

Generative AI in Higher Education: Perceptions of Credibility, Reliability, Gratifications, and Ethical Concerns among University Students in Lahore, Pakistan

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Abstract

This study investigates the perceptions of credibility, reliability, gratifications, and ethical concerns regarding Generative AI (GenAI) among higher education students in Lahore, Pakistan. Employing the Uses and Gratifications (U&G) theory as its theoretical framework, this quantitative survey involved 500 students from various higher education institutions. The demographic profile of the participants was almost equal gender distribution (52% female, 48% male), with a significant majority (81%) that were 18-24 of age. Most participants (66%) reported a middle-income family status, and 86% were enrolled in Bachelor of Science (BS) programs. Findings indicate that students primarily utilize GenAI for academic purposes such as brainstorming, summarizing, and academic writing. A strong correlation was observed between students' motivations and the gratifications sought from GenAI use, while ethical concerns play a minor role. Findings also highlight that students don't use GenAI too much. They are in early adoption phase of this technology. Demographic factors don't play much role in students' GenAI use. Their skills (technical, critical) and the reliability perception of tool are also some important factors that influences GenAI use. This research provides valuable insights into the evolving landscape of GenAI adoption in higher education within a developing country context, highlighting both its utility and the associated challenges concerning trust and ethics. Future research should focus on educator perspectives and the impact of GenAI on student performance.

Keywords: Ethical concerns, Credibility perception, GenAI use, Reliability perception, Uses and Gratification (UGT).

1. Introduction

Growing up in 21st century, technology has become an essential part of our daily life. From the

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invention of mobile phones to the advancement in artificial intelligence, we are living in a digital era where technology has reshaped everything in our life. Healthcare, finance, transportation, education and almost every sector in the industry has evolved with the changes in technology and it has greatly impacted the lives of people. Recent development in artificial intelligence has gained a lot of attention as it is reshaping industries at a faster pace. A lot of companies are investing their resources in the development of AI and more importantly in GenAI. According to report in 2024, the funding and investment in GenAI was greater as compared to previous years. the recent investment and development in AI based technologies has seen a significant growth of 76 percent (Zhang et al., 2022). If we look at the statistics, just in 4 months after its launch, ChatGPT set the record of fastest growing consumer application in history with over 100 million active users (Trust et al., 2023). Originating as a concept in computer science in the mid-20th century, AI has rapidly evolved and has been used for many purposes. From virtual assistance to autonomous vehicles and medical diagnostics, AI systems are increasingly integrated into various aspects of everyday life, offering many opportunities for innovation and efficiency. Either it is the devices we use in our daily lives or the media or information we encounter online; a lot has changed in the last twenty years.

There are multiple sorts of AIs available online that can perform a number of tasks. Among them is Generative AI that can work through complex prompts and produce human like output. GenAI has the power to autonomously generate realistic and convincing texts, audio, video and images. It is also playing a significant role in locating and accessing information. Many AI assistants and AI powered search engines are available online that can help in searching the information online. For example, Google make use of AI to predict, refine and generate information for a user. The results are also refined making use of location, search history and preferences (Marr, 2019). Recent studies show that young adults are the primary adopters of GenAI. Among young adults those with higher level of education show greater awareness with AI (Saks, 2023; Pervaiz et al., 2025). They use GenAI tools frequently and use it academic reading (Corbin et al., 2024), idea generation, translation and literature summary (Almassaad et al., 2024). While GenAI can be time saving and good for personalized experiences, very little has been known about the actual experience and perception of young people. Their perceptions of GenAI's reliability, credibility, and ethical implications significantly influence usage patterns, yet these relationships remain largely unexplored in these researches. There are a lot of opportunities in studying how they make use of GenAI and benefit from it in educational setting, the violations they could make ethically and how they could overcome the challenges.

Academic misconduct is one of the biggest concerns associated with GenAI use among students. Plagiarism (Song, 2024), misinformation (Shalevska, 2024) and over reliance (Gujjula & Sanghera, 2023) remain the most highlighted concerns. The significance of this research extends beyond academic interest. As educational institutions are conflicted to incorporate GenAI use, policymakers consider regulatory frameworks, and technology developers refine their tools, understanding young people's perceptions and usage patterns becomes essential. This research provides timely insights for developing approaches and strategies to make students literate in some sense, develop ethical guidelines, and educational policies that acknowledge the reality of how and why young people engage with these technologies. By examining GenAI use through the lens of Uses and Gratification Theory, this study contributes to both theoretical understanding of emerging technology adoption and practical applications for education and policy in an increasingly AI- integrated world. The emphasis on perception of students helps learn beyond the passive consumption of GenAI and towards a responsible and critical use of such systems, therefore offering an integrated and holistic approach to understanding the relationship between GenAI use and the Perceptions.

