

Student support system and perceived quality outcomes in Ethiopian higher education institutions

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Abstract

This study investigated the availability, accessibility, and quality of student support system in Ethiopian higher education institutions to ensure that all students receive the necessary resources to thrive academically and personally. A questionnaire was used to gather data from 355 randomly chosen postgraduate students at three first-generation higher education institutions using a quantitative research approach. Both descriptive statistics, such as percentages, mean scores, and standard deviation, and inferential statistics, such as one-sample t-tests and one-way ANOVA, were used to examine the data. The study found flaws in the institutional student support system that hinder both the overall quality of higher education and the efficacy of student learning. According to the survey, the overall assessment for the student support system was below the moderate level of the expected support system ($M = 2.57$). Research and publishing support systems varied considerably amongst universities, according to one-way ANOVA analysis results ($F = 30.346$, $p < 0.05$). The study showed that student support systems were extremely few and of lower quality in higher education institutions. Additionally, the majority of postgraduate students expressed general discontent because there was insufficient student assistance available at these academic institutions. Generally, the findings highlight a serious weakness in the way higher education institutions serve their students. The availability, accessibility, and quality of the support system are limited, which influence academic performance and general well-being in addition to student satisfaction.

Keywords: *internal quality assurance system, postgraduate students, institutional resources, academic advising*

Article History:

Received: January 7, 2026

Accepted: March 28, 2026

Revised: March 11, 2026

Published online: April 17, 2026

Suggested Citation:

Awaki, G., Kebede, B. & Jebessa, F. (2026). Student support system and perceived quality outcomes in Ethiopian higher education institutions. *International Journal of Educational Management and Development Studies*, 7(2), 1-24. <https://doi.org/10.53378/ijemds.353343>

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1. Introduction

Quality is primarily the responsibility of the academic institution itself. Although governments have a special responsibility for quality assurance in many countries, it is the university, particularly its staff and students, that is responsible for providing and assuring the quality of education. Therefore, it is important that Higher Education Institutions (HEIs) develop an efficient internal quality assurance system (IQAS). This system involves the methods and practices that academic institutions use to assess and improve the quality of their educational programs. It serves as a fundamental function of institutional self-regulation, allowing HEIs to proactively examine, monitor, and optimize their academic programs, administrative policies, and teaching practices.

Internal quality assurance refers to the procedures and techniques used by educational institutions to evaluate and enhance the quality of their curricula (Ai Tran et al., 2025). It is a core component of institutional self-regulation that enables HEIs to proactively review, track, and improve their academic programs, administrative policies, and instructional strategies. Hence, HEIs must establish systems that provide a wide range of academic and non-academic support services to meet the diverse needs of their students. In addition, they must implement comprehensive policies, mechanisms, and procedures that align admission requirements with program standards and government regulations to ensure the effective management of admissions and student support services (ETA, 2025).

One of the focus areas of quality assurance systems in many countries, including Ethiopia, is the quality of student support provision in HEIs. Student support services encompass academic advising, counseling, financial aid, career guidance, disability services, and other resources designed to promote student retention, progression, and success. Empirical and policy literature underscores that the quality of higher education is closely linked to the adequacy of these support systems. For example, Kaur (2016) argues that the overall quality of higher education depends directly on student support provision. Without sufficient support, higher education risks devolving into little more than the mechanical issuance of degrees rather than a meaningful process of learning and professional formation. This concept can be understood and evaluated using service-quality frameworks such as SERVQUAL, which conceptualizes service quality across five dimensions: reliability, responsiveness, assurance, empathy, and tangibles (Parasuraman et al., 1988). When applied to student support, these dimensions offer a structured lens for assessing how effectively HEIs meet students' needs.

Most HEIs today aim to increase student enrollment and retention to achieve financial independence and economic stability (Zhang et al., 2019). However, maintaining the quality of instruction and ensuring access to high-quality support services require a substantial increase in resources as enrollment grows. The strength of support systems in HEIs must therefore expand in proportion to the number of students they admit. Research indicates that university staff and international students often have differing perspectives regarding students' needs and the role of staff in addressing those needs, despite the availability of various support services in many HEIs (Roberts & Dunworth, 2012). Furthermore, the level of resources invested by HEIs significantly influences the quality of student support services.

According to Admas and Teferra (2017), students who utilized student support services performed better in the classroom than their counterparts. While it is widely recognized that student support services are available in HEIs, a critical question remains: to what extent are these services accessible and effectively delivered to students? Most studies focus on the importance of student support systems in academic success and students' personal well-being. However, it is equally important to assess the availability, accessibility, and quality of these services.

