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# Trends of academic achievement of higher education students in Ethiopia: literature review

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This literature review explores trends in academic performance among higher education students in Ethiopia from 2005 to 2022. Its goal is to identify the factors that affect academic success and suggest ways to enhance it. By conducting a thorough search on Google Scholar, relevant studies were selected based on specific criteria, particularly focusing on metrics like GPA. The findings highlight notable differences in student performance, often related to socioeconomic status and the resources available at various institutions. While some universities have seen improvements in GPA, challenges such as overcrowded classrooms and limited support services remain significant obstacles. To address these issues, the review suggests implementing initiatives that promote equity, improving the quality of teaching, and expanding comprehensive support services for students. It stresses the importance of collaboration among all stakeholders to create an inclusive educational environment. Such a holistic strategy is crucial for improving the quality of higher education in Ethiopia and ensuring that all students have equal access to opportunities.

## KEYWORDS

academic achievement, higher education student, grade point average, Ethiopia, trends

## Introduction

Learning can be conceptualized as the systematic acquisition of knowledge, skills, and values. This process encompasses both formal education, delivered through institutions like universities and colleges, and informal education, which occurs through everyday experiences and self-directed learning activities (González-Pérez and Ramírez-Montoya, 2022). Education ultimately aims to equip graduates with a critical and adaptable skillset for a dynamic world. Higher education fulfills this purpose by offering specialized knowledge, rigorous coursework, and professional training, fostering expertise within chosen fields (Morris, 2019). Higher education fosters intellectual development, career preparation, and engaged citizenship, affecting individual and societal progress. Academic achievement (grades, test scores, knowledge mastery) reflects success within this context (Robinson et al., 2019). This suggests that learning, particularly through higher education, is a multi-faceted process aimed at developing well-rounded, adaptable individuals who can contribute to individual and societal advancement.

Educational achievement reflects learning application but acknowledges prior knowledge, motivation, effort, and environmental context. Analysis of achievement yields valuable insights for educators, guiding instructional improvement and promoting both individual potential and educational equity (Cai et al., 2021). The contemporary educational landscape reveals a

complex picture. While progress towards universal primary schooling gains traction, persistent disparities hinder the realization of equitable access for all (Shukla et al., 2023). Differences in educational resources exist between developed and developing nations, with the former tending to have well-resourced institutions and advanced curricula, while many developing countries struggle with limited resources, inadequate infrastructure, and a lack of qualified educators (Omehia, 2019). Technological advancements offer promising avenues for instruction; however, digital divides exacerbate existing inequalities. The educational system navigates a precarious equilibrium, attempting to reconcile standardized assessments with fostering well-rounded student development in preparation for a rapidly evolving world (Tewathia et al., 2020). From this, one can infer that the educational system faces a multifaceted challenge of promoting equity, leveraging technology, and balancing standardized assessment with holistic student development, all while accounting for the significant disparities that exist within and between educational systems globally.

Despite ongoing challenges, global collaboration fosters innovative solutions for a more inclusive and effective educational experience. Higher education has experienced dynamic growth, particularly in developing nations (Matkin, 2022; Demissie et al., 2021). Yet, equitable access remains elusive due to persistent disparities and funding challenges faced by many institutions (Ainscow, 2020). Globalization has fostered collaborative learning and student mobility, but issues like brain drain and curriculum homogenization have emerged. Technological advancements have expanded access through online platforms, yet digital divides persist (Xu and Montgomery, 2019). This system integrates specialized training with fostering critical thought and adaptability, readying graduates for an unpredictable future. Persistent challenges notwithstanding, continuous evolution lays the groundwork for an empowered and interconnected academic landscape (Aithal and Aithal, 2023).

