



Final-Year Sri Lankan IT Undergraduates' Perspectives on the Use of AI Tools in Academic Work: A Qualitative Study

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Abstract: This focused qualitative study investigates how final year IT undergraduates in Sri Lankan universities perceive the use of artificial intelligence (AI) tools in their academic work. A sample of 14 was selected employing a mix of purposive and convenient sampling, ensuring the inclusion of different districts, genders, and diverse areas in Information and Technology. Their perspectives, captured through semi-structured, in-depth interviews were analyzed manually using thematic analysis to identify common codes and themes. The analysis revealed five key themes representing the participants' awareness of AI as an integral part in academic work. Main findings largely mirrored their positive attitude towards the use of AI as a reality in their academic practice. However, their vagueness in equating AI to plagiarism offered insights for reassessing the concept of academic integrity in the university system. Moreover, the participants' divided ideas about AI as a dependable tool, and about replacing lecturers with AI, signaled emerging views on the dynamic status of using AI in the Sri Lankan university system through the lens of final-year IT undergraduates. The study thus fills the gap in qualitative research concerning the use of AI, purely from the Sri Lankan undergraduates' perspectives against the rapidly changing global educational practices.

1. INTRODUCTION

AI plays an essential role in shaping the global educational atmosphere (Verboom et al., 2025). As 'a branch of computer science related to making computers behave like humans' (Bahadur, 2025, p.50), AI has influenced the educational sector significantly (Bahadur, 2025). Several authors have identified AI as a significant research area in education (Berens et al., 2023; Thomas et al., 2023).

Openness to AI is considered welcoming in the tertiary educational sector worldwide (Folk, D. P., Wu, C., & Heine, S. J., 2025). For instance, both in the West and in the East, academia is interested in incorporating AI practices into productive pedagogical practices (Qian, 2025; Schmidt et al., 2025). In the same vein, the Sri Lankan research community has also been interested in the combination of AI and university education (Perera et al., 2025; Aflal et al., 2024). However, in this

context, the undergraduates' perspectives on using AI in their academic tasks are not adequately examined. Students' perspectives offer valuable information for educators to understand the context and make informed decisions (Cook-Sather, 2006; Rogers, 1983). Capturing the views of specific groups of undergraduates focusing on their field of study would provide insights into how Sri Lankan undergraduates would position the role of AI in practice. Therefore, contextual analyses through in-depth interviews of such demographics are a necessity. This study, thus, aims to explore the final year IT undergraduates' perspectives through a qualitative approach.

2. AI AND TERTIARY EDUCATION

Academics have researched how AI contributes to both undergraduate and postgraduate academic tasks (Bahadur, 2025; Lin et al., 2023). For instance, Arifani et al., (2026) revealed that mainly ChatGPT and other AI tools help postgraduate students to improve their research themes and their overall proposal quality. Similarly, at the undergraduate level, Lin et al., (2023) note that AI tools as essential instruments for learners' academic performance. Fitria (2021) argues that AI applications and academic writing efficiency have been strongly linked to achieving improvement in academic writing. Furthermore, considering the students' opinion on AI, Lin et al., (2023) note that students interact with AI tools with the belief that it enhances their academic performance. However, some studies highlight the negative impact of using AI on students in their academic tasks (Selwyn, 2024; Weeks et al., 2024). Overdependence on AI tools would result in superficial learning, thereby degrading students' cognitive engagement and critical thinking skills (Selwyn & Aagaard, 2022, as cited in Bahadur, 2025). It is in this research backdrop that our study on Sri Lankan undergraduates' use of AI is situated.

Use of AI in the Sri Lankan university system has been investigated. Perera et al. (2025), for instance, examined the impact of artificial intelligence in higher education within a Sri Lankan public university. Using a mixed method as their methodological approach, their study explored the

impact of AI tools on Sri Lankan undergraduates and lecturers. However, their attention is limited to the fourth-year students enrolled in the Accountancy and Finance programs. Moreover, using a quantitative methodological approach, Nawarathne et al. (2023) have also measured Sri Lankan undergraduates' use of AI tools. They have particularly assessed the students' perceived usefulness for academic tasks and analyzed how these perceptions correlate with students' self-reported academic performance. Despite several studies relating to AI, which broadly focus on several aspects of education, such as research and academic writing, not adequate qualitative research has been conducted specifically focusing on the undergraduates in Sri Lankan state universities. Particularly, the use of AI by final-year undergraduates following the IT stream remains little explored. Thus, this study focuses mainly on this demographic through their own perspectives.