Evaluating postgraduate students' perceptions of the internal quality assurance system is essential for this study. Understanding how students perceive the support services offered by HEIs is particularly valuable, as their perceptions can significantly influence their academic success and overall satisfaction with their educational experience (Aberra & Davids, 2022). These considerations distinguish this research from previous studies conducted in Ethiopian HEIs. On the other hand, measuring students' satisfaction or perceptions in educational institutions can be considered one of the greatest challenges of the quality movement, which is among the key issues surrounding quality enhancement processes in HEIs (Avilés-Noles et al., 2025). The concept of service quality is typically studied from the consumer's perspective. Since students are the primary consumers of HEIs, this area has attracted the interest of various scholars (Kaur & Amanpreet, 2021). Hence, this study aims to investigate the availability, accessibility, and quality of the student support system in Ethiopian HEIs.

In the development of internal quality assurance systems in higher education, a number of strategies and frameworks have been introduced to improve the sector. One of the key components of internal quality assurance systems used to ensure the quality of education in HEIs is the provision of student support services (Abidin, 2015). It is widely believed that

inadequate student support systems negatively affect students' academic performance. Conversely, a system that effectively supports students in achieving their goals can be considered a strong student support system. However, the expansion of higher education, both in terms of enrollment and the number of universities, has not been matched by a proportional increase in learner support services to enhance the quality of teaching and learning (Michubu et al., 2017).

Many previous studies have examined quality assurance policies, practices, and related concerns in Ethiopian higher education. Several investigations have also explored the factors contributing to the limited effectiveness of quality improvement programs in Ethiopian universities, identifying systemic, institutional, and resource-related barriers that hinder meaningful progress (Oliso, 2023). However, the student support system has received comparatively less attention, particularly in terms of its availability, accessibility, and quality. To effectively meet students' needs and improve the quality of services offered, universities must identify, refine, and redesign their academic support systems to become centers of excellence in education and research, supported by strong industry and business linkages (Ntoyakhe & Ngibe, 2020). The study conducted by Admas and Teferra (2017) examined the availability, adequacy, and perceived importance of student support services, revealing that such services were limited. However, the context of the present study differs substantially from that of secondary schools.

Recently, Ethiopian HEIs have introduced a mandatory requirement for postgraduate students to publish articles in reputable journals based on their MA theses or PhD dissertations. This publication requirement must be fulfilled before students are allowed to present or defend their research and graduate, making it a uniform policy across public universities in the country. Because this policy directly links degree completion to successful publication, it highlights the critical importance of institutional research and publication support systems. These include supervisor capacity, writing and editing assistance, access to research funding and laboratory facilities, training in scholarly communication, and guidance on journal selection and the peer-review process. At the same time, this requirement has introduced considerable burdens for many postgraduate students. Navigating the complexities of academic publishing, such as identifying suitable journals, meeting rigorous methodological and ethical standards, responding to peer review comments, and, in some cases, covering publication fees, can delay thesis defenses and graduation, particularly when institutional

support systems are weak or unevenly distributed. These challenges are often compounded for students from resource-constrained programs or those without experienced supervisory networks, thereby widening inequities in time-to-degree completion and career progression. Consequently, the publication mandate underscores both the necessity of robust and equitable research support infrastructures within HEIs and the urgent need to reform or supplement existing policies to ensure that publication requirements enhance research quality without unduly delaying students' timely completion.

It is also crucial to examine the effectiveness and adequacy of student support systems in HEIs. Academic advising and tutoring, for instance, can significantly enhance students' academic achievement (Campbell & Mogashana, 2025) and play a critical role in student success and retention rates (Johnson et al., 2022). Furthermore, access to mental health services helps students manage stress (Ma & Mumtaz, 2025) and fosters a sense of belonging within the institution (Kramer et al., 2025). A comprehensive assessment of student support systems is therefore essential to address the diverse needs of student populations and to ensure the provision of individualized support. Moreover, the quality of an institution's support services directly affects its reputation (Masserini et al., 2019), as successful graduates enhance institutional standing and attract prospective students (Johnson et al., 2022).

Despite the well-established importance of effective student support systems in promoting academic success, mental well-being, and retention (Estacio et al., 2022; Johnson et al., 2022), many HEIs exhibit significant variability in the availability, accessibility, and quality of these services (Mireku et al., 2024). This raises important concerns about whether current support structures adequately meet the diverse needs of students, particularly those from vulnerable and underrepresented groups. Furthermore, there remains a lack of comprehensive understanding regarding how effectively these systems contribute to positive student outcomes. Therefore, this study seeks to critically evaluate the current state of student support systems to ensure that all students have access to the resources necessary for both academic and personal success. Thus, the primary objective of this study was to evaluate the availability, accessibility, and quality of student support systems in Ethiopian HEIs. To achieve this objective, the study addressed the following research questions:

1. What is the current status of the student support system in Ethiopian HEIs?
2. How do students perceive the availability, accessibility, and quality of student support provisions in Ethiopian HEIs?

