TPM Vol. 32, No. S2, 2025
ISSN: 1972-6325
https://www.tpmap.org/

PSYCHOLOGY BEHIND CHATGPT ENGAGEMENT: A TAM AND USES & GRATIFICATIONS APPROACH IN PUBLIC AND PRIVATE PAKISTANI UNIVERSITIES

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Abstract:
This study investigates how students' motivations and acceptance of ChatGPT shape their engagement with digital media and academic practices, using the Technology Acceptance Model (TAM) and Uses and Gratifications (U&G) theory as guiding frameworks. Focusing on a comparative context, the research explores differences and similarities in adoption patterns across public and private higher education institutions. Data were collected through qualitative interviews with 32 undergraduate students 16 from the School of Media and Communication Studies (SMCS), University of Management and Technology (UMT), Lahore (private sector) and 16 from the School of Communication Studies, University of the Punjab (public sector) to capture their perceptions, motivations, and behavioral intentions regarding ChatGPT use.
Findings reveal that students' acceptance of ChatGPT is significantly influenced by perceived usefulness, ease of use, and interactivity, which enhance their learning efficiency, writing quality, and research productivity. From a U&G perspective, students engage with ChatGPT to fulfill informational, Psychological, academic, and creative needs, employing it for idea generation, content creation, and enhanced participation in digital communication environments.
Comparative insights indicate that while both groups share similar motivations, variations exist in adoption intensity, usage purposes, and dependency levels. Despite concerns about over-reliance, misinformation, and ethical challenges, the study emphasizes the importance of AI literacy initiatives and institutional support to ensure meaningful and responsible integration. Overall, the findings highlight how motivations intersect with adoption processes, demonstrating ChatGPT's potential to enhance learning satisfaction, digital competencies, and media engagement across diverse higher education contexts.
Keywords: ChatGPT, Technology Acceptance Model, Uses and Gratifications Theory, Motivation, AI Adoption, Digital Media Engagement, Public and Private Universities, Pakistani Students.

1. INTRODUCTION

The endeavour of Sustainable Development Goal 4 touches on the international perspective of inclusive, equitable and quality education that helps in generating lifelong learning. Developmental Digital competence has turned out to be a needy challenge in this ever-evolving setting particularly when educational practice is being reconstruction using artificial intelligence (AI) (Li et al., 2025). Higher education institutions are no longer obligated to deliver knowledge on their own; the demanding requirements of critical thinking and evaluative content-generation skills are all that is demanded of higher institutions in a continuously growing digital ecosystem (Huzooree etal., 2025; Waheed et al.,2022).
ChatGPT has rapidly become one of the most popular recently developed AI tools because it is a flexible platform that provides support to academic writing, research, enables imagination, and helps to improve communication (Afzal et al., 2025). Its increased application in academic institutions is the indicator of wider changes in the learning process and digital interactions, in which AI is no longer a supplementary one, but rather a catalyst to encourage new pedagogical practices (Marengo and Pange, 2024). Nevertheless, limited research has been done as yet to establish the factors that contribute towards student readiness to adopt and use such technologies and to

determine the ways in which their motivation, perceptions and institutional settings relate to the engagement patterns.

The current research applies this gap by synthesizing two powerful data acceptance frameworks in sciences; the Technology Acceptance Model (TAM) and the Uses and Gratifications (U&G) theory. Although TAM appears to pay more attention to the effect of perceived usefulness and easiness of use on technology adoption, U&G emphasizes psychological needs, motivations, gratifications that push the user to turn into the digital platform (Camilleri and Falzon, 2021). A combination of the two frameworks gives a more detailed picture of the interaction of motivation and adoption when using ChatGPT by students.

Significance of the Study: The research study focuses on the fact that there is an increasing integration of artificial intelligence in the field of higher education whereby AI technologies are transforming the learning and creativity and communicative processes of students. Even though the existing scholarship is mostly focused on the technical and pedagogical value of AI tools, they often omit the underlying motivation and situational dynamics that support student interaction.

In addition, very little has been done to examine how institutional contexts, namely, the differences between public and private universities, affect perceptions, behaviors, and dependence on AI technologies.

