

The Use of Generative Artificial Intelligence and Academic Integrity in Somaliland Higher Education: Usage Patterns, Student Perceptions and Emerging Challenges

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Abstract: The rapid adoption of generative artificial intelligence tools in higher education has greatly changed how students carry out academic tasks, but the evidence in resource-constrained contexts such as Somaliland is virtually non-existent. The study investigated patterns of generative AI use, students perceived academic effectiveness and emerging academic integrity concerns among undergraduate students from four universities in Hargeisa, Somaliland. The study was grounded on the Technology Acceptance Model (TAM) and Diffusion of Innovation (DOI) theory. The study adopted descriptive cross-sectional mixed-methods design combining 360 valid student questionnaire responses and nine key informant interviews with deans, lecturers and ICT officers. Descriptive statistics were calculated and qualitative data were analyzed thematically using Python. The findings revealed widespread use of AI (95.6%), with ChatGPT being the most popular platform (85.0%). The most use case for generative Artificial Intelligence was reported by Students were research, writing assignments and preparing for exams when they encountered academic difficulty or were under time pressure, rather than as a general habit. A large majority also saw AI as improving quality of writing, organizing ideas and reducing workload. Against this, there were serious concerns. 61.4% of the respondents admitted to dependency, risk of plagiarism was over 72% and motivation for independent study was declining by 55.5%. Over half felt there was no institutional guidance or it was unclear on the use of GenAI. Finally, GenAI is structurally embedded in the practice of students in Somaliland higher education, yet institutional governance has not kept pace with this mass adoption of generative artificial intelligence. In light with the evidence from this study, the study recommends the need for national policy and considering generative artificial intelligence a national issue, the universities to adopt AI frameworks, enhance lecturer capacity on use of GenAI, the assessment currently applied to rethink a more robust assessment to engage on this age of generative Artificial Intelligence, and students to be trained on the ethical use of generative Artificial Intelligence.

Keywords: Generative Artificial Intelligence in Higher Education; ChatGPT Use Among University Students; Somaliland Higher Education; Academic Integrity in Somaliland; AI Tools in Somaliland Universities; Digital Ethics in Education.

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I. INTRODUCTION

Generative artificial intelligence tools have entered university life with a speed that most higher education institutions were unprepared to manage. Within a few years, platforms like ChatGPT moved from experimental tools used by early adopters to near-standard resources for assignment writing, research, and exam preparation across a wide range of

academic contexts. The breadth of this shift is now empirically documented. In Indonesia, Rabiev et al. [1] found that over 70% of undergraduates used ChatGPT for essay writing and coursework. In South Korea, students who incorporated ChatGPT into reflective writing classes showed measurably stronger writing efficacy than peers who did not [2]. In Hong Kong, AI-supported collaborative projects improved students' organizational capacity and language fluency [3]. In Finland,

ChatGPT served non-native English speakers by supporting grammar correction and idea development [4]. In Ghana, 72% of students reported using the tool to deepen comprehension in difficult academic subjects [5]. Across all these settings, the pattern is similar: AI tools are not being adopted cautiously at the margins of academic life but are being embedded at its centre.

The perceived benefits driving adoption are not trivial. Sudrajad et al. [6] showed that ChatGPT helped Indonesian students structure essays more efficiently and enhanced creative output during English academic writing tasks. Chauke et al. [7] found, among South African postgraduate students, that AI tools reduced writing anxiety and improved coherence in thesis development. Yassin and Bashir [8] documented similar patterns in Uganda, where students valued ChatGPT for the immediacy of academic support it provided. In Tanzania, Matto [9] reported that 81.5% of surveyed students used ChatGPT for assignments and revision, and in Saudi Arabia, Almulla and Ali [10] linked frequent AI use to improved academic satisfaction. The convergence of these findings across different national contexts suggests that students' positive assessment of AI tools is not simply enthusiasm for technology and it reflects specific academic functions that the tools perform effectively.

These gains, however, come with documented costs. Obed et al. [11] found that over 50% of Tanzanian students used ChatGPT in assessed work without understanding the ethical implications. Du and Tate [12] showed that multilingual students in the United States often misidentified AI-generated content as their own, resulting in inadvertent plagiarism. Jeyaraman et al. [13] warned against students' uncritical reliance on AI output, particularly where hallucinated citations and inaccurate information can pass undetected. Gruenhagen et al. [14] found that a significant share of Australian students did not categorize AI-assisted assignment completion as academic misconduct, complicating institutional enforcement. Evangelista [15] argued that existing assessment systems are structurally ill-equipped to detect or deter AI-enabled misconduct, and called for assessment redesign as a matter of urgency. Together, these findings establish a tension that defines the current educational moment: AI adoption is expanding faster than institutions' capacity to manage its integrity implications.