2. Literature Review

This section reviews a range of related literature, including the key components of student support systems in HEIs, with particular emphasis on the diverse needs of students and the support services provided to address them. By examining these factors, the study aims to highlight the critical role of an effective student support system in enhancing academic achievement and improving the overall quality of higher education. Given that this study focuses on postgraduate students, it specifically analyzes issues related to general student support services, academic advising, and research and publication support systems, drawing on both national and international literature.

2.1. Theoretical Framework

This study is guided by the SERVQUAL model of service quality provisions. SERVQUAL is a widely used framework developed in the 1980s to measure service quality and customer satisfaction. It evaluates service performance across five key dimensions: reliability, responsiveness, assurance, empathy, and tangibles (Parasuraman et al., 1988). By identifying discrepancies between students' expectations and perceptions, (Al Azzam, 2015) demonstrated how SERVQUAL effectively assesses the quality of educational services. Additionally, this approach provides crucial insights for planning service enhancements in educational institutions, addressing quality shortcomings, and assisting with resource allocation (Šakinytė, 2024). The SERVQUAL model applies to the assessment of the availability, accessibility, and quality of student support in Ethiopian higher education because its five dimensions correspond to service presence and consistency (availability), practical and technological ease of use (accessibility), and staff competence and individualized care (quality).

Table 1

Dimensions of SERVQUAL model

Dimension	Expectations
Reliability	Consistency and dependability of the service.
Responsiveness	Ability to promptly and effectively assist customers.
Assurance	Conveying competence, courtesy, and credibility to build trust.
Empathy	Understanding and compassion for customer needs.
Tangibles	Physical aspects of the service, such as facilities and equipment.

Source: Adapted from Šakinytė (2024)

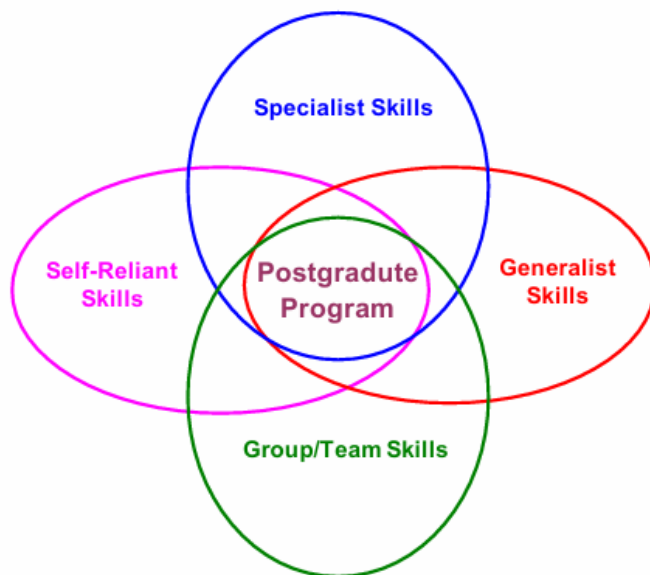
2.2. Student Support System in HEIs

The Student Support System (SSS) is a set of tools and activities intended to help students study more effectively and succeed in their learning, whether academic or non-academic in nature. It serves as a conduit between the institution and the student. The quality of higher education is directly influenced by the student support systems provided across different types of higher education institutions. If HEIs do not provide adequate support to their students, they risk becoming little more than degree-awarding institutions (Kaur, 2016). A well-organized student support system can have a substantial influence on the overall quality of instruction in HEIs.

Adequate support systems, such as career counseling, mental health services, and academic advising, have been shown to improve student performance and retention rates (Ralston, 2024). On the other hand, inadequate support may result in lower student satisfaction and reduced educational quality (Gathui et al., 2024). It has been demonstrated that sufficient support systems, including academic advising, career counseling, and mental health services, enhance student performance and retention rates (Eccles & Wigfield, 2024). Conversely, inadequate support may lead to lower student satisfaction and diminished educational quality (Ajayi, 2024). Thus, the effective provision of student support services is essential; when these services are robust, they contribute to a high-quality educational experience, whereas inadequate support can lead to a decline in educational outcomes. Furthermore, the quality of support provision is a critical factor influencing educational outcomes, either contributing to their improvement or decline.

In terms of the research and publishing support system, students are often under pressure to support their families financially, publish research articles, and develop broader skills that will enhance their employability after graduation. If the necessary infrastructure, supervision, and research environment are lacking, these pressures and expectations can negatively affect the creation of new knowledge, the production of innovative work, the ability to remain current with the body of knowledge through critical analysis of contemporary literature, and the development of high-quality theses by postgraduate students (Abiddin & Ismail, 2014).

