
Undergraduate Students' Perceptions and Use of Generative AI in Assignment Writing: A Qualitative Study in Sri Lankan State Universities

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A B S T R A C T

The rapid availability of Generative Artificial Intelligence (GenAI) tools has created both learning opportunities and academic-integrity concerns in higher education. Although Sri Lankan research has begun to examine university students' acceptance and perceived usefulness of ChatGPT and other AI tools, less is known about how undergraduates experience and use GenAI specifically in assignment writing, including the ethical boundaries they perceive in practice. This qualitative study explored: (1) undergraduate students' perceptions of using GenAI for assignment writing; (2) the purposes, patterns, and circumstances in which they use these tools; and (3) the ethical concerns and perceived implications associated with such use. Semi-structured interviews were conducted with ten purposively selected undergraduates aged 21–24 years from four Sri Lankan state universities and five degree programmes. Interviews were audio-recorded with consent, transcribed, and analysed inductively using Braun and Clarke's six-phase thematic-analysis procedure. Four themes were generated: (1) GenAI as a practical support for understanding, brainstorming, grammar, and organisation; (2) ethical uncertainty and academic-integrity concerns; (3) strategic use of GenAI across assignment stages; and (4) perceived risks of over-reliance for critical thinking and originality. Participants generally valued GenAI as a supportive learning tool rather than a substitute for independent academic work. However, uncertainty about acceptable use shaped cautious and sometimes inconsistent practices. The study contributes context-sensitive qualitative evidence on how a small group of Sri Lankan undergraduates negotiate the benefits and risks of GenAI in assignment writing. It recommends assessment-specific institutional guidance, AI-literacy development, and assessment practices that support transparent and responsible GenAI use.

Keywords: Academic Integrity; Assignment Writing; Generative Artificial Intelligence; Qualitative Study; Sri Lankan State Universities; Undergraduate Students.

1. Introduction

The rapid expansion of Generative Artificial Intelligence (GenAI) tools, including ChatGPT, Google Gemini, and other writing-support applications, has reshaped how students search for information, generate ideas, organise content, revise drafts, and complete academic writing tasks. In higher education, such tools may support learning by providing explanations, brainstorming assistance, language feedback, text organisation, and summarisation. At the same time, their growing use has raised concerns about the accuracy of generated material, authorship, academic integrity, critical thinking, and independent learning (Holmes & Tuomi, 2022; UNESCO, 2023).

These opportunities and concerns are particularly important in assignment writing. GenAI can be used at different stages of the writing process, including interpreting assignment questions, clarifying difficult concepts, generating preliminary ideas, producing outlines, improving grammar, and revising draft text. Limited and critical use of these tools may support students' learning processes. However, submitting AI-generated content without appropriate verification, acknowledgement, or independent intellectual engagement may compromise academic integrity and reduce opportunities for students to develop disciplinary writing, analysis, and problem-solving skills.

Existing Sri Lankan research has started to examine students' acceptance, perceived usefulness, and broad patterns of ChatGPT and AI-tool use. Nawaz et al. (2024) surveyed 500 undergraduates from 17 Sri Lankan government universities and identified habit, performance expectancy, and perceived ease of use as important determinants of ChatGPT acceptance. Similarly, (Nawarathne et al., 2025) found that Sri Lankan university students commonly used AI tools for clarifying concepts, grammar checking, and summarisation. A Sri Lankan study of AI-tool use for academic purposes also reported that ChatGPT was the most frequently used AI tool, followed by QuillBot and Grammarly, and that students commonly used AI to obtain information, improve grammar, and summarise content. However, a substantial proportion of students also believed that AI use could diminish critical thinking.

While these studies provide valuable quantitative evidence about adoption, perceived usefulness, and broad usage patterns, they do not explain in depth how students use GenAI during assignment writing, how they negotiate ethical boundaries, or why they may simultaneously view AI as useful and academically risky. In particular, survey results alone cannot fully capture the decisions students make when using GenAI to brainstorm, structure, write, revise, or submit assignments.