3. METHODOLOGY

A qualitative research design was used to explore the perspectives of individuals (Creswell & Poth, 2018) regarding their interaction with AI in academic tasks, and how their experiences have impacted their academic activity.

The sample consists of fourteen final year undergraduates from five Sri Lankan state universities in the field of information technology. A mix of purposive and convenience sampling was employed (Creswell & Creswell, 2018; Palinkas et al., 2015) to ensure the inclusion of different districts, genders, and diverse areas in the stream of Information Technology. Participants were approached through academic staff members and through available undergraduates' networks. We attempted to reach more participants from the Colombo district, which carries a greater concentration of universities that offer IT related degree programs.

Data were collected through semi-structured interviews, which are often conducted with one respondent at a time using mix closed- and open-ended questions, along with follow-up why or how questions (Adams, 2015). Interviews were

conducted face-to-face and online (WhatsApp and Zoom) in the medium of English. Each participant was interviewed for approximately 30 – 50 minutes. The audio-recorded interviews were transcribed using the Microsoft Word Transcribe tool.

Table 1: Demographic Distribution of Interviewees

Participant	Degree	Specialization	Gender	University Location
P1	BIT	Game and Animation	Male	Gampaha
P2	BIT	Game and Animation	Male	Gampaha
P3	BSc	Business Information Systems	Female	Colombo
P4	BSc	Business Information Systems	Male	Colombo
P5	BSc	Applied Mathematics & Computing	Female	Vavuniya
P6	BSc	Information Technology	Female	Colombo
P7	BA	Information Technology	Male	Colombo
P8	BSc	Applied Mathematics & Computing	Male	Vavuniya
P9	BSc	Management & IT	Female	Gampaha
P10	BIC T	Information & Communication Technology	Male	Matara
P11	BSc	Information Technology	Female	Anuradhapura
P12	BSc	Information Technology	Male	Colombo
P13	BSc	Information Technology	Male	Colombo
P14	BSc	Business Information Systems	Female	Colombo

The interview data were analyzed using thematic coding following the six-phase framework outlined by Clarke and Braun (2013). The transcripts were reviewed multiple times to ensure familiarity with the data. Meaningful statements related to participants' perceptions towards the use of AI in academic work were highlighted and assigned initial open codes. These codes were subsequently examined to identify recurring patterns and to develop broader themes representing participants' perspectives.

4. ETHICS STATEMENT

Participants' informed consent was gained prior to interviews. Participants were also informed that their participation during the interview was voluntary, and they could withdraw from the process at any time without any consequences. Participants' anonymity was maintained throughout the study, and no personally identifying information was disclosed in the reporting of the findings.

5. RESULTS

Following the initial coding stage, related codes were grouped into broader themes based on similarities in meaning and relevance to the research objectives. When reviewing the data collected from the fourteen interviews, five themes emerged: (1) AI as an integral part in academic work (2) AI needs verification (3) AI may replace lecturers (4) disadvantages of using AI, and (5) AI and plagiarism. Patterns were identified through comparison of coded segments across the data, allowing the researchers to interpret recurring perceptions of participants toward the use of AI in academic work.

Table 1: Emergent Themes and Relevant Codes

Theme	Relevant Codes
AI as an integral part in academic work Subthemes: • Advantages • Institutional Facilitation of AI tools • Student contributions	AI as a learning tool, concept explanation, summarizing content, academic support, lecturers' recommendation of AI
AI needs verification	Cross-checking information, erroneous information, reliability concerns
AI may replace lecturers	Technology replacing teaching roles, but need for human interaction
Disadvantages of using AI	Over-dependence, reduced problem-solving skills, reduced creativity
AI and plagiarism	AI-generated content as plagiarism, issues with directly copying, perceiving AI-generated content as non-plagiaristic

6. DISCUSSION

While the findings largely complement some common existing research (Lohitha & Sumathi, 2024), there are some aspects, such as AI replacing lecturers and AI and plagiarism, which raise awareness in academia regarding transitional views of final year IT undergraduates in terms of AI use in their academic work. While ChatGPT was the mostly used AI tool of the sample, Gemini AI was revealed as the second AI tool in common. This finding of final year Sri Lankan undergraduates' dependence on AI reflects some recent studies that record ChatGPT as a highly utilized AI tool by students (Stojanov et al., 2024).