1.1. Research Questions and Hypothesis

RQ1: How do perceptions of reliability, credibility, and ethical concerns shape students' engagement with GenAI?

RQ2: What is the strongest predictor of GenAI use among university students?

RQ3: What are the most performed and least performed tasks by students using GenAI?

The corresponding hypotheses are as follows:

H1: GenAI use varies with Gender.

H2: GenAI use varies with Age.

H3: GenAI use varies with Family Income.

H4: Skills will positively influence GenAI use.

H5: Motivation will positively influence GenAI use.

H6: Gratification Sought will positively influence GenAI use.

H7: Reliability Perception will positively influence GenAI use.

H8: Credibility Perception will positively influence GenAI use.

H9: Ethical Concerns will negatively influence GenAI use.

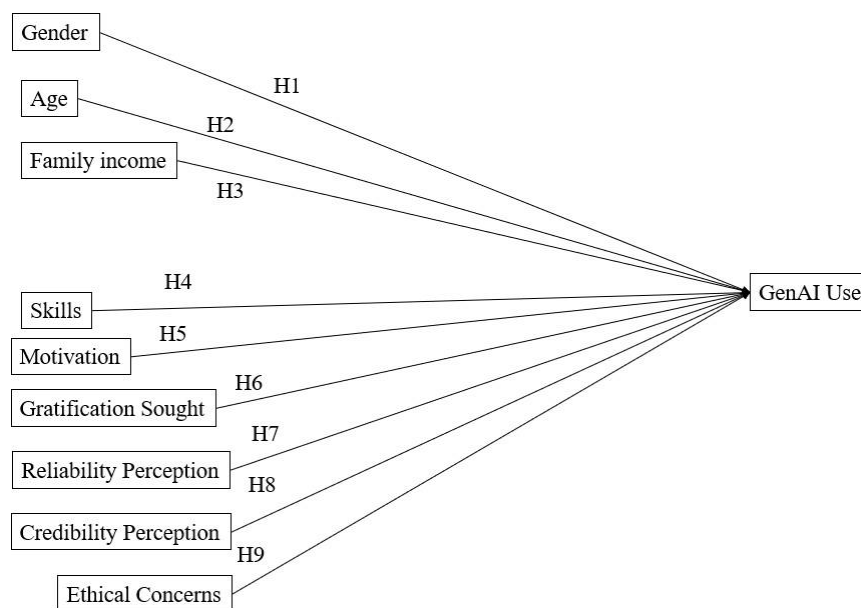


Figure 1. Research Model

2. Literature Review

2.1. Use of GenAI in Education

Due to its rapid development and usability, GenAI has been received very well in general. However, in academia it is met with certain concerns. GenAI is quick and efficient and provides

a number of opportunities in academic field. Educational institutes are interested in understanding the use of GenAI in educational practices. Bahroun et al., (2023) found out that GenAI offers opportunities to improve learning outcomes for students and improve educational practices for teachers. Students from different fields of education can have their own benefits from GenAI. Developers can make use of it in code generation. In engineering it can help with developing chatbots and text generation models and in media education it can help in translation and improving accuracy in text. GenAI like ChatGPT is very good tool for individualized learning and helps in brainstorming and writing but it has certain limitations. It produces text based on the patterns it has encountered in the data used for its training. So, it may generate text that can be incorrect and biased (Atlas, 2023).

GenAI can help them in every possible way but the main emphases should also be about educating students about the responsible use of GenAI and the ethical considerations. Trust et al., (2023) state that educators should include AI tools like ChatGPT into classwork and curriculum so that students can learn to use it and improve creativity, productivity and comprehension. According to Plata et al., (2023), GenAI should be used students as it improves productivity, but people should be guided about its use so that they can avoid academic misconduct. They should also be guided about ethical and moral use of AI technology. Malinka et al., (2023) state that with the passage of time, the efficiency of GenAI tools will improve and it will eliminate their inaccuracies. Soon their use is expected to increase, so students should be prepared to use these tools. This will allow them to learn at a faster rate and will increase effectiveness of their learning.

2.2. Demographics and GenAI

Demographics play an important role in GenAI acceptance. For instance, gender can play an important role in users' experience (Zhang et al., 2023). Age can also influence the use of GenAI. According to Alanzi et al., (2023), Gen Y and Z had more positive attitude and stronger motivation to use GenAI. Lopez Barrios & Déri, (2025) found out that demographic region and socio-economic factors do influence the adoption and use of GenAI. Perceived usefulness and time saving nature of GenAI also play an important role in GenAI adoption (Hamerman et al., 2025).