Regional evidence from Africa and the Middle East reinforces both sides of this tension. Almulla and Ali [10] found that Saudi students valued AI tools but expressed concern about reduced critical thinking. In Egypt, ChatGPT usage was high among media students, though apprehension about plagiarism was equally prevalent [16]. In Ghana, Wiredu et al. [5] reported a positive correlation ($r = 0.45$) between AI use and academic comprehension, alongside widespread concern about academic dishonesty. In Tanzania, both Matto [9] and Obed et al. [11] noted institutional policy vacuums that left students without guidance on appropriate AI use. Across these varied contexts, the common denominator is adoption that outpaces governance a pattern with direct consequences for academic integrity.

Somaliland remains entirely absent from this literature. No published study has systematically examined how university students in Somaliland engage with generative AI tools, what they use them for, what they perceive as beneficial, or what ethical concerns arise. This absence is analytically important: Somaliland's higher education sector is expanding under infrastructure constraints and without established AI governance frameworks, making it a distinct and underexplored test case for how AI diffusion operates outside well-resourced institutional environments. This study addresses that gap. It examines patterns of AI tool usage, student perceptions of academic effectiveness, and emerging ethical concerns among undergraduate students at four major universities in Hargeisa, Somaliland.

II. METHOD

This study employed a descriptive cross-sectional mixed-methods design with an exploratory orientation. Quantitative data formed the primary analytical strand; qualitative evidence from key informant interviews provided institutional depth and contextual interpretation. The study was conducted in Hargeisa, Somaliland's principal urban and educational centre, covering four universities: the University of Hargeisa, Gollis University (Hargeisa campus), the Civil Service Institute, and Frantz Fanon University. These institutions were selected purposively because they represent both public and private higher education settings and account for the bulk of the city's undergraduate enrollment. According to the Somaliland Central Statistics and Research Department, combined undergraduate enrollment across the four institutions in 2023 was 3,951 students (Table 1).

Table 1: Undergraduate Student Enrollment at Selected Universities (2019–2023)

No.	University	2019	2020	2021	2022	2023
1	University of Hargeisa	5,742	6,296	2,169	2,404	1,955
2	Gollis University (Hargeisa)	2,009	3,257	1,485	1,698	1,400
3	Civil Service Institute	513	571	276	376	344
4	Frantz Fanon University	—	—	101	269	252
	Total	8,264	10,124	4,031	4,747	3,951

Note. Source: [17].

Using Slovin's formula with a 5% margin of error, the required sample was calculated at 363 students. The quantitative component used quota-based convenience sampling. Data collection teams were positioned at high-traffic campus areas entry points, foyers, and communal spaces and invited available students to complete a QR-code-linked questionnaire until institutional quotas were filled. Final allocation was: Civil Service Institute (124), University of Hargeisa (105), Gollis University (92), and Frantz Fanon

University (39). Convenience sampling is non-probabilistic and its use is acknowledged as a limitation; it was adopted because complete institutional student lists were not accessible and the study required practical cross-campus administration. For the qualitative component, purposive sampling was used to select nine key informants' deans, lecturers, and ICT officers whose professional roles gave them direct institutional experience with AI-related academic behavior. Sample allocation is summarized in Table 2.

Table 2: Sample Size Allocation by University

No.	University	Population (2023)	Sample Size
1	Civil Service Institute (CSI)	344	124
2	University of Hargeisa (UOH)	1,955	105
3	Gollis University (Hargeisa)	1,400	92
4	Frantz Fanon University (FFU)	252	39
	Total	3,951	360

Note. Source: [17]; Field allocation by the researchers, 2025.

Primary data were collected using a structured questionnaire and semi-structured Key Informant Interviews (KIIs). Secondary data were drawn from a review of published literature, institutional documents, and official educational statistics. The questionnaire was administered digitally through Google Forms and comprised closed-ended items, including Likert-scale questions covering AI tool usage, perceived academic effectiveness, and ethical concerns. Demographic items allowed variation to be examined by institution, year of study, gender, and field of study. The KIIs elicited institutional perspectives on AI integration, academic integrity challenges, and the policy environment surrounding AI use in Somaliland's universities. To strengthen data quality, the questionnaire was pre-tested with a small group of students outside the final sample; the interview guide was piloted with one academic staff member not included in the final nine. Both instruments were refined based on pilot feedback before full data collection commenced.