Despite global progress, disparities persist in higher education attainment across regions, institutions, and disciplines. Developed nations boast higher graduation rates, yet equity concerns remain due to socioeconomic background and instructional quality (Chmielewski, 2019; Demissie et al., 2021). Rapid growth in enrollment presents challenges for emerging economies in ensuring quality education and graduate employability. Globalization and technological advancements offer opportunities but raise concerns about standardization and comparability of educational measures. Analyzing this intricate landscape is crucial to comprehending progress, identifying disparities, and guiding interventions for equitable and effective learning for all (Mgaiwa, 2021; Smith et al., 2020; Yimer et al., 2024). This is why the current researchers are focused on studying the trend of academic achievement over the last 17 years, from 2005 to 2022, among Ethiopian higher education students. This includes the mechanisms to enhance an academic achievement of students in higher education.

## Understanding the trajectories of higher education

### Higher education achievement: global context

Over the last 10 years, researchers have identified significant trends in academic performance within higher education worldwide.

A comprehensive study involving 27 countries revealed that the average GPAs of university students have risen by about 0.15 points each decade since the 1990s (Smith et al., 2020). This suggests that new university students are arriving better prepared academically than their predecessors, likely due to improvements in K-12 education, enhanced academic support systems, and other factors that help students get ready for college (Bridgeman et al., 2016). While some believe that this increase in GPAs is partly due to grade inflation—where schools boost grades to attract students—standardized test scores have only seen slight improvements. This indicates that grade inflation alone does not fully explain the observed rise in academic performance.

The reasons behind these trends in academic achievement are complex and interconnected. Innovations in teaching methods, like active learning and the integration of educational technology, have been linked to better student outcomes (Freeman et al., 2014; Means et al., 2013). The increase in average GPAs over the past decade likely stems from a mix of various factors. While grade inflation and changing grading practices may contribute, improvements in teaching methods and learning environments also play a significant role. Moreover, shifts in student demographics, particularly the growing enrollment of traditionally underrepresented groups, have influenced these achievement patterns as institutions strive to close equity gaps (Hurtado et al., 2010). Additionally, curricular reforms focusing on critical thinking and problem-solving skills have been associated with higher academic performance (Arum and Roksa, 2011; Finley and McNair, 2013). Understanding these intricate trends is essential for higher education institutions and policymakers aiming to enhance student success and prepare graduates for the challenges of the 21st century.

### Higher education achievement: Ethiopian context

In Ethiopia, significant strides have been made in expanding access to higher education. However, achieving gender parity continues to be a challenge, even with initiatives aimed at increasing access for women, especially in STEM fields (Beyene et al., 2023). The landscape of higher education in the country has evolved considerably, featuring approximately 50 universities that include both public and private institutions (Tamrat and Teferra, 2020). It's important to note that these universities are not evenly distributed; major urban centers like Addis Ababa and Dire Dawa have a higher concentration, while rural areas face a shortage of such institutions. To tackle this imbalance, the Ethiopian government has implemented policies designed to broaden access to higher education across various regions, working towards a more equitable distribution of universities throughout the nation (Desalegn and Solomon, 2022; Gaston, 2023).

Despite this rapid growth in the higher education sector, concerns about quality and academic standards persist. Research indicates that Ethiopia's graduation rates hover around 60–70%, which falls behind many other African nations (Alemu and Fenta, 2019). Employers have expressed dissatisfaction with the job readiness and skill levels of graduates, highlighting misalignment between educational outcomes and the needs of the labour market (Gebremeskel et al., 2020). Further investigations into the academic performance of Ethiopian university students reveal that those from wealthier backgrounds or attending

more prestigious institutions tend to achieve higher GPAs, pointing to socioeconomic disparities within the education system (Demissie et al., 2021). This suggests that both an individual's socioeconomic status and the reputation of their university play significant roles in their academic success.

Additionally, research has identified several systemic issues that negatively impact academic performance, particularly in regional and rural universities. Factors such as insufficient teaching resources, overcrowded classrooms, and limited student support services have been linked to poor academic outcomes (Ayalew and Meaza, 2021; Tadesse et al., 2018). These challenges are especially pronounced in institutions outside major urban areas, contributing to lower academic performance among students. The lack of adequate resources and support can hinder students' learning experiences and overall engagement. To improve the quality of higher education and enhance academic success for Ethiopian students, it is essential to address these systemic challenges. Strategies such as refining teaching methods, incorporating educational technologies, and providing comprehensive support services have shown promise in improving student outcomes in other settings (Freeman et al., 2014; Means et al., 2013). Adapting these interventions to meet the specific needs of Ethiopia's higher education system could help bridge the gap between educational quality and labor market requirements.