This study addresses that gap through in-depth interviews with a purposively selected group of undergraduates from four Sri Lankan state universities. It contributes qualitative evidence on the practical purposes for which students use GenAI in assignment writing, the ethical uncertainties they encounter, and the perceived risks of over-reliance for critical thinking and originality. Rather than seeking statistical generalisation to all Sri Lankan undergraduates, the study offers an interpretive, context-sensitive account that can inform institutional guidance, AI-literacy initiatives, and assessment design in comparable higher-education settings.

2. Research Problem

Generative AI tools can support students with brainstorming, explanation of difficult concepts, grammar correction, summarisation, assignment organisation, and revision of written work. However, their use in assessment contexts also raises concerns regarding authorship, verification of AI-generated information, academic integrity, and the possible substitution of independent reasoning with generated text. (UNESCO, 2023) notes that the rapid emergence

of GenAI has outpaced policy and institutional preparedness in many education systems, creating a need for clear, ethical, and pedagogically appropriate guidance for learners and educators.

In Sri Lanka, emerging empirical studies indicate that university students are engaging with ChatGPT and other AI tools and often perceive them as useful for academic work. Nawaz et al. (2024) examined factors associated with ChatGPT acceptance among Sri Lankan government-university students, while (Nawarathne et al., 2025) reported student use of AI tools for concept clarification, grammar checking, and summarisation. These studies demonstrate that GenAI has become relevant to the Sri Lankan higher-education environment. However, existing work has primarily focused on technology acceptance, overall usage patterns, and perceived academic benefits.

There remains limited qualitative evidence about how undergraduate students specifically use GenAI while preparing assignments, how they distinguish acceptable assistance from inappropriate substitution of academic work, and how they perceive the influence of GenAI on their critical thinking and originality. These issues are important because institutional responses should be informed not only by whether students use GenAI, but also by how, why, and under what circumstances they use it.

Accordingly, this study sought to explore the perceptions and self-reported practices of a purposively selected group of Sri Lankan undergraduate students regarding GenAI use in assignment writing.

Research objectives

1. To explore undergraduate students' perceptions of using generative AI tools for assignment writing.
2. To examine the purposes, patterns, and circumstances in which undergraduate students use generative AI tools during assignment writing.
3. To identify students' perceived ethical concerns and perceived effects of generative AI use on critical thinking and originality.

Research questions

1. How do the participating undergraduate students perceive the use of generative AI tools in assignment writing?
2. For what purposes, in what ways, and under what circumstances do the participating undergraduate students use generative AI tools while completing assignments?
3. What ethical concerns and perceived implications for critical thinking and originality do the participants associate with such use?

3. Review of the Relevant Literature

3.1. Generative AI in Higher Education

From supporting education, writing, administration, student experience, and personalisation, AI has increasingly entered the realm of higher education. As AI continues to rapidly evolve, it opens up possibilities for supporting learners and educators in education, but also for introducing pedagogical, ethical, and governance challenges (Holmes & Tuomi, 2022). These conversations have been magnified by GenAI's ability to create human-like text, summarise content, respond to questions, provide examples and help write content. In the university space, the advent of GenAI tools can assist with various aspects of academic activities. They can assist students with understanding concepts that are not familiar, generating ideas,

planning the structure of their essay, editing grammar, editing text, and getting immediate feedback. (Imran & Almusharraf, 2023) argued that ChatGPT can act as a writing assistant in higher education for generating ideas, enhancing language skills, and advancing writing abilities. They also stressed the need of judicious application, verification and proper pedagogical guidance.

3.2. Student Perceptions and Patterns of Use

Many students have been found by research to see GenAI as being helpful, convenient and efficient for academic work. (Amyatun & Kholis, 2023) have concluded that AI tools like QuillBot can help students with different components of their writing, such as language development and text development. Students can use GenAI for brainstorming ideas, generating outlines, paraphrasing text, editing grammar, streamlining complex information, and summarising academic content.