Quantitative data were analyzed using Python, with descriptive statistics such as frequencies, percentages, means, standard deviations, and cross-tabulations used to summarize patterns and examine demographic variation. Qualitative data from the KIIs were analyzed thematically, with recurring ideas and institutional perspectives coded inductively following the principles of thematic analysis. Triangulation of quantitative and qualitative findings strengthened interpretive depth throughout the analysis. Ethical principles were observed at each stage. Informed consent was obtained prior to participation; all respondents were briefed on the study's purpose, the voluntary nature of participation, and their right to withdraw without penalty. Anonymity and confidentiality were protected by excluding personally identifying information and storing all materials securely. Permission to conduct the research was obtained from each participating university, and all data were used exclusively for academic research purposes.

III. RESULTS AND DISCUSSION

➤ Response Rate and Reliability

Of 365 questionnaires distributed across the four universities, 360 valid responses were returned a response rate of 98.6%. This return level, while partly a function of the in-person QR administration method, suggests that the topic held immediate relevance for respondents and that the digital format was practically accessible within the study context. It provided a quantitative dataset adequate for descriptive analysis across all study variables.

Internal consistency of the measurement instrument was assessed using Cronbach's Alpha. The perceived effectiveness scale returned an alpha of 0.743, comfortably above the conventional 0.70 threshold for exploratory research. The ethical concerns and limitations scale returned 0.670, marginally below threshold but accepted given the contextual novelty of the subject and the absence of prior validated instruments for this specific setting. The combined scale alpha was 0.729. These values confirm that the instrument offered a sufficiently consistent basis for examining the study's three substantive areas usage patterns, perceived effectiveness, and ethical concerns. Results are summarized in Table 3.

Table 3: Response Rate and Reliability Summary

Indicator	Value
Target Population	3,951
Calculated Sample Size	363
Questionnaires Distributed	365
Valid Responses Returned	360
Response Rate	98.6%
Cronbach's Alpha: Perceived Effectiveness Scale	0.743
Cronbach's Alpha: Ethical Concerns and Limitations Scale	0.670
Cronbach's Alpha: Combined Scale	0.729

Note. Source: Primary Data, 2025.

➤ Respondent Profile

The 360 respondents were drawn from all four universities: Civil Service Institute (124, 34.4%), University of Hargeisa (105, 29.2%), Gollis University (92, 25.6%), and Frantz Fanon University (39, 10.8%). Gender distribution was reasonably balanced at 196 males (54.4%) and 164 females (45.6%). The age profile skewed young, with 50.8% falling in the 18–21 bracket and 40.6% in the 22–25 bracket a pattern consistent with an undergraduate study population. Second-year (37.2%) and third-year (30.0%) students were most strongly represented, meaning the dataset reflects students with enough university experience to have established academic digital practices, but who have not yet reached the final stages of their programmes.

Students from 12 distinct fields were represented, with the largest shares from Accounting and Finance (23.3%), ICT (13.1%), Public Administration (12.5%), and Human Resource Management (11.7%). Self-assessed ICT skill levels were predominantly intermediate (59.7%), with smaller beginner (26.7%) and advanced (13.6%) categories. The disciplinary spread and range of ICT confidence levels mean the findings cut across different academic traditions and levels of digital familiarity rather than reflecting one specialized student group. Detailed demographic data are presented in Table 4.

Table 4: Demographic Profile of Respondents

Variable	Category	Frequency (n)	Percentage (%)
University	Civil Service Institute (CSI)	124	34.4
	University of Hargeisa	105	29.2
	Gollis University (Hargeisa Campus)	92	25.6
	Frantz Fanon University	39	10.8
Gender	Male	196	54.4
	Female	164	45.6
Age Group	18–21 years	183	50.8
	22–25 years	146	40.6
	26–30 years	25	6.9
	Above 30 years	6	1.7
Year of Study	First year	69	19.2
	Second year	134	37.2
	Third year	108	30.0
	Final year	49	13.6
Field of Study	Accounting and Finance	84	23.3
	ICT	47	13.1
	Public Administration	45	12.5
	Human Resource Management	42	11.7
	Medicine	37	10.3
	Engineering	16	4.4

	Economics	15	4.2
	Business Administration	12	3.3
	Laboratory Sciences	12	3.3
	Law	11	3.1
	Public Health	8	2.2
	Social Work	6	1.7
	Others	21	5.8
ICT Skill Level	Beginner	96	26.7
	Intermediate	215	59.7
	Advanced	49	13.6

Note. Source: Primary Data, 2025.