The current research project fills these theoretical and empirical gaps with positive contribution. It uses TAM Model and U&G approach in comparative design, which clarifies the use of motivational profile and acceptance paths towards the use of ChatGPT within the academic and online environments. The subsequent knowledge offers practices to educators and policy makers with evidence-based information on how to develop specific AI integration plans and nurture AI literacy that is sensitive to needs of different institutional contexts (Azizah and Nugraha, 2025; Waheed et al.,2025).

Scope of the Study: The research investigates how undergraduate students from two contrasting institutional contexts a private university (SMCS, UMT, Lahore) and a public university (SCS, PU) perceive, adopt, and utilize ChatGPT. With information usefulness, ease of use, behavioral intention, informational needs, cognitive gratifications, and creative engagement, the research is conducted using a, qualitative approach with the utilization of in-depth interviews with 32 respondents (16 per institution).

The paper does not start with generalisations but provides a little bit more detailed material about both the behavioural and institutional predictors of the interest the generation of ChatGPT. They can be utilized in further research, where the other criteria may be taken into account or a larger audience or even a longitudinal investigation of the impact of AI on education (Yu et al., 2025).

Problem Statement: Since the use of the AI tools like ChatGPT is expanding into the academic sphere, the factors that motivate one to use the tools have not been properly established (Jo, 2025). The interplay of psychological propensity and a technological determinant or influence of institutional situations is typically overlooked in the literature. In addition to this, TAM by itself cannot be used to explain the motivation and cognitive fulfilments that influence maintained participation by students. By combining TAM and U&G, the analysis perspective is richer though insufficiently explored in the situation of the higher education industry of Pakistan.

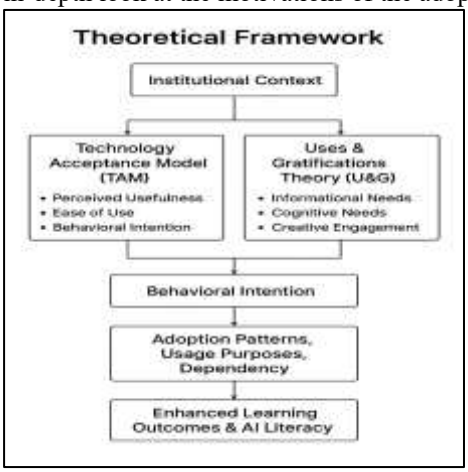
This paper fills these gaps in the research by identifying the ways students in a public and a private university interact with ChatGPT and how motivation, gratification, and technology acceptance interact to create behaviors and perceptions.

Table1: Research gap:

No.	Research Gap	What Previous Studies Show	How This Study Fills It
1	**Limited integration of TAM & U&G in Pakistan**	Most studies use TAM alone (e.g., Iqbal et al., 2024; Jo, 2025), focusing on perceived usefulness and ease of use.	Few combine TAM with motivational gratifications. This study links psychological drivers with technology acceptance.
2	**Public vs. private university comparison is rare**	Existing research (e.g., Lee et al., 2024) samples students without distinguishing institutional types.	Institutional context's influence on motivation and adoption remains unexplored. This study compares both settings.
3	**Psychological motivations underexplored**	Most research emphasizes functional factors (PU, PEOU) (e.g., Yu et al., 2025).	Emotional, cognitive, and social gratifications guiding sustained use are largely ignored.
4	**Focus on intention, not sustained engagement**	Many studies examine intention to use (e.g., Chauhan & Yeoh, 2024) rather than actual usage patterns.	Little is known about how motivations and gratifications affect continued engagement.
5	**Institutional policies and context overlooked**	Ethical and policy concerns are noted (e.g., Jo, 2025) but not integrated into adoption models.	How institutional support, guidelines, and infrastructure shape adoption is still unclear.

Theoretical Framework: Technology Acceptance Model is based on the expected theoretical framework of how people base their decisions on adoptions due to the perceived usefulness and ease of use as the primary predictors (Nilashi and Abumalloh, 2025). The theory that will complete this view is the Uses and Gratifications theory; it

expounds on the psychological needs that motivate such an engagement including information seeking needs, cognitive sophistication needs as well as creative needs (Katz et al., 1973). Together, these frameworks would constitute an in-depth look at the motivations of the adoption and further use of ChatGPT in learning.