Student usage of GenAI could differ based on subject, year level, assessment, digital literacy, confidence and institutional support. In Sri Lanka, (Nawaz et al., 2024) identified habit, performance expectancy and perceived ease of use as the factors that influenced students' willingness to use ChatGPT. In line with this, (Nawarathne et al., 2025) noted that students also employed AI tools in a practical educational context, such as clarifying concepts, grammatical corrections, and summarising. The studies indicate a link between usefulness and usability and students' interaction with GenAI. They don't, however, tell us everything about student choice of using GenAI for specific assessment situations.

3.3. Academic Integrity and Ethical Use

Many ethical issues involving academic integrity, authorship, transparency, originality, and verification of generated information are raised by the application of GenAI in the writing of assignments. The fact that ChatGPT is now available and students can create text that could be difficult to distinguish from what they have written themselves will necessitate a rethinking of the approaches to academic integrity that higher-education institutions take. (Cotton et al., 2024) Issues of ethics are the ones that come when students turn in AI-generated content as their own, when they refer to fabricated sources, or when they use a response created by AI without carefully evaluating it.

According to (Li et al., 2024), the ethics of using ChatGPT in higher education have come up in discussions of plagiarism, the possibility for biased output, privacy, transparency, inequitable access, and the possibility of diminishing the quality of education. Likewise, (Bano et al., 2023) emphasises the need of responsible use of AI, transparency, accountability and human supervision in academic and research environments. The ethical question is not about if students use GenAI, but how students use GenAI, which involves the challenge of supporting learning while being honest, accountable, and owning the content.

3.4 AI Literacy, Critical Thinking, and Institutional Guidance

AI literacy is increasingly important because students need to understand both the capabilities and limitations of GenAI tools. Responsible use requires students to evaluate AI-generated material, check facts and references, recognise hallucinated or biased outputs, and revise content through their own disciplinary understanding. (UNESCO, 2023) recommends a human-centred approach to GenAI in education that includes appropriate governance, ethical safeguards, capacity development, and protection of human agency.

There are also concerns that excessive or uncritical dependence on GenAI may limit students' opportunities to practise critical thinking, independent problem-solving, and original academic writing. The risk is particularly relevant where students use GenAI to substitute for

reading, analysis, synthesis, and argument development. Therefore, institutions require guidance that distinguishes between legitimate learning support and inappropriate substitution of assessed work.

3.5. Sri Lankan Evidence and Research Gap

Sri Lankan research on GenAI in higher education is emerging. (Nawaz et al., 2024) investigated ChatGPT acceptance among 500 undergraduates from 17 government universities using a hybrid structural-equation-modelling and artificial-neural-network approach. The study focused on determinants of student acceptance, including performance expectancy, effort expectancy, and habit. (Nawarathne et al., 2025) examined usability and academic impact of AI tools among university students in Sri Lanka and found that students commonly used GenAI for concept clarification, grammar checking, and summarising information.

These studies provide valuable evidence of adoption, perceived usefulness, and common academic uses of AI tools. However, they are primarily quantitative and do not provide detailed accounts of how students navigate the use of GenAI during assignment writing. In particular, limited qualitative evidence is available on how students distinguish between acceptable support and inappropriate use, how ethical uncertainty shapes practice, and how students perceive the effects of GenAI on their own critical thinking and originality. The present study addresses this gap by examining the perspectives and self-reported practices of selected undergraduate students from four Sri Lankan state universities.

4. Methods

4.1. Research Design

The design of this research was a qualitative descriptive design with an inductive orientation. A qualitative approach was used to gain insights into understanding, experiencing, and negotiating the use of generative AI in writing assignments and was suitable because the study sought to understand rather than estimate prevalence or test causal relationships. Semi-structured interviews allowed the researcher to explore the same issues with participants and to get a detailed description of practices, concerns and examples as described by each participant.

The design was properly designed for exploratory research questions as it allowed for rich contextual accounts of students' perception, practicality, moral concerns, and perceived impact of GenAI in academic writing. The study used an inductive strategy whereby codes and themes were not predetermined but instead emerging from the participants' accounts.