➤ *Generative AI Tool Usage Patterns*

AI tool use among students at the four universities was effectively universal. Of 360 respondents, 344 (95.6%) reported using generative AI tools for academic purposes; only 16 (4.4%) did not. ChatGPT was overwhelmingly the primary platform, named by 306 respondents (85.0%). The remainder were distributed across Grammarly (6.1%), Gemini (3.9%), Quillbot (1.4%), Deepseek (0.8%), and several others, each well below 1%. This concentration on a single platform is analytically notable. It reflects not merely user preference but the practical reality of which tools are accessible, known about, and trusted in Somaliland's bandwidth-constrained environment. Interview participants confirmed the picture: one noted that "AI usage is widespread, over 80% of students are using tools like ChatGPT for academic purposes" (Respondent 1, 2025), while another described student use extending to coding, online research, and subject-specific problem-solving (Respondent 2, 2025). AI use in this context is not fragmented across many platforms; it is concentrated in one, which makes ChatGPT's design, defaults, and capabilities especially consequential for academic outcomes here.

The purposes for which students use AI cluster around tasks that require either substantive knowledge input or written output under pressure. Research and information search ranked highest (48.6%), followed by assignment or essay writing (45.0%), exam preparation (29.2%), brainstorming (27.7%), paraphrasing (20.6%), and translation (18.6%). The co-dominance of information search and writing assistance is

worth noting. Many students are using AI to do what a combination of library search and writing support would previously have done — but faster, and without requiring access to resources that may not be reliably available on Somaliland campuses. The contextual drivers reinforce this: 49.4% of respondents said they turned to AI mainly when tasks were difficult or required deeper understanding, while 35.8% cited time-saving and 20.8% noted approaching deadlines. Teacher recommendation (10.8%) and peer influence (5.8%) were minor factors. The pattern strongly suggests self-directed, academically motivated adoption rather than passive imitation, students are reaching for AI when they feel cognitively stretched or time-pressed, not simply because their peers do it.

Frequency data underscore how routine this use has become. Daily usage was highest for information search (41.4%), translation (38.9%), and brainstorming (36.9%). Weekly usage dominated assignment writing (55.0%) and exam preparation (49.2%). These figures describe a rhythm of use tied to the academic calendar rather than casual or incidental engagement. One interview participant observed that students now use AI as a first-response aid in situations where they would previously have sought out a lecturer or searched conventional sources (Respondent 5, 2025). Another noted the pattern is particularly pronounced among senior students, who have had more time to develop comfort with the tools (Respondent 5, 2025). Detailed usage pattern data are presented in Table 5.

Table 5: AI Tool Usage Patterns

Indicator	Category	Frequency (n)	Percentage (%)
General use of AI tools	Yes	344	95.6
	No	16	4.4
Primary AI tool used	ChatGPT	306	85.0
	Grammarly	22	6.1
	Gemini	14	3.9
	Quillbot	5	1.4
	Deepseek	3	0.8
	Poe	2	0.6
	Google	2	0.6

	Others	6	1.7
Academic purpose of AI use	Research and information search	175	48.6
	Assignment/essay writing	162	45.0
	Exam preparation	105	29.2
	Idea generation/brainstorming	100	27.7
	Paraphrasing/rewording content	74	20.6
	Translation	67	18.6
Main context of AI use	Difficult tasks requiring deeper understanding	178	49.4
	Time-saving/convenience	129	35.8
	Personal interest/curiosity	121	33.6
	Approaching deadlines	75	20.8
	Teacher recommendation	39	10.8
	Peer influence	21	5.8

Note. Source: Primary Data, 2025.