It is believed that students acquire multiple skills from postgraduate programs, as shown in Figure 1. However, deficiencies in any of these skills may lead postgraduate students to experience delays in their studies or withdraw from the program altogether (Petrus, 2022).

Figure 1*Schematic postgraduate skills*

Source: Adapted from Alam et al. (2013)

2.3. Academic Support Services

Apart from teaching and learning services, students are expected to receive academic support services to succeed in their careers in HEIs. According to Michubu et al. (2017), student support services are those services that are meant to make learners' academic lives more effective and comfortable. Academic advising is one of the most important support services usually provided in HEIs. Young-Jones et al. (2013) mentioned that academic advising is a point at which student behavior and institutionally controlled conditions meet to potentially influence student achievement. It is not only a component of a student's educational experience that can be enhanced as a mechanism to assist students in attaining their academic and professional objectives, but also a means of aiding institutions in fulfilling their declared educational missions. Additionally, White (2015) asserts that education should prioritize empowering students to be independent intellectual actors, which includes providing the required support services in addition to knowledge acquisition. As a result, the majority of studies in this area support the idea that, in order for students to succeed in higher education, they must receive adequate academic advising (Young-Jones et al., 2013).

2.4. Research and Publication Support Services

Typically, postgraduate students participate in proposals, mini-research, seminars, and workshops during their university tenure. In addition, they are expected to conduct a thesis or dissertation as a requirement for graduation. Not only do they conduct research, but they are also expected to publish their work in a reputable journal as part of their graduation requirements. This process helps students become scholars in their academic fields. Thus, students should receive sufficient support services related to research writing and academic publishing in higher education institutions.

The development of knowledge and the growth of society depend on the unbreakable bond between research and publication (Mohammad, 2023). No matter how innovative, research remains in the minds of its authors unless it is disseminated through publication. In addition to validating results through thorough peer review, this dissemination enhances the broader scholarly conversation by allowing others to expand on the work (Jonathan, 2024). Moreover, publication is an essential means for academics to obtain funding, gain recognition, and contribute to the body of knowledge in their fields (Ashikuzzaman, 2025). Researchers have an ethical duty to share their findings, particularly if they have the potential to impact public health or inform policy (World Medical Association, 2024). Without publication, research essentially loses its significance; through this vital link, knowledge flourishes, inspires innovation, and ultimately advances society (Mohammad, 2023). Thus, it is necessary to embrace both research and publication to promote an informed and engaged global community.

Research and publication are crucial for promoting the growth of individuals, communities, and societies. By conducting research, academics can advance their fields, address societal issues, and contribute to the body of knowledge. Despite these advantages, getting published in a reputable journal can be challenging, especially for university students. For example, the high cost of publication fees is a significant obstacle that can discourage researchers, particularly those with limited institutional support or funding. Early-career researchers face financial difficulties because many reputable journals require authors to pay submission or processing fees (Kaliuzhna et al., 2025). Furthermore, the submission process can be demanding, often requiring rigorous peer review as well as adherence to strict formatting and content requirements. Inexperienced authors may find it difficult to meet the standards of reputable publications due to this complexity (Ochner & Mineo, 2020). This process is further complicated by the competitive nature of academic publishing. Only a small

proportion of the numerous submissions are accepted, which places significant pressure on academics to produce work that is both impactful and original (Ali et al., 2023).

3. Methodology

3.1. Research Design

A comparative descriptive research design was utilized in this study using a quantitative research approach to address the present condition of the student support system and to compare the availability, accessibility, and quality of support systems in improving the quality of education in HEIs.

3.2. Sampling

A cross-sectional sample of 355 Master's and PhD students from different programs and batches across three public universities was selected to participate in this study. The sampled institutions were chosen randomly, taking into consideration the various types or categories of universities established by the Ministry of Science and Higher Education or the Ministry of Education (MoSHE, 2020). From the eight first-generation public universities, three were selected using a simple random sampling technique. As first-generation universities, they are expected to have more resources and infrastructure compared to second-, third-, and fourth-generation universities. Moreover, these institutions have stable administrative structures and well-developed infrastructure, which enhance comparability across sites and improve the potential for implementing and scaling policy-relevant recommendations. This selection enabled the researcher to evaluate and compare the availability, accessibility, and quality of student support systems in higher education institutions.

Table 2 displays the composition of the participants by university, demographic data, program level, year of study, and sponsorship. Among the 355 students, the three universities in the study were represented by 37.5% (University A), 37.7% (University B), and 24.8% (University C). The gender composition of the students was 283 (79.7%) males compared with 72 (20.3%) female students. These students were either government sponsored 297 (83.7%) or private/self-sponsored 58 (16.3%). Regarding the program level, a relative majority of the students, 211 (59.4%), were attending PhD programs, while the remaining 144 (40.6%) were doing their master's degrees. The sample comprised students from 1st to 5th year of study. The 1st year and 2nd year students were represented by 22.5% and 23.4% of the respondents,

respectively. The 3rd year and 4th year students were 16.9 and 16.6% in the sample, while 20.6% of the sample was in their 5th year of study.