4.2. Study Context and Participants

The subjects were the undergraduate students in four state universities in Sri Lanka. The sample consisted of 10 students (21-24 years) across five degree programmes: Accounting, Business Technology, Entrepreneurship, Human Resource Management and Marketing Management. The participants were the first, second, third and fourth year of undergraduate students. There were 8 female and 2 male participants.

Students from varying universities, years and degree programmes were included to reflect as wide a spectrum of experience with using GenAI in assignment writing as possible. However, it was a small selection of a purposive sample. So the results are not meant to depict the total undergraduate students or all the universities in the state of Sri Lanka. Instead, they provide an in-depth account of the experiences and perceptions of the participating students.

4.3. Sampling and Recruitment

Purposive sampling was used to recruit information-rich participants with direct experience of using generative AI for academic work. Participants were selected based on the following criteria:

1. They were currently enrolled as undergraduate students at one of the four participating state universities.
2. They were studying in one of the selected degree programmes.
3. They had experience using at least one GenAI tool, such as ChatGPT, Google Gemini, QuillBot, Grammarly AI, or a similar application, for an assignment-related task.
4. They were willing to participate in a recorded semi-structured interview.

Participants were recruited through email invitations. Before participation, prospective students received a brief explanation of the study purpose, voluntary nature of participation, confidentiality procedures, and interview arrangements.

The sample included students from different years of study and degree programmes to obtain varied perspectives on GenAI use in assignment writing. A sample of ten participants was considered appropriate for this focused, exploratory interview study because all participants had direct experience of the phenomenon and were able to provide detailed accounts relevant to the research questions. In qualitative research, sample adequacy depends on factors such as the specificity of the study aim, the relevance of the sample, the quality of dialogue, and the analytic strategy, rather than on a fixed numerical threshold alone (Malterud et al., 2016).

4.4. Data Collection

Data were collected through semi-structured, in-depth interviews conducted between November 2025 and March 2026. The interview guide was developed from the research objectives and relevant literature on GenAI use, academic integrity, student learning, and AI literacy.

The interview guide covered the following areas:

1. Awareness of GenAI tools and previous experiences of using them.
2. Perceptions of GenAI in academic work and assignment writing.
3. Frequency and contexts of GenAI use.
4. Specific purposes for which GenAI was used during assignment completion.
5. Perceived benefits and challenges of GenAI use.
6. Academic-integrity concerns and awareness of institutional guidance.
7. Perceived effects on critical thinking, originality, creativity, and independent learning.

Interviews were conducted in both face-to-face and online mode in Sinhala and English. Each interview lasted approximately 30–50 minutes. With participants' informed consent, interviews were audio-recorded and transcribed verbatim. If interviews were conducted in Sinhala or Tamil, excerpts included in the manuscript were translated into English while preserving participants' intended meanings.

To protect anonymity, each participant was assigned a participant code from P01 to P10. Identifying personal and institutional information was removed from transcripts and reporting.

4.5 Data Analysis

The interview transcripts were analysed using (Braun & Clarke, 2006) six-phase thematic-analysis procedure. First, the researcher read the transcripts repeatedly to become familiar with the dataset. Second, meaningful segments relevant to the research questions were assigned initial codes. Third, related codes were compared and grouped to generate candidate themes. Fourth, candidate themes were reviewed against coded extracts and the complete dataset. Fifth, the themes were refined, defined, and named. Finally, representative participant quotations were selected to illustrate each theme.

Coding was undertaken manually using Microsoft Word. The analysis was primarily inductive because codes and themes were developed from participants' accounts rather than imposed through a predetermined coding framework. To improve analytic rigour, the researcher maintained a coding record and analytic notes throughout the process and repeatedly checked candidate themes against the full dataset and relevant coded extracts. This iterative review helped ensure that the final themes reflected patterns in participants' accounts rather than isolated statements.

The analysis generated four themes:

1. GenAI as a practical support for assignment writing.
2. Ethical uncertainty and academic-integrity concerns.
3. Strategic use of GenAI across assignment stages.
4. Concerns about critical thinking and originality.