➤ *Perceived Effectiveness of AI Tools*

Students across all four institutions broadly regarded generative AI as academically useful. The strongest positive responses were recorded for writing quality, with 43.3% strongly agreeing and 38.1% agreeing that AI improves their academic writing a combined positive response of 81.4%. For clarity and organization of ideas, 33.9% strongly agreed and 44.4% agreed, producing a combined positive of 78.3%. These two dimensions: writing quality and organizational clarity, appear to be the core of what students value. The mean scores reflect this: the statement on writing quality returned the lowest mean (M = 1.82, SD = 0.88), indicating the strongest agreement on the four-point scale (1 = Strongly Agree to 4 = Strongly Disagree).

Perceived benefits extended to workload reduction (71.7% combined agreement), confidence in academic tasks (72.8%), and grade improvement (70.6%). What the quantitative profile does not capture is the specific academic context that makes these benefits feel pressing. Several interview participants noted that students turn to AI not because it is entertaining or novel, but because it fills real support gaps, students at Somaliland universities may have

limited access to writing tutors, subject specialists outside class hours, and comprehensive digital libraries. In this environment, a tool that can answer a subject question, reorganize a draft, or translate a passage has obvious practical value. One respondent summarized it plainly: AI affects student performance in "both negative and positive" ways (Respondent 1, 2025). The positive dimension, as the data show, is real but it operates within conditions that are specific to this context, not universal. Perceived effectiveness data are presented in Table 6.

A note of caution is warranted. The strong positive perceptions reported here concern perceived, not demonstrated, academic benefit. Students believe AI improves their writing; whether it actually does, and whether it supports deeper learning or primarily accelerates surface-level task completion, cannot be established from self-report data alone. Several interview participants implied as much, observing that AI use can produce more polished output without necessarily producing stronger understanding. This distinction matters for how institutions interpret these results: high perceived usefulness should not be mistaken for deep learning gain.

Table 6: Perceived Effectiveness of AI Tools

Statement	SA (%)	A (%)	D (%)	SD (%)	Mean	SD
AI tools improve the quality of my academic writing	43.3	38.1	12.2	6.4	1.82	0.88
AI tools enhance clarity and organization of ideas	33.9	44.4	13.1	8.6	1.96	0.90
AI tools reduce assignment workload	32.8	38.9	18.1	10.3	2.06	0.96
AI tools boost confidence in academic tasks	28.9	43.9	15.6	11.7	2.10	0.95
AI tools help achieve better grades	35.6	35.0	16.4	13.1	2.07	1.02

Note. Mean scores based on a 1 (Strongly Agree) to 4 (Strongly Disagree) scale. Source: Primary Data, 2025.

➤ *Ethical Concerns, Institutional Gaps, and Reform Preferences*

The same students who reported strong perceived benefit from AI also acknowledged serious ethical and cognitive risks — and the levels of concern were high. On plagiarism, 72.5%

of respondents agreed or strongly agreed that AI tools create plagiarism risks (M = 2.00, SD = 0.97). On original thinking, 61.7% agreed or strongly agreed that AI negatively affects their originality (M = 2.25, SD = 1.02). Dependency was acknowledged by 61.4% (M = 2.26, SD = 0.97), and 55.5%

agreed that AI reduces motivation for independent academic work ($M = 2.36, SD = 1.02$). These are not peripheral worries expressed by a cautious minority. They represent majority positions, students who simultaneously value AI and are aware that their use of it carries risks.

The qualitative evidence makes these concerns tangible. Interview participants described plagiarism not as an abstract category but as observable daily behaviour. One respondent characterized student practice bluntly: "they just use copy and paste and this is negative" (Respondent 5, 2025). Another went further, observing that "natural intelligence is disappearing, we're becoming too dependent" (Respondent 3, 2025). A third noted that students frequently use AI-generated content without understanding where the text came from or what ethical obligations its use entails. These accounts suggest that the risks are not being theorized by students from a distance; they are being observed by academic staff in classrooms, assignments, and assessment results.

The institutional response to this situation has been largely absent. Only 46.9% of respondents agreed or strongly

agreed that their universities provide clear guidelines on AI use meaning the majority perceive the institutional environment as either unclear or silent on the matter ($M = 2.57, SD = 1.07$). This is not a peripheral finding. It means that the majority of students using AI extensively for academic work do so without institutional direction about what is permissible, what must be disclosed, and what constitutes misconduct. Despite this absence, students showed strong appetite for structured guidance: 73.7% supported ethical training on AI use as an urgent need, 76.9% supported formal AI integration into academic work, and 60.0% supported compulsory AI training workshops. In their own words, students are not asking for prohibition they are asking for structure. As one interview respondent stated, "there should be national policy or strategy on AI; academic guidelines must be developed, and awareness increased" (Respondent 9, 2025). Another argued that traditional written assignments are no longer fit for purpose and should be supplemented with presentations and practical tasks less amenable to AI completion (Respondent 7, 2025). Full ethical concern and reform preference data are presented in Table 7.