Table 2

Background information of respondents

Variables		Frequency	Percent
University	University A	133	37.5
	University B	134	37.7
	University C	88	24.8
Program	MA/MSc	144	40.6
	PhD	211	59.4
Gender	Male	283	79.7
	Female	72	20.3
Year	1st Year	80	22.5
	2nd Year	83	23.4
	3rd Year	60	16.9
	4th Year	59	16.6
	5th and above	73	20.6
College	Education and Behavioral Studies	124	34.9
	Social Sciences and Humanities	140	39.4
	Natural and computational sciences	65	18.3
	Veterinary Medicine and Agriculture	26	7.3
Sponsorship	Government sponsorship	297	83.7
	Private/ Self-sponsorship	58	16.3
Total		355	100.0

3.3. Data Collection

As this study is part of a broader PhD dissertation, the research instrument was developed by the researcher, and a group of experts was invited to assess and review the questionnaire before data collection. Each item was evaluated by the experts and the research team and was accepted after consensus was reached. No major changes occurred during the instrument validation process. The questionnaire consists of 22 items, of which 6 pertain to demographic information, while the remaining 16 focus on the student support system. It uses a five-point Likert scale as follows: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly Disagree (1).

To ensure content validity, the instrument was examined by a group of subject-matter specialists in quantitative research methods. Prior to pilot testing, the items were refined based on their recommendations after each item was evaluated for relevance, clarity, and alignment with the intended constructs. To assess item clarity and internal consistency, a group of non-participants took part in a pilot test of the revised instrument.

In addition, a reliability test of the questionnaire items on student support was conducted with a sample of 30 postgraduate students from AAiT prior to the main data collection. The results indicated a reliability coefficient of 96%, suggesting that the items in the questionnaire are both reliable and internally consistent. The Cronbach's alpha for the questionnaire items is .958, which exceeds the acceptable threshold of 0.7. Data were collected using Kobo Toolbox software, which facilitates the organization, storage, and management of collected data, making analysis more efficient. The data collection period spanned from April 2025 to June 2025.

3.4. Data Analysis

The collected data were exported to the Statistical Package for the Social Sciences (SPSS version 25) for analysis. A descriptive research approach was employed to guide the analysis. Descriptive statistics, including frequency, mean, and standard deviation, as well as inferential statistics such as one-way ANOVA and one-sample t-tests, were used to address the research questions.

3.5. Research Ethics

In all studies, ethical dilemmas are likely to emerge with regard to data collection, dissemination of findings, and, in particular, the relationship between the researcher and participants. Hence, in this study, the researcher informed all participants about the study's goals and provided them with all pertinent research information. The study was carried out in accordance with the ethical considerations required when conducting research. Prior to data collection, the study obtained ethical approval from the Institutional Review Board of the Center for Educational Research at Addis Ababa University. Furthermore, all sources used in this study have been properly acknowledged and cited in accordance with the APA 7th edition guidelines (Publication Manual of the American Psychological Association., 2020).

4. Results and Discussions

4.1. Student Support System in HEIs

As shown in Table 3, students assessed their universities' support system with an overall rating ($M = 2.57$) significantly below the expected moderate level of support ($t = -9.23$, $p < 0.05$). The 95% confidence interval (2.48, 2.66) was significantly below the moderate level of agreement (3.00). The result indicates that students have a low level of satisfaction with the student support system in higher education universities. The result also presents students' satisfaction with specific features of the support system. The maximum rating among the seven items was 3.07, indicating a moderate level of agreement regarding the provision of adequate academic advising services by the institutions. This result suggests that academic advising services (Osman & Vaidya, 2025) in HEIs are not sufficiently provided. Students also reported a moderate level of agreement ($M = 2.98$) that they received friendly and helpful support from staff members.