## Constructs of academic achievement in higher education

Academic achievement in higher education is often quantified through metrics such as grade point average (GPA). In the context of the attached study, the authors examine trends in GPA as a key indicator of academic achievement among higher education students in Ethiopia. A thorough investigation across 27 countries revealed that the average GPA among university students has increased by approximately 0.15 points per decade since the 1990s. This trend suggests that incoming university students are better academically prepared than previous cohorts (Smith et al., 2020). While some scholars attribute this rise to grade inflation, it is noteworthy that standardized test scores have shown only marginal improvements. This observation indicates that grade inflation alone cannot fully account for the enhancement in academic performance (Bridgeman et al., 2016). Consequently, the increase in GPA may reflect authentic advancements in academic readiness and learning among new university entrants, rather than merely lenient grading practices.

In addition to GPA, academic achievement encompasses the mastery of course content and learning objectives. Researchers underscore that higher education aims to equip graduates with a versatile and critical skill set necessary for navigating the complexities of the 21st century (Freeman et al., 2014; Means et al., 2013). This entails a systematic approach to acquiring knowledge, skills, and values that empower students to think critically, solve problems, and effectively apply their learning (Bound et al., 2010). Therefore, universities should prioritize not only the enhancement of quantitative metrics like GPA but also the cultivation of higher-order cognitive abilities and transferable skills essential for success in today's workforce and society.

Graduation rates represent another vital component of academic achievement in higher education. Despite significant growth in enrollment figures across many developing countries, including

Ethiopia, concerns regarding educational quality and academic standards—particularly graduation rates—remain prevalent (Bound et al., 2010; Bridgeman et al., 2016). Ensuring that students complete their higher education programs successfully and graduate is critical for fostering a skilled and adaptable workforce capable of driving economic and social advancement.

## Strategies for improving academic excellence in higher education

Enhancing academic excellence in higher education involves a comprehensive strategy that focuses on both teaching methods and learning experiences. Research has demonstrated that pedagogical approaches that encourage student engagement and active participation can significantly boost academic performance. For example, collaborative learning techniques—like team projects and problem-solving activities—have been associated with increased student motivation and a deeper grasp of course content (Freeman et al., 2014). Moreover, incorporating high-impact practices such as undergraduate research, internships, and service-learning opportunities can help develop critical thinking and problem-solving abilities among students (Kuh, 2008). These types of learning environments empower students to take charge of their education, ultimately leading to improved academic results.

On an institutional and policy level, initiatives aimed at enhancing academic success and the overall quality of higher education can have significant societal benefits. For instance, targeted support programs—such as tutoring, mentoring, and academic advising—have proven effective in boosting student retention and graduation rates (Bettinger and Baker, 2014). Additionally, institutions can adopt policies that foster equity and inclusion by increasing access to financial aid, providing necessary accommodations for students with disabilities, and addressing the specific needs of underrepresented groups (Bastedo et al., 2018). By tackling these systemic challenges, higher education institutions can create a more equitable environment where all students have the chance to succeed.

Educators play a vital role in shaping effective learning experiences that promote academic excellence. By implementing evidence-based teaching strategies—such as active learning techniques, personalized feedback, and fostering a supportive and inclusive classroom atmosphere—educators can enhance student engagement and learning outcomes (Deslauriers et al., 2019). Furthermore, on-going professional development and collaboration among faculty members can keep them informed about best practices and help them continually improve their teaching effectiveness (Malouff et al., 2015). By empowering educators and investing in their professional growth, higher education institutions can cultivate a learning environment that inspires students to reach their full potential. Ultimately, improving academic excellence not only enhances individual learning and achievement but also contributes to broader national development.