2.3. Motivation for GenAI Use

Students' engagement with GenAI is shaped by their prior experiences, expectations or specific requirements. A majority of students use GenAI tools frequently and it helps them in learning, enhancing understanding and research processing (Almassaad et al., 2024). Lund and Wang (2023) while studying about ChatGPT among university students, discovered that perceived usefulness of a tool like ChatGPT serve as the primary motivation of adoption of GenAI. Zhou, Zhang & Chan (2024) stated that the nature of GenAI to help an individual through conversation itself is very appealing. This kind of perceived social presence motivates them to use GenAI. Information seeking in limited time and meeting deadlines for assignments is also a very strong motivation to work with GenAI (Lim et al., 2023).

2.4. GenAI Awareness and Skill

The future of higher education not only rely on advancement of technology but also on the skills

and capabilities of its teachers and learners. Artificial intelligence has definitely created new opportunities and challenges and has ability to bring reforms for both teachers and students.

According to Popenici & Kerr (2017), innovation is all about transforming teaching methodologies and equip students with skills so that they can compete in global economies. Ng et al., (2021) have defined four aspects of learning about AI i.e. to know and understand working of AI, use and apply knowledge and concepts, evaluate and create using AI applications and lastly deals with ethical issues. There concept is elaborative and talks about AI literacy not just as a competency of skills and knowledge but also stresses upon the idea of learning its use from a multi-dimensional point of view. They not only include basic digital skills in their definition of AI literacy but also include making use of AI to work on creating applications.

Biagini et al., (2023) present a four-dimensional concept of AI literacy including knowledge dimension, operational dimension, critical dimension and ethical dimension. Their concept of

AI literacy is grounded with the concept of digital literacy and covers aspect of critical engagement with the content. Long & Magerko, (2020) define AI literacy as an important human competency and apart from knowing and using AI, they extend it to effectively communicate and critically evaluate technology. Keeping in mind about these concerns, it can be said that the understanding of AI is necessary to find a progressive way in this AI driven landscape so that individuals can participate in a meaningful way and use their skills for their benefit. The concept of AI literacy is quite complex and is used as a concept in multiple fields.

Khan et al., (2022) revealed that critical skills and operational skills are drivers of digital literacy. They highlighted that the ability to interpret visual, digital and audio media is as important as reading and writing skills in the 21st century. These skills are important for learning and workplace. The ability of people to use and analyse resources increase their creativity, productivity and growth. Tiernan et al., (2023) went through the available digital literacy frameworks and identified that they are not enough to cater information literacy and AI. The GenAI can generate incorrect response and the users lacking in capabilities cannot recognize and cross check the output. Wang et al., (2020) talks about the extension of Media Literacy from perspective of AI. They add computation thinking and programming skills and include human interaction abilities like the ability to critically evaluate and analyse information from online sources, understand the ethical implications of AI, and utilize technology in a responsible and effective manner.

2.5. Challenges and Concerns with the use of GenAI:

The use of GenAI presents users with a number of opportunities. However, there are a number of challenges and concerns with the use of AI. While GenAI presents valuable insights and improve learning experience, its use brings a lot of challenges and concerns. Lower use of AI can be linked to lack of trust in AI systems. Its excessive use brings about several concerns. For example, the use of GenAI in completing tasks makes it almost impossible for another person to identify the line between personal creativity of a person and the work done by AI. This raises the concern about students' authorship and authenticity of work. Students using GenAI without proper acknowledgment are liable to academic misconduct. Few other notable concerns are accuracy, credibility of information and accountability issues.

2.5.1. Credibility and Trust

Bykov & Medvedeva (2024) state that fake information is one of the main risks associated with use of AI. So, it is not feasible to see AI as a threat. In the near future more and more people will be involved in communicating and working with AI so it is better to make them capable and understand the consequences associated with it. Apart from generating fake information, another important concern with the use of AI is deepfakes. AIs can be used to generate hyper realistic images and videos of people that can be used to spread wrongful information and commit fraud (Sharma & Kaur, 2022). Shalevska (2024) consider misinformation, disinformation and information manipulation as one of the most important challenges in this era that can affect public opinion formation.

2.5.2. Reliability and Consistency

Saeidnia (2023) highlight that discrimination and bias are one of the main concerns associated with the use of AI and it reinforce existing inequalities through discriminatory practices and makes it hard to access to information. In order to understand the biasness of AI systems, one has to understand how these AI system are developed. Hao (2019) define that it can happen due to many factors. For instance, these systems are designed to address a problem or achieve a certain objective. Biases can also happen due the unavailability of representative data sets. Also, the bias can occur while selecting the attributes that might be useful to achieve the objective, but this can influence the representation of actual reality. Overcoming these biases is quite hard as the developers of AI systems don't think of problems related to biases or the social context in mind while developing these systems. Also, what is fair or discriminatory varies from community to community. Qian et al., (2024) define that biases can result from both human related issues and technical issues. In order to reduce these biases from influencing the users of AI, they propose that there should be proper guidance and governing policies. A collaboration between professionals (For example, the developers don't have proper knowledge about health-related issues so they should work with health care professionals to improve the system) can also solve certain problems. Research and literature suggest certain reliability and credibility issues. However, the perception of students in this regard is quite important. According to Lund and Wang (2023), students prefer consistent and reliable outputs as compared to credible and trustable content of AI.