Table 3

Student support system in higher education institutions

Student Support System Characteristics	N	M	SD	Test Value = 3					
				t-value	Df	p-value	Mean Difference	95% CI Difference	
								Lower	Upper
The institution provides adequate academic advising services.	355	3.07	1.133	1.218	354	.224	.073	-.04	.19
The institution offers effective counseling services for personal issues.	355	2.75	1.066	-4.382	354	.000	-.248	-.36	-.14
The institution provides career services that assist in job placement.	355	2.75	1.074	-4.396	354	.000	-.251	-.36	-.14
Information about support services is clearly communicated to students.	355	2.81	1.107	-3.309	354	.001	-.194	-.31	-.08
Support services are easily accessible when I need them.	355	2.75	1.118	-4.224	354	.000	-.251	-.37	-.13
Staff members in support services are friendly and helpful.	355	2.98	1.142	-.279	354	.781	-.017	-.14	.10
Overall, I am satisfied with student support system at this institution.	355	2.77	1.068	-3.975	354	.000	-.225	-.34	-.11

The low-level evaluation ($M = 2.75$) was observed regarding the effectiveness of counseling services (Cicco, 2018) for personal issues, career services that assist in job

placement, and easy access to support services as needed by students. The 95% confidence intervals for these aspects of the student support system were all below the moderate level (3.00), indicating the inadequacy of the support system. A lack of clear communication regarding information on support services was also indicated ($M = 2.81$). Students were also found to have a low level of satisfaction with the institutions' student support system ($M = 2.77$, $t = -3.975$, $p < 0.05$).

Further assessment of the student support system with respect to certain attributes was conducted using a one-way ANOVA. Table 4 shows that the three universities did not have a similar level of provision of student support systems ($F = 13.108$, $p < 0.05$). Relatively, University B has a moderate level of service ($M = 3.16$), which was significantly better than the low-level services rendered by both University A ($M = 2.70$) and University C ($M = 2.57$). The 95% confidence interval for the rating of University B was strictly above the corresponding confidence intervals of the other two universities.

The disparities in student support provision likely reflect differences in funding and resource allocation, staffing capacity and expertise, institutional priorities and leadership, organizational coordination and service delivery, student population needs, external partnerships, and research support. The mean differences indicate that structural and operational factors, rather than chance, are driving the gaps and justify a targeted needs assessment, comparative resource and staffing analysis, and qualitative inquiry to guide interventions.

An assessment of the level of the student support system among the four colleges was also conducted and revealed that these colleges did not have a similar level of support services ($F = 72.223$, $p < 0.05$). The differences in student support services indicated a high level of support ($M = 4.06$) within the College of Natural and Computational Science, in contrast to the low-level student support services ($M = 2.17$) in the College of Veterinary Medicine and Agriculture. The Scheffé test identified that only the College of Education and Behavioral Studies ($M = 2.60$) and the College of Social Sciences and Humanities ($M = 2.61$) had similarly low levels of support systems.

The College of Natural and Computational Sciences appears to receive more funding, advisors, and research-support infrastructure, along with better organizational coordination and stronger external partnerships, while the College of Veterinary Medicine and Agriculture and the other colleges face limited budgets, weaker coordination, and higher unmet demand.

Historical program development also contributes to these differences, although further qualitative investigation is necessary.

Table 4

Evaluation of student support system by university, college, and year of study

		N	M	SD	95% CI		ANOVA		Scheffe Subset for alpha = 0.05		
					Lower Bound	Upper Bound	F-value	P-value	1	2	3
University	University A	133	2.70	0.86	2.55	2.85	13.108	.000	2.70		
	University B	134	3.16	1.08	2.97	3.34			3.16		
	University C	88	2.57	0.74	2.41	2.73			2.57		
	Total	355	2.84	0.95	2.74	2.94			0.57	1.00	
Year of Study	1st Year	80	2.82	0.80	2.64	3.00	10.544	.000	2.82		
	2nd Year	83	2.42	0.76	2.25	2.58			2.42		
	3rd Year	60	2.74	0.92	2.50	2.98			2.74		
	4th Year	59	2.95	0.97	2.69	3.20			2.95		2.95
	5th and above	73	3.34	1.08	3.09	3.60					3.34
	Total	355	2.84	0.95	2.74	2.94			0.15	0.76	0.16
College	Education and Behavioral Studies	124	2.60	0.81	2.46	2.75	72.223	.000	2.60		
	Social Sciences and Humanities	140	2.61	0.83	2.47	2.75			2.61		
	Natural and computational sciences	65	4.06	0.56	3.92	4.20			4.06		
	Veterinary Medicine and Agriculture	26	2.17	0.34	2.03	2.31			2.17		
	Total	355	2.84	0.95	2.74	2.94			1.00	1.00	1.00

The perception of the student support system was found to be significantly different among students with different years of study ($F = 10.544$, $p < 0.05$). Fourth-year students ($M = 2.95$) and fifth-year students ($M = 3.34$) have relatively higher and more positive assessments of the support services they have received compared to the low-level student services reported by first-, second-, and third-year students.