Table 7: Ethical Concerns, Institutional Gaps, and Reform Preferences

Statement	SA (%)	A (%)	D (%)	SD (%)	Mean	SD
AI tools pose risks of plagiarism	37.2	35.3	18.1	9.4	2.00	0.97
AI tools negatively affect original thinking	27.5	34.2	23.9	14.4	2.25	1.02
AI tools make students dependent on them	25.0	36.4	26.7	11.9	2.26	0.97
AI tools reduce motivation for independent study	24.4	31.1	28.9	15.6	2.36	1.02
My university provides clear guidelines on AI use	20.8	26.1	28.6	24.4	2.57	1.07
Ethical training on AI use is urgently needed	33.1	40.6	20.0	6.4	2.00	0.89

Note. Mean scores based on a 1 (Strongly Agree) to 4 (Strongly Disagree) scale. Source: Primary Data, 2025.

IV. DISCUSSION OF FINDINGS

The near-universal AI adoption recorded in this study 95.6% usage, with ChatGPT accounting for 85.0% of primary tool use is analytically significant not simply because the numbers are high, but because of where they come from. Somaliland is a context regularly described in terms of infrastructure constraints, limited digital connectivity, and an expanding but under-resourced higher education sector. The standard expectation from Diffusion of Innovation theory is that adoption accelerates when a technology demonstrates relative advantage, compatibility with existing practices, and observability among peers [18]. All three conditions appear to be met here: AI tools offer immediate, language-flexible academic assistance that is demonstrably useful, compatible with how students already think about academic tasks, and visible across campus social networks. The Somaliland case thus extends the DOI framework empirically by showing that even where infrastructure remains uneven, a technology with strong perceived advantage can achieve rapid saturation. This finding has implications beyond Somaliland: it suggests that governance frameworks for AI in education cannot rely on delayed or gradual diffusion as a buffer, because diffusion can be nearly complete before institutions have begun to respond.

Students' positive perceptions of AI largely reflect the Technology Acceptance Model's construct of perceived

usefulness the belief that a tool improves task performance [19]. Students in this study consistently identified writing quality, idea organization, and workload reduction as areas where AI delivered real value. What gives this finding a Somaliland-specific dimension is the structural context in which perceived usefulness is formed. Students at these universities may have limited access to academic writing centres, librarians trained in database search, or subject tutors available outside formal class hours. In that environment, a tool that provides instant feedback on a draft, explains a difficult concept in Somali or Arabic, or retrieves relevant information within seconds addresses genuine academic support gaps. Perceived usefulness here is not detached from context — it is a response to it. This matters analytically because it complicates the common framing of AI use as student laziness or academic shortcutting. At least some of the demand is a rational response to real resource gaps, and any policy intervention that ignores those gaps risks displacing AI without offering anything in return.

Perhaps the most consequential finding is not the level of adoption or the scale of perceived benefit, but the paradox that sits between them and the ethical concern data. More than 72% of students acknowledged plagiarism risks; 61.4% admitted dependency; yet adoption was near-total. This is not an anomaly that can be explained by ignorance these students are aware of the risks. The better explanation lies in what the TAM

would call the gap between attitude and behavioral intention when perceived behavioral control is low [20]. Students may disapprove of AI-enabled plagiarism in principle while continuing to use AI because they have no clear institutional framework telling them where the line falls. If no policy exists, no threshold has been set, and no enforcement mechanism operates, then the personal moral awareness that something might be problematic does not translate into behavioral change. This finding points firmly toward institutional responsibility: the problem is not a values deficit among students but an accountability vacuum created by the absence of governance.

That governance vacuum is confirmed by the institutional gap data. A majority of respondents, over 53% perceived their university as providing unclear or no guidance on AI use. This figure is consistent with what interview participants described on the ground: students navigating AI independently, without disclosed standards for what constitutes permissible use, without assessment designs that make AI assistance irrelevant or visible, and without access to training on how to engage with AI tools critically rather than uncritically. Obed et al. [11] found similar conditions in Tanzania, and Wiredu et al. [5] documented comparable policy gaps in Ghana. The Somaliland evidence extends these findings by showing that the gap is not merely the absence of a written policy document, but the absence of a functional institutional ecosystem policies, pedagogies, assessments, and staff competencies that together create an environment where responsible AI use is the path of least resistance rather than the exception. The institutional silence described by respondents is not passive; it actively shapes behavior by leaving students to define acceptable practice for themselves.