2.5.3. Ethical Considerations and Academic Integrity

The emergence of Generative AI tools has sparked significant discussion about their impact on academic integrity. While these tools offer potential benefits for learning and research, they also present challenges regarding appropriate use and potential misuse. A key concern revolves around maintaining academic honesty in an environment where AI can generate text, code, and other academic content (Ardito, 2023). There is no harm in use of technology for seeking general help but over reliance on AI can be a hindrance in student's growth in learning (Gujjula & Sanghera, 2023; Rožman, Tominc, & Vrečko, 2023). Using AI to complete assignments and tasks have also created ethical concerns regarding copyright, authorship and authenticity of work.

2.6. Uses and Gratification Approach and GenAI

The Uses and Gratifications (U&G) theory is a good approach that seeks to understand why and how people actively seek out specific media outlet to satisfy particular needs. Originating in

the 1940s and further developed in the 1970s, the theory shifts the focus from "what media does to people" to "what people do with media." It emphasizes the active role of audiences in selecting and using media to fulfill their needs, rather than viewing them as passive recipients of media messages.

UGT is one of the first approaches that define audience in an active role and they use media to fulfil their gratification needs. Gratification can be in form of knowledge enhancement (Ko et al., 2013, Rubin, 1981). Before 2000s, UGT has been defined with reference to radio and TV.

After the development of social media, a lot of studies have been conducted using UGT perspective. It was used to predict behaviors of people using social media as a result of their motivations (Smock et al., 2011). The assumption of theory is that people actively seek and use media to fulfil their needs so in the context of GenAI, this approach is more than relevant. Katz, Blumler, et al., (1973) define five basic assumptions of UGT. The users of media are active, and their use of media is goal oriented. They have the choice to link their need gratification to the specific medium. There can be other forms of media involved when there is a need for satisfaction and there is a competition among media sources. The value given to certain media content can only be assessed by audience. People are aware of their interests, motives to provide accurate picture of their media use to the researcher. On the basis of these assumptions, we can make use of this approach in the context of GenAI and how it is related to students needs for gratification. Katz, Gurevitch, et al., (1973) define the five needs gratified by media. They are cognitive, affective, social, personal and tension release needs. For students, these could be improvement in personal development, skills and grades. Students might use GenAI to enhance their academic performance, build their resumes, or develop creative projects (Personal Integrative Needs).

They could access information, summarize complex topics, or assist with academic tasks (Cognitive Needs). Students could use of GenAI to relief stress of an assignment near its deadline. They could also use it in group assignments to communicate more effectively with peers or in competitive environment use to enhance skills and create a sense of belonging (Social Integrative Needs).

3. Methodology

A quantitative research design was employed, utilizing a structured survey administered to university students. The instrument measured Age, Family Income (FI) and six key variables: Skills (SKL), Motivation (MOT), Reliability Perception (RP), Credibility Perception (CP), Ethical Concerns (EC), and Gratification Sought (GS). These variables were evaluated on a 5-point Likert scales. Other than that basic information was also collected. Suggestions were also collected using Likert scale.

3.1. Sampling:

Students are taken from media studies departments across Lahore. There were two reasons for selecting media students. First, the data is known and available and a lot of effort was not required to collect data of entire population. Second, this provided results that could be generalized. The study focused on Media Studies students across 18 universities in Lahore, Pakistan, with an estimated total population of 1,500 students. To determine the required

sample size, Cochran's Formula (1963) was applied. This formula is ideal for populations where the researcher seeks a specific level of precision (e) and confidence. The sample size came out near 400. The researcher intentionally over-sampled, collecting data from more than 500 participants (representing 40% of the population). This proactive approach significantly enhances the statistical power of the study. It was expected that responses will show lack of attention or people would select 'Neutral' responses. Responses were excluded which were incomplete. A total of 100 responses were discarded during this phase, leaving a final sample of 500 students.

3.2. Analysis

The collected data (n=500) was analyzed using SPSS. Descriptive statistics, including frequencies and means, were used to profile the demographic characteristics of the participants. To test the research hypotheses, Pearson's Correlation and independent sample t-test was employed to examine the relationships.

4. Results/Analysis

Table 1

Cronbach Alpha of Variables

Construct	Items	Cronbach's Alpha (α)	Result
Gen AI Use	8	0.733	Good
Reliability Perception	10	0.866	Good
Ethical Concerns	10	0.882	Good
Credibility Perception	7	0.855	Good
Motivation to Use GenAI	8	0.894	Good
Gratification Sought	9	0.93	Excellent
Skills	18	0.934	Excellent

To ensure the internal consistency of the research instrument, a reliability analysis was conducted using Cronbach's Alpha. As shown in the table, all variables exceeded the widely accepted threshold of 0.70, indicating that the scales are reliable. These results suggest that the items within each scale are measuring their respective constructs consistently and can be used for further statistical analysis.