4.6 Ethical Considerations

The participants were briefed about the study's purpose, voluntary participation, confidentiality and the right to withdraw without any consequences before making the interviews. Audio recording was done following informed consent.

Identifying details were stripped from transcripts and reporting and the participants were anonymised using participant codes. The data were only used for this study, and stored safely by the researchers.

5. Data Analysis and Findings

5.1 Participant Profile

Table 1: Participants' Profile

Participant	Gender	Age	Degree Specialisation	Year of Study
P01	Female	22	Marketing Management	Second year
P02	Female	24	Human Resource Management	Fourth year
P03	Female	23	Marketing Management	Third year
P04	Male	24	Accounting	Fourth year
P05	Female	21	Accounting	First year
P06	Female	22	Business Technology	Second year
P07	Female	23	Entrepreneurship	Third year
P08	Female	24	Entrepreneurship	Fourth year
P09	Female	21	Human Resource Management	First year
P10	Male	22	Business Technology	Second year

Ten undergraduate students from five different degree programmes across four universities of the state were included in the study. The participants were from various years of study from

first year to fourth year undergraduate. Demographic characteristics of participants are summarised in Table 1.

5.2. Theme 1: GenAI as a Practical Support for Assignment Writing

Most participants perceived GenAI as a useful supplementary tool during assignment preparation. They described using it to generate initial ideas, clarify unfamiliar concepts, organise assignment structures, improve grammar, and refine written expression. Participants generally valued GenAI because it helped them overcome difficulties at the beginning of an assignment and made parts of the writing process more efficient.

One fourth-year Human Resource Management student explained:

“AI tools such as ChatGPT can be useful when I get stuck. It can brainstorm ideas for me and correct my writing. It saves time and helps me improve the quality of my assignment.” (P02, fourth-year Human Resource Management student)

This quotation illustrates how GenAI was used as an initial source of support when the participant experienced difficulty generating ideas or improving writing quality.

A third-year Entrepreneurship student described using AI for reviewing written work:

“I use AI to proofread my work before submitting it. It helps me identify grammar mistakes and improve the way I present my ideas.” (P07, third-year Entrepreneurship student)

This account suggests that participants often used GenAI for specific writing-related tasks, particularly proofreading and language improvement, rather than relying solely on it to generate complete assignments.

Overall, participants perceived GenAI as useful when it functioned as a support for understanding, planning, grammar checking, and language refinement. However, this perceived usefulness was accompanied by concerns about using the tool beyond supportive purposes.

5.3 Theme 2: Ethical Uncertainty and Academic-Integrity Concerns

Although participants recognised the usefulness of GenAI, they also expressed concerns about academic integrity, plagiarism, authorship, and the boundary between acceptable assistance and inappropriate use. Participants were particularly uncertain about whether AI-generated or AI-revised content could be considered their own work.

One final-year participant stated:

“I use AI sometimes, but I worry about plagiarism when using AI-generated content. Even if I change the words, I ask myself whether it is really my own work.” (P04, fourth-year Accounting student)

This quotation demonstrates the participant’s uncertainty about authorship and the distinction between using GenAI as support and presenting AI-generated material as independently produced work.

Another participant explained:

“I think it is important to know the university rules. Sometimes I avoid using AI too much because I do not want to face problems related to academic dishonesty.” (P08, fourth-year Entrepreneurship student)

This account suggests that ethical concern was associated not only with the use of the technology itself but also with uncertainty about how institutions may interpret AI-assisted work.

Taken together, the participants' accounts indicate that ethical concern arose when GenAI was perceived to replace, rather than support, the student's own reasoning and writing. Some participants appeared particularly cautious about the possible consequences of inappropriate use in assessed academic work.

5.4 Theme 3: Strategic Use of Gen-AI across Assignment Stages

Participants described using GenAI at different stages of assignment completion. Their uses included clarifying theories, obtaining preliminary explanations, generating outlines, summarising lengthy material, improving grammar, and reviewing draft text. These accounts suggest that students used GenAI strategically depending on the requirements of the task and the difficulties they encountered.