Research Objectives: This study aims at examining how student motivation and their use of technology influences how they comprehend their use of ChatGPT in college education using the technology acceptance model (TAM) and the theory of uses and gratifications (U&G). Specifically, it focuses on:

- The analysis of the effect of perceived usefulness, ease of use, and behavioural intention in relation to the acceptance and adoption of ChatGPT (TAM).
- Researching the motivating forces of informational, cognitive, and creative gratifications in encouraging students to use ChatGPT (U&G).
- Comparison of the differences in adoption and use purposes and levels of dependency among the students studying in the government and privately financed universities.
- Knowledge about the benefits of ChatGPT on learning effectiveness, academic achievement, innovation, and online communication.
- Identifying challenges such as over-reliance, misinformation, and ethical issues, and recommending strategies for its responsible and effective use in higher education.

2. MATERIALS AND METHODS

Research Design: The study took a qualitative phenomenological approach to engage undergraduate students on their experiences and perceptions on interaction with ChatGPT. Phenomenology aids in knowing what people encounter in their lives and gives interpretation without imposing ideas about phenomena (Choliq, 2025). Semi-structured interviews made it possible for respondents to express their experiences without being constrained, whilst the researcher retained flexibility to examine salient themes in relation to the study aim (Hossain et al., 2024). This research is guided by the principles of the interpretivist paradigm, where the objective is to comprehend students' subjective experiences and what meaning they assign to ChatGPT use (Gebre Hiwot & Namuduri, 2024). The data analysis is inductive as it allows for themes to emerge from participants and their answers instead of testing or verifying concepts or theories (Naeem et al, 2023).

Demographics of Participants: Qualitative research minimizes generalization and abstraction amongst its respondents; therefore, the context behind the data is important (Lim, 2025). In this study, we investigated undergraduate students' trust, readiness and attitudes towards ChatGPT, as well as how demographic factors (age, gender and study years) potentially affect students' familiarity and beliefs related to AI tools (Sebbah, 2025).

The purposive sampling model was used to find the subjects of the research. There were 32 undergraduate students in Media and Communication majors that participated. Among them, 16 respondents were registered in a state university (University of the Punjab) and 16 in a privately established one (University of Management and Technology). The subjects were all aged 18 to 24 and were a fair sample both gender-wise and otherwise. This nonhomogeneous sample provided valuable outcomes in the nature of experience, perceptions, and adoption behavior on ChatGPT amongst different institutional settings through students.

Table 2: Description of Participants

University Type	University Name	No. of Participants	Gender (F/M)
Public	University of the Punjab	16	9F / 7M
Private	University of Management and Technology	16	10F / 6M
Total	—	**32**	**19F / 13M**

We identified participants by using academic and social networks, then screened out those who used ChatGPT, and finally undertook semi-structured interviews through in-person or online sessions.

Table 3: Demographic Details of Participants

Participant Code	Gender	University Type	Primary Use of ChatGPT
P1	Female	Public	Academic writing, assignment support
P2	Male	Public	Research and information retrieval
P3	Female	Public	Creative content generation
P4	Male	Public	Drafting reports and summaries
P5	Female	Public	Idea generation and brainstorming
P6	Male	Public	Language support and editing
P7	Female	Public	Digital communication enhancement
P8	Male	Public	Research queries
P9	Female	Public	Academic writing and formatting
P10	Male	Public	Assignment assistance
P11	Female	Public	Concept explanation
P12	Male	Public	Drafting and summarizing content
P13	Female	Public	Brainstorming and content support
P14	Male	Public	Research and writing
P15	Female	Public	Creative writing and ideation
P16	Male	Public	Information search
P17	Female	Private	Assignment drafting and paraphrasing
P18	Male	Private	Idea generation and topic exploration
P19	Female	Private	Research queries and academic support
P20	Male	Private	Essay and report structuring
P21	Female	Private	Brainstorming and summarizing
P22	Male	Private	Academic assistance and content writing
P23	Female	Private	Digital communication and messaging
P24	Male	Private	Writing and content enhancement
P25	Female	Private	Concept explanation and research
P26	Male	Private	Assignment support and content review
P27	Female	Private	Content creation and idea refinement
P28	Male	Private	Report writing and editing
P29	Female	Private	Brainstorming and language support
P30	Male	Private	Academic writing and information use
P31	Female	Private	Research and summarizing
P32	Male	Private	Idea development and editing

Thematic analysis is further improved by being able to see trends across demographic groups, which helps with understanding the use of AI tools in the context of digital engagement (Braun & Clarke, 2021).