The demographic profile of the 500 participants reveals a fairly balanced gender distribution, with 52% (n=259) female and 48% (n=241) male respondents. The sample is predominantly composed of young adults, as 81% fall within the 18–24 age bracket.

Table 2

Demographics (N=500)

Characteristics	Category	Frequency	Percentage
Gender	Male	241	48%
	Female	259	52%
Age	18-24	405	81%

	25-34	77	15%
	35-44	16	3%
	45-51	2	0%
Family Income	40,000 – 100,000	137	27%
	100,001 – 450,000	332	66%
	450,001 –1,000,000	32	6%
Institute/University	Public	382	76%
	Private	118	24%
Level of Study	BS	430	86%
	M. Phil	50	10%
	PhD	20	4%

In terms of level of study, the vast majority are undergraduate students, with 86% enrolled in BS programs, while MPhil and PhD students represent a smaller fraction of the sample at 10% and 4% respectively.

Furthermore, a significant portion of the respondents (76%) are from public sector institutes, and a majority (66%) report a household income in the 100,001 – 450,000 range suggesting the most data collected from middle income group. The group is heavily skewed toward a younger demographic, with 8 out of 10 participants being under the age of 25. This has been shown below in figure 2.

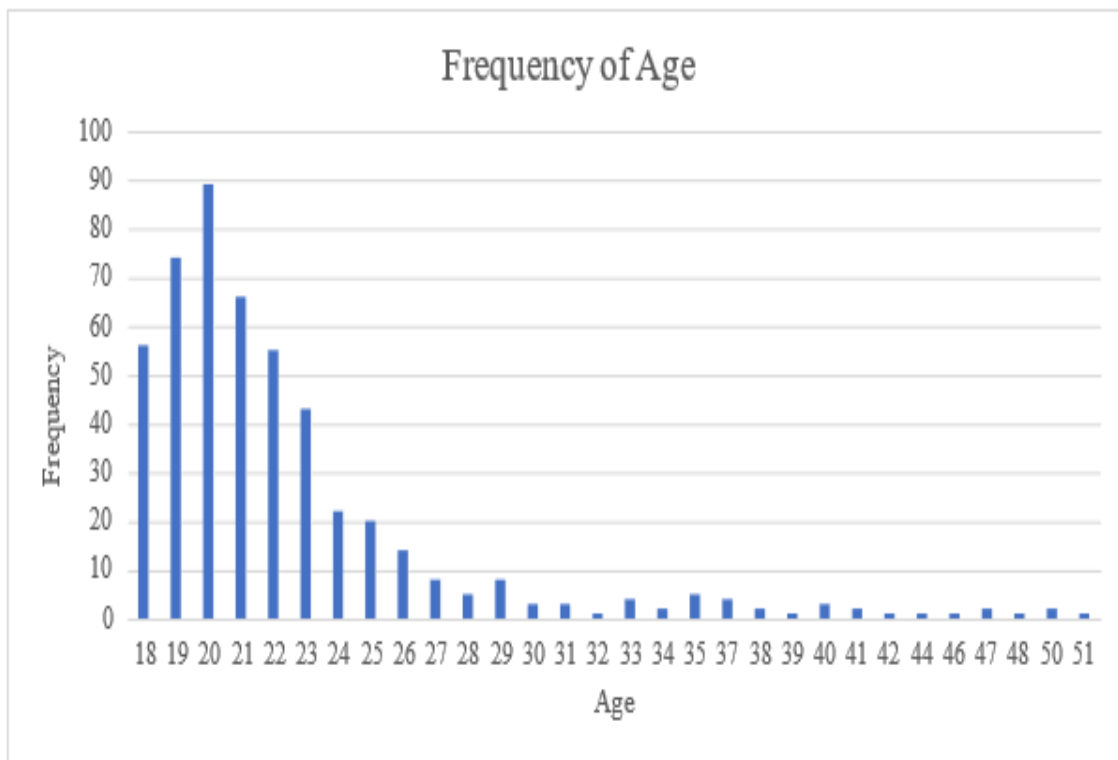


Figure 2. Frequency of Age

Table 3

Users according to Age Group

Age Group	Avg. Frequency	Status
18-20	2.29	High users
21-23	2.33	Most Frequent Users
24-26	2.21	Moderate Users
27+	2.09	Least Frequent Users

As shown in table 3, younger people from age 19 to 23 are frequent users of GenAI. Most users use GenAI for brainstorming. GenAI is mostly used for Academic writing and summarizing.

Whereas GenAI is least used for Professional writing, Data Analysis and Calculation and Coding assistance by students (RQ 3). Table 4 and Figure explain the usage of GenAI further.