A first-year Human Resource Management student explained:

"It is useful because it can summarise articles and simplify theories for me. I use it at the beginning when I need to understand the topic before I start writing my assignment." (P09, first-year Human Resource Management student)

This quotation shows that GenAI was used to make academic content more accessible before the participant began drafting an assignment.

A second-year Marketing Management student stated:

"Sometimes I do not know how to start an assignment. I use AI to create an outline and get ideas about how I can organise my thoughts before I begin writing." (P01, second-year Marketing Management student)

This account illustrates the role of GenAI in helping students structure their work and begin an assignment when they were unsure how to proceed.

Another participant highlighted the efficiency associated with GenAI use:

"When I need information quickly, AI can give me the main points. I do not need to go through many articles first, especially when I want to understand the key ideas in a topic." (P03, third-year Marketing Management student)

The theme indicates that participants did not describe one uniform pattern of GenAI use. Instead, they used it selectively at different stages of assignment completion, particularly for understanding, planning, organising, and revising their work.

5.5 Theme 4: Concerns about Critical Thinking and Originality

Although participants recognised the efficiency benefits of GenAI, some were concerned that excessive reliance could weaken critical thinking, creativity, independent problem-solving, and originality. Participants recognised that immediately available answers may reduce the effort needed to read, analyse, compare sources, and construct an argument independently.

One participant stated:

"AI helps me start the assignment, but sometimes I feel that I may lose my critical thinking and creativity skills if I depend on it too much." (P01, second-year Marketing Management student)

This quotation indicates that the participant recognised a possible trade-off between efficiency and independent intellectual engagement.

Another participant explained:

“AI can give an answer quickly, but if we just copy it, we do not really learn or think deeply about the topic.” (Po6, second-year Business Technology student)

This account reinforces the concern that GenAI may be beneficial when used critically but problematic when it replaces students’ own analysis.

Overall, participants’ accounts suggest that responsible GenAI use depends not only on whether the tool is used, but also on how students evaluate, verify, adapt, and integrate its outputs into their own academic work.

6. Discussion and Conclusion

6.1. Discussion

This study aimed to examine the perception and use of generative AI tools among a purposive sample of Sri Lankan undergraduates in relation to their perception and use of generative AI in writing assignments. The participants said they used GenAI to brainstorm, clarify ideas, organise ideas when writing, improve grammar, summarise information, and review written works. Concurrently, they voiced their doubt about academic integrity and their concern that too much dependence could lead to less critical thinking and originality.

The results show that participants did not perceive GenAI as a completely positive or negative. Instead, they judged its usefulness in terms of what they read for their homework, how much they knew about the subject, how much time they could give and what their ethical limits were. In its role as an auxiliary generator of ideas, a grammar corrector, a clarifier and organiser of content, GenAI was overall perceived as positive. But a concern arose of the possibility of the AI-generated text replacing their own intellectual effort.

This study's findings of positive perceptions are consistent with previous studies of Sri Lanka's quantitative results. A study by (Nawaz et al., 2024) concluded that the performance expectancy, habit, and perceived ease of use were key factors in the acceptance of ChatGPT among students from a government university in Sri Lanka. Likewise, (Nawarathne et al., 2025) found that AI applications for clarifying concepts, correcting grammar and summarising Sri Lankan university students. This study builds on this evidence by illustrating participants' descriptions of these practices during the assignment writing process and by demonstrating that ethical doubts can co-exist with perceived usefulness.

The perception of GenAI as both useful and risky can be explained by the difference between GenAI as an assistive tool and the substitution of it. The participants seemed to be at ease with the use of GenAI to get explanations, generate initial concepts, revise language, develop an outline, or draft a document. But they grew more wary when it became possible to have AI do the analysis for them, or to be able to present work without any critical thought. The distinction is important practically because guidance to institutions should not simply be about whether or not they should allow or not allow AI. It should highlight acceptable uses, prohibited uses, needs for verification and expectations of acknowledgement or disclosure.