## Methods and materials

### Literature search

To investigate the trends in academic achievement among Ethiopian higher education students from 2005 to 2022, the

researchers conducted a thorough literature review. They utilized the Google Scholar database, a well-respected platform for accessing scholarly articles and publications (Gusenbauer and Haddaway, 2020). The search employed keywords such as “Academic Achievement,” “Higher Education Student,” “Grade point average,” “Ethiopia,” and “Trends” along with various combinations and variations of these terms.

## Inclusion and exclusion criteria

To maintain the relevance and quality of the studies included in the review, specific criteria were established. The inclusion criteria required that studies: (1) be published between 2005 and 2022, (2) focus on Ethiopian higher education institutions, (3) report on students’ academic achievement or performance, and (4) be published in peer-reviewed journals or conference proceedings. Studies were excluded if they: (1) were published before 2005 or after 2022, (2) did not pertain to the Ethiopian higher education context, (3) did not address academic achievement, or (4) were not peer-reviewed.

## Data extraction and synthesis

The researchers meticulously examined the titles, abstracts, and full-text articles to pinpoint studies that met the inclusion criteria. They extracted key information from the selected studies, including the study period, sample size, indicators of academic performance, and overall trends in academic achievement. Following this, the researchers synthesized the findings to identify patterns, trends, and notable changes in the academic performance of Ethiopian higher education students over the 17-year span from 2005 to 2022.

## Quality assessment

To ensure the credibility and validity of the studies included in the review, a quality assessment was conducted using the Joanna Briggs Institute (JBI) critical appraisal checklist for literature reviews (Aromataris and Munn, 2020). This checklist evaluates several aspects, including the effectiveness of the search strategy, the relevance of included studies, the quality of data extraction and synthesis, and the overall methodological rigor of the review.

## Ethical considerations

Since this research involved reviewing publicly available literature, specific ethical approval was not necessary. Nonetheless, the researchers ensured that all studies included in the review were properly cited and acknowledged to uphold the integrity of the research process.

## Results

This study presents two key components derived from the literature review. First, it analyzes the academic performance of

university students over the past 17 years. Second, it explores potential strategies to improve these students’ academic success.

## Academic achievement in the past 17 years

Data analysis of Ethiopian higher education institutions reveals substantial variation in student achievement. While roughly two-thirds of students attain a satisfactory academic standing, a significant portion demonstrates lower performance, which means a pass mark (Choudhury and Singh, 2023). Prior research identifies a complex interplay of factors influencing academic achievement. These factors encompass individual characteristics (cognitive abilities, study habits, motivation, prior education), institutional elements (class size, facilities, teaching methods), and socioeconomic background (family resources, technology access) (Abdelrahman, 2020). Despite limitations in resources and student body size, Ethiopian universities are undertaking deliberate initiatives to augment student achievement through improved pedagogical approaches and the development of comprehensive student support structures (Ahmady et al., 2019). Despite variation in research design, setting, and sample size, a longitudinal analysis (past 17 years) reveals a consistent positive trend of student academic achievement Ethiopian government higher education institutions (Figure 1 and Table 1).

Based on the information provided in Table 1 and Figure 1, the trends in academic achievement among higher education students in Ethiopia from 2005 to 2022 were analyzed.

The data presents a varied picture of academic performance across different universities in Ethiopia over the past 17 years. In 2005, Debu University stood out with a remarkable mean grade point average (GPA) of 3.78, showcasing strong academic success among its students. However, this impressive performance took a downturn in 2006, as Debu University’s mean GPA plummeted to 2.31. During the late 2000s and early 2010s, other universities like Jimma, Hawassa, and Haramaya/Gondar reported mean GPAs ranging from 2.71 to 2.85, indicating a moderate level of academic achievement among their students. In contrast, Rift Valley University recorded a lower mean GPA of 2.5 in 2015, suggesting that its academic performance was lacking compared to other institutions.

In more recent years, some universities have begun to show signs of improvement. For instance, Bahir Dar University, Gondar University, and Wolaita Sodo University reported mean GPAs of 3.08, 3.23, and 2.93 in 2017, 2021, and 2022, respectively, indicating a positive trend in student performance. The data also reveals notable gender disparities within the Ethiopian higher education landscape. In most universities, male students consistently outnumber their female peers, highlighting the need for further exploration into the factors behind these imbalances and the implementation of strategies to foster greater equity in access and participation.