The Discussion should not close without acknowledging what the data also reveal about students' readiness to respond constructively. Support for formal AI integration (76.9%), compulsory training (60.0%), and urgent ethical guidance (73.7%) indicates that students are not resistant to institutional authority on this question they are requesting it. This reframes them from passive adopters to active stakeholders in their own academic integrity environment. The qualitative evidence reinforces this: calls from interview respondents for national policy, campus guidelines, and redesigned assessments reflect institutional actors who can see the problem and want structured tools to address it. This convergence of student demand and institutional concern creates an unusually clear window for reform one that Somaliland's higher education sector and its regulatory bodies have a specific opportunity to act on before the current policy vacuum becomes more entrenched.

V. CONCLUSION

This study set out to document what is actually happening at the intersection of generative AI and academic integrity in Somaliland's universities, in the absence of any prior empirical evidence from this context. What the data establish is unambiguous: AI tools, overwhelmingly ChatGPT have become a routine part of academic practice at the four institutions studied. Students use them for research, writing,

exam preparation, translation, and brainstorming. They use them frequently, purposefully, and primarily when they are academically stretched. This is not experimental behavior at the edges of student life; it is a normalized pattern.

The academic value students associate with AI is real, at least as they perceive it. Improvements in writing quality, clearer idea organization, lower workload, and stronger confidence in academic tasks are what most respondents report. In a setting where formal academic support services are limited, these perceived gains are not trivial. They reflect functional utility in a context where it matters. But the data also make clear that these gains are not occurring within a well-governed environment. Dependency is widespread, original thinking is perceived as weakening, plagiarism risk is widely recognized, and institutional guidance is largely absent. The combination is unstable: high-value, high-risk technology operating in a governance vacuum.

What this study contributes analytically is a demonstration that the AI governance problem in Somaliland's higher education sector is not principally a student behavior problem. Students are aware of the risks, report them candidly, and are actively calling for clearer institutional direction. The core problem is the absence of the infrastructure policy, training, assessment design, enforcement that would channel already-existing AI adoption toward academic integrity rather than away from it. Closing that gap will require coordinated action from national regulatory bodies, universities, faculties, and individual lecturers. The evidence suggests neither the scale of the challenge nor the appetite for addressing it should be underestimated.

RECOMMENDATIONS

Based on the evidence, the following graduated recommendations are proposed by actor level.

➤ *National Level:*

- The President of Republic of Somaliland should issue a Presidential Decree on the responsible integration of artificial intelligence in education, establishing a binding national direction and mandating policy, regulatory, and implementation action across secondary and higher education.
- The National Commission for Higher Education should develop and enforce a Higher Education AI Use Framework, specifying standards for ethical use, academic integrity, assessment governance, and institutional compliance across all accredited universities.
- The Ministry of Education and Science should prepare a national policy and strategic plan for AI integration in secondary education, beginning with curriculum review, teacher preparation, and phased school-level introduction, so that students arrive at university with established responsible digital habits.
- The Ministry of Education and Science should incorporate AI literacy, digital ethics, and critical content evaluation modules into the secondary school curriculum.

➤ *Institutional Level:*

- Universities should develop and formally adopt institutional AI policies, approved through academic governance structures that specify what is permitted, restricted, and prohibited in academic work.
- Universities should establish AI oversight committees, with shared accountability across academic leadership, ICT units, and quality assurance offices, to coordinate implementation and review.
- Universities should redesign assessments to include oral presentations, practical exercises, supervised writing, staged assignments, and defense sessions formats that reduce AI substitutability and restore the value of demonstrated, in-person competence.

➤ *Faculty and Student Level:*

- Lecturers should engage in structured professional development on AI use, ethics, and academic integrity enforcement not as an optional supplement to teaching, but as a core professional responsibility.
- Student affairs and academic support units should deliver compulsory AI ethics and literacy workshops at entry level and at each subsequent year, ensuring that training is cumulative rather than one-off.
- Education regulators should require annual institutional reporting on AI-related academic integrity patterns, enabling early detection of misuse and systematic monitoring of policy effectiveness.

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