for all students.

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