The results of the one-way ANOVA in Table 5 indicated that there was no significant difference in student support services based on gender ($F = 0.895$, $p = 0.345 > 0.05$). However, students at different program levels and with different sponsorship statuses differed significantly in their evaluations of the student support system. The results indicated that government-sponsored students reported moderate support ($M = 2.89$) and better services

compared to private or self-sponsored students, who reported low-level support ($M = 2.58$). Moreover, the evaluation of the support system by PhD students ($M = 3.01$) was significantly higher than that of MA/MSc students, who reported lower levels of support ($M = 2.59$).

Table 5

Evaluation of student support system by program level, gender, and sponsorship

		N	M	SD	95% CI		ANOVA	
					Lower Bound	Upper Bound	F-value	p-value
Program Level	MA/MSc	144	2.59	0.77	2.47	2.72	17.366	.000
	PhD	211	3.01	1.03	2.87	3.15		
	Total	355	2.84	0.95	2.74	2.94		
Gender	Male	283	2.87	0.97	2.75	2.98	.895	.345
	Female	72	2.75	0.90	2.53	2.96		
	Total	355	2.84	0.95	2.74	2.94		
Sponsorship	Government sponsorship	297	2.89	0.97	2.78	3.00	5.299	.022
	Private/ Self-sponsorship	58	2.58	0.84	2.36	2.80		
	Total	355	2.84	0.95	2.74	2.94		

Enrollment size and resource distribution may explain this discrepancy: PhD cohorts are generally smaller and therefore more likely to receive intensive, tailored support, such as laboratory access, research funding, supervisory attention, and targeted publication assistance, whereas larger MA/MSc cohorts may encounter diluted services, limited advisor availability, and stretched resources, leading to lower perceived support among master's students (Chauke, 2025).

4.2. Research and Publication Support System in the Higher Institutions

This study also assessed the research and publication support system in HEIs among 355 postgraduate students. The results revealed that the overall research and publication support system ($M = 2.70$) was significantly below the expected level of support ($t = -5.89$, $p < 0.05$). The 95% confidence interval (2.60, 2.80) was significantly below the moderate level of agreement (3.00). The results indicate that students have a low level of satisfaction with the research support system in higher education universities. This further suggests that the provision of research and publication support systems in higher education institutions is below the average or minimum expected level.

Table 6*Research and publication support system in higher education institutions*

One-Sample Statistics	N	M	SD	Test Value = 3					
				t-value	df	p-value	Mean Difference	95% CI Lower	95% CI Upper
Adequacy of research advising	355	3.11	1.17	1.77	354	.078	.11	-.01	.23
Sufficient workshops on research issues	355	2.85	1.15	-2.53	354	.012	-.15	-.28	-.03
Availability of sufficient funding opportunities	355	2.29	1.12	-11.98	354	.000	-.71	-.83	-.59
Awareness of grants offered for research projects	355	2.43	1.10	-9.77	354	.000	-.57	-.69	-.46
Access to editorial services for research papers	355	2.48	1.14	-8.53	354	.000	-.52	-.63	-.40
Training on research ethics and compliance	355	2.82	1.18	-2.87	354	.004	-.18	-.30	-.06
Training on academic writing and publishing	355	2.88	1.19	-1.88	354	.061	-.12	-.24	.01
Access to reputable journals for publication	355	2.72	1.24	-4.31	354	.000	-.28	-.41	-.15
Overall support services for research and publication	355	2.70	1.12	-5.13	354	.000	-.30	-.42	-.19
Total	355	2.6967	0.97	-5.89	354	.000	-.30	-.4046	-.2020

Table 6 also presents students' satisfaction with specific features of the research support system. The adequacy of research and publication support provided by faculty members was rated at a moderate level ($M = 3.10$), while the sufficiency of research workshops received a lower average rating ($M = 2.85$). However, the availability of sufficient funding opportunities was rated at a low level, with a mean of 2.29. Awareness of grants offered for research projects and access to editorial services for research papers were also rated as inadequate, with mean scores of 2.43 and 2.48, respectively. Training on research ethics and compliance ($M = 2.82$) and access to reputable journals for publication ($M = 2.72$) were both rated below the moderate level, indicating inadequately low performance. In contrast, training on academic writing and publishing ($M = 2.88$) was observed to be approaching a moderate level across the universities.

In the analysis of the overall research and publication support system, a sample of 355 participants reported a mean score of 2.6967 ($SD = 0.97$), which indicates moderate variability in responses. Statistical significance was demonstrated by a t-statistic of -5.89 with 354 degrees of freedom and a p-value of .000. A small to moderate negative effect size was observed, with Cohen's d equal to -0.30, suggesting a tendency toward dissatisfaction with the research and

publication support system. Furthermore, the 95% confidence interval ranged from -0.4046 to -0.2020 confirm a significant deviation from neutrality.