Table 4

GenAI Use Frequency and Percentage

Gen AI Use	Regular GenAI Usage Frequency out of 500	Percentage
Academic writing	274	55%
Professional writing	145	29%
Creative writing	131	26%
Proofreading	211	42%
Brainstorming	289	58%
Translating	186	37%
Summarizing	271	54%
Data Analysis and Calculation	147	29%
Study assistance	214	43%
Personal assistance	202	40%
Research assistance	260	52%
Coding assistance	162	32%

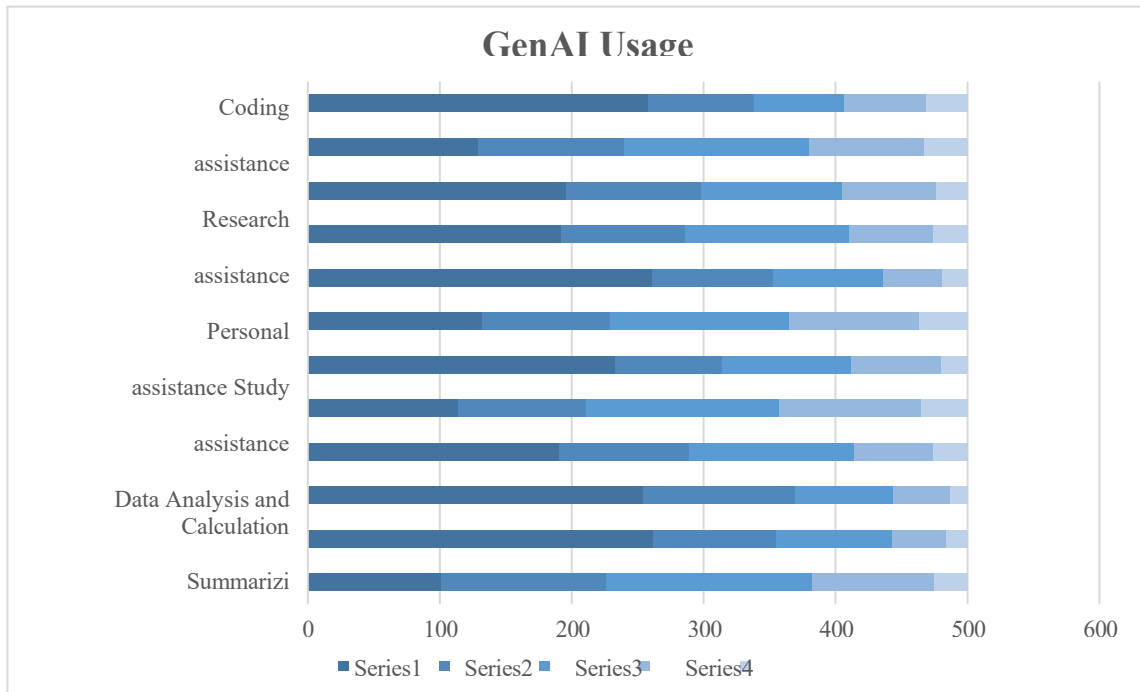


Figure 3. GenAI Usage

Table 5

Comparing Means and Standard Deviation of Generative AI Usage according to Gender

Gender	Mean	Std. Dev
Male	2.83	0.504
Female	2.77	0.521

The descriptive analysis of GenAI usage revealed that both male ($M=2.83$, $SD=0.50$) and female ($M=2.77$, $SD=0.52$) respondents report a similar, moderate-to-low frequency of use. The low standard deviation across both groups indicates a high level of consensus among participants.

These findings suggest that GenAI has not yet reached 'saturated' or 'heavy' usage within the students, regardless of gender. A mean of ~ 2.8 suggests that students are still in the early adoption phase. They use it, when necessary (perhaps for specific assignments), but it hasn't become a constant, integrated part of their lifestyle yet. To further test H1, independent sample t test was conducted. The p-value of 0.80 was much greater than the standard alpha level of 0.05.

This indicates that there is no statistically significant difference in the mean GenAI usage between males and females in the dataset. The usage levels are identical across both groups.

Table 6

Correlation between Income, Age and other Variables

	1	2	3	4	5	6	7	8
1 Family Income								
2 Age	0.029							
3 GenAI Use	0.005	-0.011						
4 Skills	-0.016	-0.036	.609**					
5 Motivation to use GenAI	-0.009	-0.064	.710**	.705**				
6 Reliability Perception	-0.016	-0.029	.601**	.514**	.644**			
7 Credibility Perception	.092*	.962**	.167**	0.079	.090*	.152**		
8 Ethical Concerns	0.054	.149**	-.090*	-.108*	-.153**	-0.062	.125**	
9 Gratification Sought	-0.030	-0.039	.676**	.722**	.860**	.599**	.105*	-.171**

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

A very strong correlation ($r = 0.962$, $p < 0.01$) exists between Age and Perception of Credibility. This suggests that older participants find the GenAI significantly more credible than younger participants. Skills and Motivation have a strong positive correlation ($r = 0.705$, $p < 0.01$) with each other. people who are more skilled, their motivation to use GenAI increases significantly.