Overall, the academic achievement trends among Ethiopian higher education students are mixed. While some institutions demonstrate strong performance, others face challenges. This situation emphasizes the necessity for ongoing monitoring and analysis of student outcomes to pinpoint areas needing improvement and to work toward creating a more effective and equitable higher education system in Ethiopia.

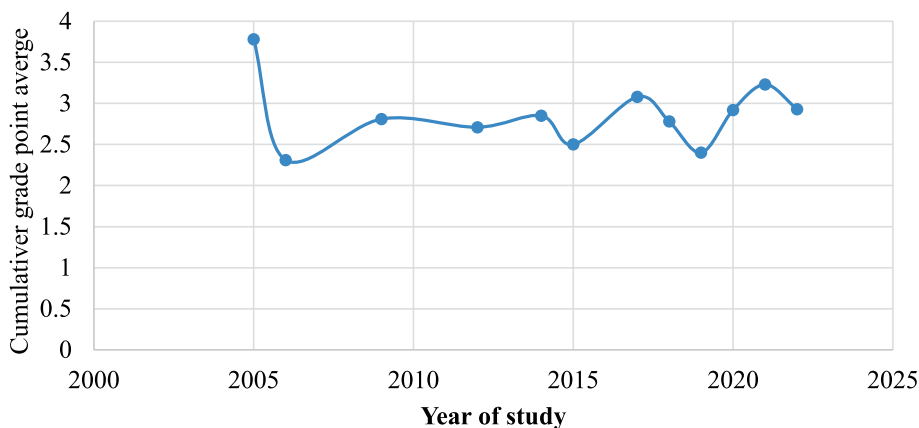


FIGURE 1 A trends academic achievement or grade point average score of higher education student from 2005 to 2022, Ethiopia.

TABLE 1 Summary of studies showed an academic achievement of higher education students from 2005 to 2022, Ethiopia.

| Name of a university                                 | Year of publication | Sample | Male       | Female     | Mean of grade point average |
|--|---------------------|--------|------------|------------|-----------------------------|
| Debub University (Admasu et al., 2005)               | 2005                | 254    | 200(78.7%) | 54(21.3%)  | 3.78                        |
| Debub University (Semela, 2006)                      | 2006                | 134    | 94(70.1%)  | 40(29.9%)  | 2.31                        |
| Jimma University (Meressa et al., 2009)              | 2009                | 239    | 207(86.6%) | 32(13.3%)  | 2.81                        |
| Hawassa University (Gedefaw et al., 2015)            | 2012                | 592    | 473(79.9%) | 119(20.1%) | 2.71                        |
| Haramaya and Gondar University (Lemma et al., 2014)  | 2014                | 2,143  | 1,672(78%) | 471(22%)   | 2.85                        |
| Rift Valley University (Akessa and Dhufera, 2015)    | 2015                | 294    | 118(40.1%) | 176(59.9%) | 2.5                         |
| Bahir Dar University (Gedifew and Bitew, 2017)       | 2017                | 169    | 136(80.4%) | 33(19.6%)  | 3.08                        |
| Haramaya University (Gobena, 2018)                   | 2018                | 172    | 87(50.5%)  | 85(49.6%)  | 2.78                        |
| Dambi Dollo University (Alemu et al., 2022)          | 2019                | 1,262  | 721(57.2%) | 541(42.8%) | 2.4                         |
| Hawassa University (Tadese et al., 2022)             | 2020                | 202    | 109(54%)   | 93(46%)    | 2.92                        |
| Gondar University (Negash et al., 2022)              | 2021                | 123    | 91(74%)    | 32(26%)    | 3.23                        |
| Wolaita Sodo University (Gebresilase and Zhao, 2023) | 2022                | 313    | 177(56.6%) | 136(43.4%) | 2.93                        |

### Possible mechanisms to enhance an academic achievement

The literature review reveals that achieving success in Ethiopian higher education goes beyond personal determination; it requires a collective effort from families, educators, and institutions. Since student achievement is crucial for national development, it is essential to prioritize this area. This commentary suggests a holistic framework aimed at enhancing learning outcomes in Ethiopian higher education institutions. The framework focuses on three main pillars: improving learning resources, fostering a nurturing learning environment, and offering robust student support. It also underscores the significance of adopting technological innovations to accommodate various learning styles.