Table 2: AI Tools Used by Participants

Participant	Frequently used AI Tools
P1	Gemini Pro, ChatGPT
P2	Gemini Pro, ChatGPT
P3	ChatGPT, DeepSeek
P4	ChatGPT, Gemini, Claude AI
P5	ChatGPT, Gemini
P6	ChatGPT, Gemini
P7	ChatGPT, Gemini Pro
P8	ChatGPT, Gemini
P9	Gemini Pro, ChatGPT
P10	ChatGPT, Gemini
P11	ChatGPT, Gemini Pro
P12	ChatGPT, DeepSeek
P13	ChatGPT, Gemini
P14	ChatGPT, Gemini Pro, DeepSeek

6.1. AI as an Integral Part in Academic Work

The theme, 'AI as an integral part in academic work', captures the participants' common belief in the use of AI as a grounded reality in their academic work. They acknowledged a lot of advantages of AI, such as summarizing content, explaining concepts, problem-solving, generating program code, supporting research, and searching academic information. Certain Observations run parallel with the findings of researchers such as Weeks et al. (2024), who argue that 'educators

must embrace these technological developments' (as cited in Bahadur, 2025, p. 51). Participants' positive attitude towards AI as an essential component in academic work was mainly supported by two aspects, institutional facilitation of using AI tools and the advantages of AI. Many participants mentioned that their lecturers recommend different AI tools and campuses provide them with free access to them. P3, a Business Information Systems major, explained: 'Some lecturers also allow us to use AI... they told like we are moving with it, so use AI, and they are also introducing some AI tools'. Similarly, P4, an Information Systems major, said: 'The teachers... they do recommend for studying purposes, for learning purposes, using AI tools'. The same was elaborated by P14, a Business Information Systems major as well. For her, 'lecturers expect us to use them [AI tools] in some activities'. These perspectives regarding lecturers' recommendations reflect the use of AI in academic work positively.

The subtheme, student contributions, emerged reflecting the perceptions of their active involvement in monitoring, verifying, and manipulating the AI tools to achieve their academic tasks effectively. P1, a Game and Animation major, for example, explained his strong belief in using AI within his control: 'If we are not fully dependent on the AI, like we [stress 'we'] continue our work, that's fine. We can't be fully dependent on the AI. Mm-hmm, imagine like a doctor, doctors need to do the prescription. So, OpenAI company production is like a prescription. Mm-hmm. We need to use our mind also when we use it.' The participant stressed the importance of having their active involvement in the process of using AI tools in the academic system. In fact, all the participants perceived their conscious interference with AI as an important factor in completing academic activities.

6.2. AI Needs Verification

'AI needs verification' emerged as an interrelated theme with the 3rd subtheme of the previously discussed 1st theme. While many students consider that AI information needs to be cross-checked for accuracy, there was one participant (P8, Applied Mathematics & Computing) who was relatively

more confident of its validity. In answering the researchers' question, 'Do you think you can rely on the information provided by AI?', the participant replied, 'Yeah, I think so'.

However, answering the cross-question, 'then, do you think that the information provided by AI, let's say, for example, ChatGPT, is 100% okay, is it trustworthy?', the participant further says, 'I can't tell 100% okay, madam, because I found for some parts, they're not giving proper answers, I mean, ChatGPT. So, I can... I can tell 97% (P8).

Erroneous references were another aspect that was mentioned by several participants. Thus, to them, AI-generated information was not reliable to use for academic tasks without cross-checking. 'Imagine we asked ChatGPT to give some references, it gives lists and lists at times they're wrong. There are many lists coming in with wrong dates and so' (P11, Information Technology major).