The concern for academic dishonesty was higher with some of the final year participants. This could be due to the increased pressure placed on the final year of assessment, graduation, professional certification and the increased independent academic study. The current study, however, was of a small qualitative sample and not designed to test for differences between

academic years and should thus be interpreted tentatively. Further research is needed to explore how academic level, assessment format, and perceived risk at school relate to students' choices regarding GenAI use. The results also show that students might be drawn to GenAI when they struggle to start an assignment, to understand a complicated concept, to structure their thoughts, to handle a lot of information. Academic honesty does not necessarily mean that the student is not a student of Iraq. It does, however, highlight the need to establish assessment procedures that take cognizance of the process, reflection, sourcing, and oral and iterative engagement as well as written product.

6.2. Implications and Recommendations for Educational Leadership and Practice

The results suggest that universities need to go beyond the ban or allow model, and adopt a new perspective. This indicates that students would benefit from practical, assessment-specific examples of responsible use of GenAI in their academic endeavours.

The first step is for universities to create comprehensive and user-friendly guidelines on GenAI that clarify good practice for using the tool to enhance learning, and to clearly explain when it is inappropriate to replace classroom learning. For instance, instruction might allow brainstorming, comments on the language, elaboration of difficult concepts, and creation of practice test questions but not permit the submission of significant AI-generated or unverified content as the student's work. There should also be guidance on when and how students are allowed to reference or credit the use of GenAI.

Secondly, the educational system needs to embed AI literacy into the curriculum of universities. Students should be given the chance to practise prompt design, assessment of the quality of the output, verification of facts and references, recognising bias/falsified content, and engaging with AI-generated content and revising it with their own disciplinary expertise. This is because even if the answers given by GenAI may seem credible, they can be inaccurate, misleading, biased, and fabricated.

Thirdly, the design of assessment must ensure the learning processes are made visible. These can involve annotated drafts, reflections on AI use, verbal explanations, staged submission, locally-informed tasks, AI source-evaluation tasks, and tasks that ask students to explain their thinking. These strategies can help get students to show how they have learned and not just the final written product.

Finally, the support of students should take account of various academic stages, and assessment stakes. Students in the early years might need basic instruction regarding academic honesty, fact checking, and proper use of AI. At the end of the year, students might require greater guidance around authorship, professional practice and assessment at the highest level.

6.3 Limitations and Future Research

This study has several limitations. First, it had been a small purposive sample of ten undergraduates, thus the results ought not be statistically generalised to all Sri Lankan university students or state universities. Secondly, participants came from four state universities but were only from five degree programmes. Their experiences may not be representative of those of students enrolled in other disciplines, regions, institutional contexts, or levels to which digital technologies can be accessed.

Thirdly, the research was based on self-reported use of AI. The responses participants gave may have been under or over reported as academic honesty is a sensitive area and as the recollection may not accurately reflect all academic activities. Fourthly, the study was

conducted at a single point in time while GenAI tools, institutional policies, student awareness and assessment practices are continuously evolving.

Additional studies could include multi-university sample studies, disciplinary comparisons, longitudinal studies, and mixed method studies using both surveys and interviews, written assignments, reflective statements and institutional-policy analysis. Further research may explore the attitudes of academic staff towards responsible use of GenAI and the effects of institutional policies on students' conduct.

6.4 Conclusion

This qualitative study examined the perceptions and self-reported uses of generative AI in assignment writing among ten purposively selected undergraduate students from four Sri Lankan state universities. Participants described GenAI as useful for brainstorming, clarifying complex concepts, organising ideas, improving grammar, summarising information, and reviewing written work. However, they also expressed concern about academic integrity, authorship, over-reliance, critical thinking, and originality.

The study's contribution lies in showing how the participating students negotiated the boundary between using GenAI as learning support and using it as a substitute for independent academic work. Their accounts suggest that uncertainty about acceptable use is a central issue, not merely access to technology itself.

Universities should therefore provide assessment-specific guidance, develop students' AI-literacy and verification skills, and design assessment practices that make learners' reasoning and writing processes visible. Although the findings are based on a small purposively selected sample, they provide context-sensitive insights that can guide future research and institutional discussion on responsible GenAI use in Sri Lankan higher education.

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