### Equipping students for success: the cornerstone of learning

The bedrock of academic success is rooted in offering students access to high-quality learning materials. This encompasses providing current textbooks, up-to-date research databases, and reliable internet connectivity, which are essential for utilizing online resources effectively (Choudhury and Singh, 2023). Additionally, well-equipped libraries featuring diverse collections, comfortable study spaces, and knowledgeable librarians play a pivotal role in fostering independent learning and research. Such an environment not only cultivates a culture of staying informed but also encourages active engagement with coursework and independent scholarly pursuits (Irambona and Changach, 2023). These elements collectively create a foundation that empowers students to thrive academically.

## Beyond lectures: cultivating a vibrant learning environment

Transitioning from conventional lecture-based instruction to a more dynamic learning environment is vital for student achievement. Active learning strategies, including class discussions, collaborative projects, and problem-solving exercises, motivate students to engage deeply with the material rather than merely absorbing information passively (Sayfiyeva, 2024). This approach enhances critical thinking skills, enabling students to analyze information effectively, participate in constructive dialogues, and formulate well-reasoned arguments. Moreover, group activities foster communication, problem-solving abilities, and social skills, equipping students for success in various professional contexts (Suwono et al., 2023). By embracing these interactive methods, educational institutions can significantly enhance the overall learning experience for students.

## Addressing individual needs: effective student support

Targeted support for students is vital in fostering their academic development, especially through personalized strategies like tutoring and mentoring programs (Steinert et al., 2019). These initiatives link students with seasoned mentors who offer tailored guidance, monitor progress, and enhance motivation. By focusing on individualized support, schools can create an environment that nurtures each student's unique learning journey. This approach highlights the importance of connecting students with resources that can help them thrive academically. Moreover, providing accessible mental health counseling services is essential, as addressing mental health concerns can profoundly influence students' academic performance (Minkos and Gelbar, 2021). When institutions prioritize mental well-being, they empower students to tackle their challenges more effectively. By integrating these support systems into the educational framework, schools can significantly improve overall academic outcomes and foster a healthier learning environment. This underscores the necessity of prioritizing mental health as a critical component of student success.

## Embracing technology for inclusive learning

Incorporating technology into the classroom can greatly enrich the educational experience for students. By leveraging educational platforms, simulations, and interactive tools, teachers can cater to a variety of learning styles, making lessons more engaging and accessible for everyone (Beyene et al., 2023). Recognizing that each student has a unique way of learning, educators can employ diverse teaching methods, such as visual aids, hands-on activities, and personalized instruction (Deslauriers et al., 2019). This strategy fosters an inclusive environment that accommodates individual needs and preferences, ultimately paving the way for enhanced academic success. The implications of this approach underscore the significance of embracing a multifaceted teaching strategy that utilizes technology to support all learners.

## Discussion

The trends in academic achievement observed among higher education students globally and within the Ethiopian context highlight the multifaceted nature of student success. The collective research

evidence suggests that the improvement in GPA over the past decade is likely driven by a combination of factors, including innovations in teaching methods, curricular reforms, changes in student demographics, and efforts to address equity gaps (Freeman et al., 2014; Finley and McNair, 2013).

In the Ethiopian context, the expansion of access to higher education is a significant achievement, with around 450,000 domestic students and 16,305 international students currently enrolled. However, the persistent challenge of achieving gender parity, particularly in STEM fields, underscores the need for continued efforts to create a more inclusive and equitable higher education system which is consistent with the findings in other studies (Beyene et al., 2023).