Participants perceive institutional support for research and publications as largely insufficient with identified key deficiencies such as limited supervisory capacity, inadequate funding and specialized facilities, insufficient writing support, and weak guidance on journal selection and peer review. These findings call for a comprehensive evaluation of research support frameworks and targeted investments to enhance supervisor training, improve writing and editorial services, increase access to research resources, and streamline publication processes to better align with student needs and research objectives.

Table 7

Comparison of universities in research and publication support system

	N	M	SD	95% CI		ANOVA		Subset for alpha = 0.05		
				Lower Bound	Upper Bound	F-value	p-value	1	2	3
University A	133	2.58	0.80	2.44	2.71				2.5781	
University B	134	3.14	1.10	2.95	3.32					3.1368
University C	88	2.21	0.68	2.06	2.35	30.346	.000	2.2058		
Total	355	2.70	0.97	2.60	2.80			1.000	1.000	1.000

The results of the one-way ANOVA analyses in Table 7 show that research and publication support services differed significantly among universities ($F = 30.346$, $p < 0.05$). The mean score for University C ($M = 2.21$) indicated the lowest level of performance compared to the other universities. University A also demonstrated low-level performance, with a 95% confidence interval (2.44, 2.71) significantly inferior to that of University B, where research support services were rated at a moderate level ($M = 3.14$) with a 95% confidence interval (2.95, 3.52).

The current study utilized a one-way ANOVA to examine whether research and publication support services differed significantly across three Ethiopian universities. The results indicated a statistically significant difference among the institutions ($F = 3.03$, $p < .001$). This finding implies that there are variations in the institutional support and research infrastructure provided to students across the higher education system in the region. These results are important, as a university's global ranking and its contribution to the knowledge economy are closely associated with the strength of its research and publication support services. Students at University C and University A may encounter substantial institutional

barriers that limit their ability to publish in reputable journals, as reflected in their lower performance levels. Although University C's performance is only at a moderate level, it can serve as a benchmark for comparable institutions. While this indicates some progress, it also suggests that all evaluated universities need to make more systematic and sustained investments across the research lifecycle to move from low or moderate support to high institutional effectiveness.

5. Conclusion

The study investigated the availability, accessibility, and quality of student support systems in Ethiopian higher education institutions and identified critical weaknesses in academic advising, personal counseling, career services, communication of available supports, staff responsiveness, research advising, funding for student research, and access to editorial and academic writing training. Conceptually, these deficits reflect more than isolated service failures; they reveal gaps in internal quality assurance and institutional accountability, where student support functions are not sufficiently embedded in quality assurance indicators and are inadequately resourced and monitored by leadership. Addressing these issues requires quality assurance reform that integrates student support metrics (e.g., access, utilization, and outcomes) into routine institutional reviews, aligns resource allocation with documented needs, and holds units and leaders accountable for measurable improvements.

Recommended institutional actions include strengthening advising and counseling through enhanced staffing and training, expanding targeted research, publication, and academic writing support, improving career service linkages with employers, and enhancing communication and client service competencies among support staff. These efforts should be accompanied by robust monitoring and evaluation mechanisms.

These recommendations should be interpreted in light of the study's limitations: the sample was restricted to first-generation universities, the findings rely on self-reported perceptions, and the cross-sectional design limits causal inference. Therefore, reforms should be piloted and evaluated longitudinally and supplemented with qualitative approaches and administrative data triangulation to ensure that interventions effectively improve student outcomes and institutional quality.

6. Recommendations

To improve the overall student support system and the integrated quality assurance system, Ethiopian HEIs should collaborate to create an optimal learning environment that promotes student participation and academic achievement. Accordingly, it is recommended that they:

1. Invest in enhancing physical facilities, including classrooms, laboratories, and recreational areas, as infrastructure is crucial for providing an environment that supports student engagement and academic success.
2. Allocate resources to strengthen counseling and academic advising services by hiring dedicated staff and providing them with comprehensive training.
3. Develop and enhance research and publication support initiatives by offering workshops, funding opportunities, and increased access to academic journals.
4. Increase funding specifically designated for students undertaking theses or dissertations.
5. Conduct regular audits of internal quality assurance mechanisms related to student support services to ensure continuous improvement.
6. Establish a centralized Research and Publication Support Center to provide small grants, publication-fee assistance, editorial services, journal selection guidance, and mentorship that links students with experienced supervisors.

By implementing these recommendations, higher education institutions can significantly enhance the quality of their educational offerings and better support their students, thereby fostering a more effective and enriching learning environment.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

The authors did not receive any specific grant from funding agencies or organizations.

Institutional Review Board Statement

This research project is approved by the Center for Educational Research, Addis Ababa University. Informed consent was obtained from all participants before collecting data.

Declaration

The authors declare the use of Quillbot for paraphrasing ideas and language edition. The authors take full responsibility for ensuring proper review and editing of contents generated using AI.

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