6.3. AI may Replace Lecturers

'AI may replace lecturers' was a controversial theme that emerged in revealing two contrasting opinions regarding AI playing the role of a human lecturer in the university context. Several participants' responses manifested openness to replacing human lecturers with AI. This was contradictory to findings of some existing studies (Chan & Tsi, 2024) which reported hesitation among students to accept AI as a replacement for human lecturers. In fact, three participants (P1, P2, P4) perceived AI as a total replacement of lecturers, especially in terms of direct lecture delivery. One participant (P1), in the context of Gaming and Animation, was very positive that AI could instruct them in their academic work. Similarly, P4 in the field of Business Information Systems reflected: 'AI can replace teachers, uh yeah lecturers uh actually uh I think AI can, yeah I think AI can replace lecturers'. These findings raise concerns about an emerging perception among undergraduates that potentially reflects an underestimation of traditional interpersonal teaching that extends beyond rapid information delivery. However, many participants stressed the importance of human teacher involvement in their learning process, which can never be compared to

AI alone. They mentioned personalized feedback sessions, mentoring, and personalized human approach as unique to human lecturers. To quote P10, an ICT Major, 'We can meet lecturers personally and discuss our problems'. Thus, despite the overwhelming influence of AI in final year IT undergraduates' academic experiences and some of their recognition of its capacity to replace human lecturers, certain findings still support interpersonal, ethical, mentoring, and context-sensitive dimensions of traditional human lecturing.

6.4. Disadvantages of Using AI

'Disadvantages of using AI' was another key theme that emerged in the analysis, providing insights into divided students' views. For example, in contrast with some findings of similar studies (Davis-Bibb, 2025) which presented time saving as an advantage of using AI, many participants in our study perceived the use of AI as a waste of time in certain scenarios. For instance, two participants attributed this to the failure of AI in providing precise answers in response to queries. Despite AI being helpful in searching for information, the participants explained how time gets wasted in reading unnecessarily lengthy details that AI tools provide. P3 reflected:

'Think we ask Chat to define a concept, it gives us so many details. So, we need to go through them all and find the answers'.

Moreover, reducing one's problem-solving skills and creativity were also considered as disadvantages of using AI. To one participant, 'all people now go for templates, right, more than thinking newly, it's the way' [P4].

While admitting the fact that use of AI is indeed a reality in the prevailing Sri Lankan university context, the findings represent participants' awareness regarding the possible disadvantages it brings in their academic engagement as well.

6.5. AI as Plagiarism

In line with some previous studies (Davis-Bibb, 2025), some participants in the sample also considered inappropriate use of AI as plagiarism, while some participants held totally contrasting and controversial views, such as use of AI cannot

be claimed as plagiarism. One participant reflected: ‘They [AI tools] have access to many articles and sometimes when we also write things, sometimes we never have plagiarism. But the tools can save our writing. So, yeah, actually, I sometimes I don't care about that [plagiarism] because it is anyway there. So, when we use AI, we can't take it as plagiarism because it is anyway everywhere’ (P1). To this participant, demarcating what is and what is not plagiarism is not practical as AI has invaded all spheres of academic work.

Similarly, we encountered some vagueness in a few students’ perspectives regarding drawing the line between AI and plagiarism. For instance, P4, a Business Information Systems major, admits that there is some ethical conflict of ownership of information: ‘actually the entire credit does not go to us’. However, in terms of plagiarism, her vagueness is still clear: ‘it's really sort of plagiarism’.

Thus, the data demonstrate some conceptual ambiguity among students regarding the boundary between AI-accessible academic work and plagiarism, illustrating the emerging perceptions of negotiating ethical standards in AI-assisted academic contexts. Overall, student perceptions of AI and plagiarism are divided. While some strictly equate AI use with plagiarism, others demonstrate a greater acceptance of AI for academic support, accepting its use at different levels within academic work. This suggests an evolving understanding of AI's ethical role in academic work.

7. CONCLUSIONS

This focused qualitative study identified some final year IT undergraduates’ perspectives regarding the use of AI tools in their academic work. The themes that emerged represented participants’ diverse perspectives, mainly reflecting their positive attitude towards the use of AI. The findings further revealed a blurred boundary between plagiarism and academic tasks assisted by AI tools, surfacing participants’ difficulty in defining plagiarism in their AI-accessible academic context. It was one prominent aspect that provided insights into reconsidering academic integrity in the university system. The other themes reflected participants’

controversial ideas about accepting AI as human lecturer replacement, perceiving AI as a tool that requires verification, and the disadvantages of using AI in academic work. Moreover, divided perceptions of replacing lecturers with AI signaled some emerging views regarding the status of AI in the Sri Lankan university system through the final year IT undergraduates’ lens. These findings contribute to the body of scholarship on AI and university education, offering the undergraduate voice regarding the use of AI in the Sri Lankan state university system. Our study brings implications for lecturers, policymakers, and researchers interested in today’s AI-accessible university context.

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