Research Instruments: Qualitative studies typically are those where the investigator is the primary instrument of data collection (Turner et al., 2022) and where the use of tools such as interview protocols and observation guides are used to aid in collection of data. Interviews were semi-structured, either in-person, or online depending on the preference; and guided by a guide depending on the research objectives (De Paoli, 2024).

Data Collection Process: A semi structured interview protocol was used to gather data in the study and it was well consistent with the research objectives (Lichtman, 2023). A detailed briefing engulfed the participants on the study and informed consent was taken just before any interview to achieve the privacy and also achieve the respondents giving candid answers. The tricks of rapport -building methods (Schmid et al., 2024) were used to enable a stimulating interviewing setting. The interviews were held either over the Internet, at the participants' choice, or in person, that is, within 45 and 60 minutes. An open interview guide was adopted, and the discussion could be based on the point of view of the participants. All interviews were recorded on audio and later verbatim transcribed with the consent of the participants.

To achieve analytic rigor, the transcripts were merged into one file (Naz et al., 2022). Member checking, participant-led discussions and lengthy exposure to data were some of the ways that credibility was achieved. A great deal of reliability was ensured by a well-documented audit trail containing all research procedures. Contextual and thick descriptions covered the transferability of the findings, and the content validity was determined through the validation of the instruments provided by experts and reflexive analysis of possible bias of the findings, upholding the authenticity of the results and methodological validity of the findings (Kriegel et al., 2025).

Data Analysis: Based on in-depth interviews and employing a phenomenological framework, this study explored the digital information literacy experience of undergraduate students who used ChatGPT, emphasising their perception, trust, and readiness to use the tool for digital information literacy. The researcher applied phenomenological reduction to put aside biases as not to influence the reality of participants lived experience to maintain rigor. The analysis of data was performed complying with the six-phase strategy of thematic analysis suggested by Braun and Clarke (2021) as a technique to determine possible trends in qualitative data (Méndez-Alarcón et al., 2024).

Table 4: Mapping RQs with their Themes and corresponding Theories

Research Question (RQ)	Themes	Theory
RQ1: How do perceived usefulness, ease of use, and behavioral intention influence students' adoption of ChatGPT?	• Perceived Usefulness- • Ease of Use • Behavioral Intention	**TAM**
RQ2: What motivations and gratifications (informational, Psychological, creative) drive students' engagement with ChatGPT?	• Informational Gratifications • Psychological Needs • Creative Engagement	**U&G**
RQ3: How do adoption patterns and usage differ between public and private university students?	• Adoption Patterns • Institutional Influence	**TAM & U&G**
RQ4: How does ChatGPT affect students' learning efficiency, productivity, creativity, and digital communication?	• Educational Impact • Skill Development • Learning Outcomes	**TAM & U&G**
RQ5: What challenges and ethical concerns arise from ChatGPT use, and how can they be addressed?	• Ethical Concerns • Responsible Use- • Over-Reliance Risks	**TAM & U&G**

3. FINDINGS AND ANALYSIS

In the following section, the author outlines the significant findings of the qualitative interview with thirty-two undergraduate students at Pakistani public and private universities, to understand their experience with ChatGPT as a novel AI-driven learning resource. Two crucial theoretical perspectives provide a direction to the analysis, which are TAM Model and U&G Theory.

Results revealed that participants perceive ChatGPT as an incredibly convenient and effective tool that can be used to increase academic performance and promote cognitive growth. At the same time, the respondents comment on the existing ethical issues that dictate the need to become responsible and use carefully.