Skills also have a positive correlation with perception of reliability ($r = 0.514$, $p < 0.01$). This suggests that as users gain experience and they learn how to get consistent results from the AI, they have better perception of its reliability. However, with skill there is no relationship of perception of credibility. It suggests that even if someone is really good in using GenAI, it doesn't necessarily mean they "trust" it completely. Skills have a strong positive relationship with Gratification Sought ($r = 0.722$, $p < 0.01$). Skilled users are using GenAI and gaining more gratification from it. They aren't just randomly using GenAI; they are using it effectively to meet specific needs and achieve goals. A weak negative relation exists between Skills and Ethics ($r = -0.108$, $p < 0.05$). The negative sign implies that skilled users may be slightly less worried about ethical issues, as they feel more confident in their ability to navigate the risks associated with GenAI.

Motivation has a strong relation with Gratification Sought ($r = 0.860$, $p < 0.01$). this means that students are motivated to use GenAI because of its efficiency, better access and personalized experience to achieve academic growth and well-being. A strong positive relation between Motivation and Reliability Perception ($r = -0.644$, $p < 0.01$) suggests that there is a robust connection between how much someone wants to use GenAI and how consistent they find it.

When a tool seems reliable to students every time, it reinforces motivation to keep coming back

to it. Consistency builds the "habit" of use. A weak negative relation between Motivation and Ethical Concerns suggests that when students are highly motivated to use a convenient tool, they may subconsciously worry less about the ethical risks associated with it. Hence, results suggest that the respondents of this study are motivated to use GenAI because it is useful and consistent, even if they have any ethical doubts or don't fully trust or find GenAI credible. The relationship between Motivation and Credibility Perception is very weak ($r = 0.090$, $p < 0.05$). It means that a person's motivation to use GenAI has almost nothing to do with whether they find the information "truthful" or "credible." People might be highly motivated to use AI for brainstorming, research assistance, academic writing or summarizing work even if they don't find it "credible" for factual news or information.

A Pearson correlation coefficient ($r = 0.092$) indicates a very weak positive linear relationship between income and the perception of credibility. Ethical concerns do have a significant relationship with age. The value ($r = 0.149$, $p < 0.01$) shows a very weak relationship and suggests that age plays a minimal role in shaping ethical perceptions. A weak positive relation between Reliability and Credibility Perception ($r = 0.152$, $p < 0.01$) suggests that users may see GenAI as a reliable tool that can still produce biased information. There is no statistical relationship between how reliable GenAI is and how much a user worries about ethics. There is a significant, direct relationship between Reliability Perception and Gratification Sought ($r = 0.599$, $p < 0.01$). This means if the GenAI performs reliably and gives a good result almost every time, the student feels their needs are being met.

A weak but statistically significant relationship exists between Credibility and Ethical Concerns ($r = 0.125$, $p < 0.01$). As users find the GenAI more credible, their ethical concerns increase slightly. This might suggest that the more "Credible or Trustworthy" the GenAI seems, the more the user starts to worry about the ethical implications of it. But the relationship is so weak that one cannot say that this could be true for a wider number of users. Credibility and Gratification Sought have negligible positive relationship ($r = 0.105$, $p < 0.05$). It implies that users do not need to believe that GenAI is "Credible" to find it useful. They might seek gratification from GenAI for creative tasks, formatting, or assistance where credibility isn't the primary goal. Users who have higher ethical concerns generally have lower gratification from using GenAI. A value of 0.171 is considered weak but statistically significant negative relationship. When looking at the correlation of GenAI use with all other variables, this is where this research gets very interesting. The factors that are often talked about in the news (Trust, credibility and Ethics) actually have the least impact on whether students actually use GenAI. The weak but significant correlation of GenAI use with Credibility Perception ($r = 0.167$, $p < 0.01$) and Ethical Concerns ($r = -0.090$, $p < 0.05$) suggests that for students, factual accuracy and ethical concerns matter but are not as important as other factors (RQ 1).