To further enhance the academic achievement of higher education students in Ethiopia, a collaborative approach involving students, faculty, and the university is crucial (Bringle et al., 2023). This argument is consistent with the findings that investing in programs that develop instructors' skills in active teaching methods and student engagement can lead to improved student outcomes (Waldeyer et al., 2022; Semple and Currie, 2022). Additionally, comprehensive support structures, such as academic advising, career guidance, and mental health counseling, can help students thrive academically while addressing their holistic well-being (Hammoudi Halat et al., 2023).

Effective communication and collaboration among all stakeholders, including higher education institutions, policymakers, and the broader community, are essential for addressing the challenges and disparities in academic achievement as supported by research (Ransdell et al., 2021). Policymakers within the higher education sector, alongside other stakeholders such as government bodies and private sector organizations, should work together to ensure compliance with standards and provide the necessary financial and institutional support for initiatives aimed at improving student success (Utamachant et al., 2023).

By leveraging the insights from the global and Ethiopian contexts, higher education institutions in Ethiopia can establish strong university cultures that foster collaboration, innovation, and holistic student development. This collaborative approach, coupled with targeted interventions and support structures, can contribute to enhanced academic achievement among higher education students and help prepare them for the challenges of the 21st century.

## Conclusions and recommendations

This literature review explored the trends in academic achievement among higher education students in Ethiopia over the past 17 years. The findings reveal that while significant progress has been made in expanding access to higher education, challenges persist in ensuring equitable and high-quality educational outcomes. Internationally, research indicates a steady rise in average GPAs, attributed to improvements in K-12 education, enhanced academic support systems, and innovative teaching methods. However, in Ethiopia, academic performance is heavily influenced by socioeconomic status and the reputation of the universities attended. Students from wealthier backgrounds or prestigious institutions typically achieve higher GPAs, highlighting the disparities within the higher education system.

Systemic issues such as inadequate teaching resources, overcrowded classrooms, and limited student support services have been linked to poorer academic outcomes, particularly in regional and rural universities. These challenges underscore the urgent need for concerted efforts to enhance the quality of higher education across the nation.

To address the trends and challenges in Ethiopia's higher education system, several recommendations are proposed: strengthen equity-focused initiatives to improve access and support for students from disadvantaged socioeconomic backgrounds; enhance teaching quality and resources through faculty development, upgraded facilities, and reduced student-to-faculty ratios, particularly in regional universities; provide comprehensive student support services, including academic counseling and mentorship; foster collaboration between industry and academia to align curricula with labor market needs; and promote evidence-based policymaking by conducting regular analyses of academic achievement trends. By implementing these strategies, Ethiopia can advance towards a more equitable and high-quality higher education system those benefits all students.

## Implications and further studies

The literature review offered a detailed look at the trends in academic achievement among higher education students in Ethiopia. The findings highlight the ongoing need to tackle existing inequalities in education. It's crucial to ensure that every student, no matter their socioeconomic status or gender, can access a quality educational experience. This kind of environment is essential for nurturing their intellectual growth and equipping them for the challenges of the 21st-century job market. However, there are some important limitations to this study that need to be acknowledged. First, the research relied entirely on secondary data from published articles and did not gather any primary data from students, faculty, or administrators. This approach restricts the ability to gain deeper insights into the factors affecting academic performance. Moreover, the review concentrated on national trends as a whole, overlooking potential differences across various universities, regions, or academic disciplines within Ethiopia.

To gain a more comprehensive understanding of the complex drivers and obstacles to student success, future research could benefit from mixed-methods approaches. This could include surveys, interviews, and the analysis of institutional data. Longitudinal studies that track the academic progress of specific cohorts over time would also provide valuable insights into how these trends evolve. Additionally, conducting comparative analyses between Ethiopia and other developing

countries might reveal common challenges and innovative strategies for improving equity and quality in higher education. By addressing these methodological limitations in future studies, researchers can offer more detailed and practical recommendations for policymakers and university leaders aiming to enhance student outcomes in Ethiopia.

## Author contributions

CK: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. VD: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. AH: Writing – review & editing, Methodology, Conceptualization, Validation, Investigation.

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The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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