Motivation and Use of GenAI have a strong correlation. ($r = 0.710$, $p < 0.01$). It is the strongest predictor of GenAI use (RQ 2). It means that if someone is internally determined to use GenAI, they will use it frequently. GenAI use and Gratification Sought also have a very strong correlation ($r = 0.676$, $p < 0.01$). Students are using GenAI because they are getting something out of it (having knowledge access, learning and brainstorming and self-actualization). Skills and GenAI use also have a very strong correlation ($r = 0.609$, $p < 0.01$). this means capability is also a major factor of GenAI use. This also means that the better someone is at using technology

and GenAI, the more they actually use it. In short usage is primarily functional. If a person has the skill and sees the benefit, they use the tool. Users value a tool that doesn't crash and provides consistent results. The strong positive relationship between Reliability Perception and GenAI use ($r = 0.601$, $p < 0.01$) suggest and establish a connection that if GenAI is not reliable then its usage will drop significantly. In short, students are not using GenAI because they think it's a good or credible source of information. Instead, they are using it because they are skilled enough to make it work for them, and they are highly motivated by the gratification they receive.

When asked about if the university or teacher has any policy regarding GenAI use 54% responded by saying they don't know about it. 27% responded by saying No and 19% said yes.

Table 7

Regulations Category	Agree Percentage
International/ Company's regulation	44
Government regulation	38
University/teacher ethical guidelines	54
Users Responsibility	47

In overall data analysis of this question regarding regulations of GenAI, University/teacher ethical guidelines received the highest support, with 54% of respondents either "Agreeing" or "Strongly Agreeing" (Mean = 3.51). Government regulation had the highest "Neutral" response rate (38.2%) and the lowest overall mean score (Mean = 3.17), suggesting more uncertainty or divided opinions on state-level intervention compared to institutional guidelines.

So, concluding our findings age, gender and family income don't influence GenAI use (H1 – H3 rejected). Skills, motivation, gratification sought from GenAI use, reliability perception, credibility perception and ethical concerns influence GenAI use (H4 – H9 accepted).

5. Discussion

The results of this study provide significant insights into the factors influencing the adoption of Generative AI (GenAI). The strong positive correlations between GenAI Use, Motivation ($r = 0.71$), and Skill ($r = 0.609$) suggest that students' needs and motivations and technical, critical and digital skills are primary determinants of GenAI adoption. This aligns with the Unified Theory of Acceptance and Use of Technology (UTAUT), which speculates that performance expectancy and effort expectancy (often tied to skill) are critical predictors of behavioral intention to use new technology (Venkatesh et al., 2003).

Furthermore, the moderate positive correlation between GenAI Use and Reliability ($r = 0.601$) indicates that the trust in the GenAI's output's consistency is also a significant predictor of usage. Interestingly, Ethical Concerns showed a weak negative correlation with GenAI Use ($r = -0.09$) and Motivation ($r = -0.153$). This suggests that while ethical considerations (such as bias, privacy, and authorship) are present, they currently play a secondary role in GenAI use. This finding mirrors recent research suggesting that "perceived usefulness" and "social influence"

often overrides "perceived risk" or ethical concerns in the early stages of technology adoption (Zhang et al., 2025). This also means social integrative needs do matter.

6. Conclusion

In conclusion, this study highlights that Motivation is one of the strongest predictors of GenAI use. Skill, and Reliability Perception are also most influential factors positively correlating with the adoption and use of Generative AI. These variables likely act as mediators, bridging the gap of individual's background or socio-economic status. While Ethical Concerns are statistically significant, their impact on usage is relatively small, negative correlation indicating that users may be prioritizing the functional benefits of GenAI over its potential moral or social implications. For organizations and educators, these findings suggest that to increase GenAI adoption, the focus should be on enhancing user Skill and demonstrating the Reliability of these tools. Addressing Ethical Concerns remains important for responsible use, but it may not be the primary barrier to initial adoption.

7. Future Research Directions

While this research has explored the uses and correlations of GenAI adoption among users, the next critical step is to analyze the phenomenon from the perspective of educators and teachers.

Understanding how much students actually make use of GenAI in their assignments and the resulting impact on class performance—both positive and negative—is essential. Insights from educators will provide a more holistic view of the educational impact, helping to identify whether GenAI enhances learning outcomes or potentially compromises academic integrity.

Furthermore, the detection of GenAI content remains a significant challenge for academic institutions. Although there are software that can detect the use of AI in someone else's work, they are not very effective (Perkins et al., 2024). People who are familiar with the use of AI deliberately try to avoid getting caught for duplicity and plagiarism (Sadasivan et al., 2025). Future studies should incorporate suggestions from educators to develop better frameworks for identifying AI-generated work and establishing guidelines for its ethical and productive use in the classroom. Traditional assessment methods which include detection of plagiarism through software need to be re-evaluated in light of GenAI. Alternative assessment strategies should be considered, such as focusing on problem-solving, critical thinking assignments, and creative application of knowledge, can help eliminate the risks of GenAI misuse (Francis et al., 2025). Ongoing dialogue and collaboration among students, faculty, and administrators are crucial to make use of GenAI in education and maintain academic integrity.

By proactively addressing these challenges faced by using GenAI and developing a culture of responsible AI use, educational institutions can gain a lot from GenAI while upholding the principles of academic integrity (Chan, 2023).

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