Finding of Technology Acceptance Model (TAM): Perceived Usefulness: According to the respondents, ChatGPT is incredibly useful, and it vastly boosts academic output and enables writing and formulating research. A large number of them termed it as a prospective partner who can help in undertaking strenuous work and suit the needs of courses on higher levels.

One of the respondents described as a tool that they cannot live without to overcome impasses:

ChatGPT has become my new forever weapon to get a problem stuck that I am not making inroads.

Such a participant emphasised its efficiency saying that it allowed them to organize and to order the expression of thoughts, and hence to save hours of time.

I also use it to summarize articles of research, what took me days in the past currently occupies minutes. (P2, Male, Public)

The ability of the tool to streamline and speed up research was also greatly supplemented, with a few students emphasizing that it assisted in generating ideas, refining arguments and getting over the writer block. Its perceived usefulness was not limited to the basic task support, with the participants noting other increased areas of academic confidence and performance.

It can assist me in brainstorming, which I would not have thought of, in particular, when I am writing creatively.

Ease of Use: Students had mentioned ChatGPT as highly available and easy to use and need little technical expertise. Its chatty interface and real time responsiveness lowered the barriers to adoption allowing it to easily fit into the lives of the university.

I didn't need any training. All you do is type in a question and the answer seems to come out immediately. It is conversing with some smart friend of yours. (P12, Male, Public)

Another insight participants expressed is that the flexible interface of the platform enabled them to explore more with the prompts and narrow-down queries to adjust the responses further to a more accurate and personalized level. The perceived ease made it easy, leading to continued and regular use.

Behavioral Intention: Most of the participants claimed that it is a valuable component of their academic processes and they expect to use it in their professions as well as writing, researching and communicating outside the university.

I will continue using it since it is now part of my process of studying. (P10, Male, Public).

I believe that I will use ChatGPT when writing and communicating in my professional life even after graduation. (P24, Male, Private)

The results indicate that ChatGPT is not seen as a transitory convenience and efficiency aid, but an aid in academia and professional life in the long term.

Findings in the Uses and Gratifications Theory: ChatGPT was commonly used by students as an initial source of information. It allowed to navigate complicated topics and find useful directions even before referring to the scholarly materials.

When working on a research project, I always visit ChatGPT to receive an overview of a project before reading academic papers. (P8, Male, Public).

It simplifies hard theories in easy terms and that actually assists me to finalise exams. (P11, Female, Public)

The tendency of the platform to compress and put information in perspective was particularly welcome in subjects where one needs to read and synthesise a lot. However, respondents pointed out that ChatGPT was not a replacement of scholarly material but a supplement.

Psychological Needs: ChatGPT helped to engage more cognitively past retrieval of information. It was used by students to clear the problematic issues, find alternative perspectives and develop the critical thinking.

I apply it in explaining misunderstood content on lectures. At times, it is easier to explain this than the textbook does do so. (P25, Female, Private)

It enables me to view a subject in other angles and this enhances my critical thinking (P31, Female, Private).

This Psychological aspect was also strongly linked to self-directed learning since the participants described that ChatGPT allowed them to engage in supported intellectual confidence.

Creative Engagement: According to the testimony of the students, ChatGPT was described as a creative collaborator that broadened their imagination and provided other possible ways of solving problems.

I like the fact that it challenges my imagination. ChatGPT provides me with new ideas to follow up when I write stories because I am building new ideas consistently. (P3, Female, Public)

It is as though I had a creative partner - where I feed it a simple idea and it grows on it in the ways I hadn't thought of. (P27, Female, Private)

This creative activity was not exclusive to students of the humanities, as even students of technical subjects used ChatGPT to generate project ideas and create solutions.

Nonvoluntary Adoption and Institutional Impact: Students first used ChatGPT as a basic editing and language assistance application but eventually brought it into more wide-ranging study tasks, such as research planning, critical evaluation, and presentation creation.

Initially, I would only use it to check the grammar, but now I would use it to plan and format research findings. (P6, Male, Public)

It began as a tool to help in assignments, however, I currently use it when brainstorming and even preparing presentations. (P17, Female, Private)

Adoption was indirectly influenced by the institutional attitudes. Although the majority of the respondents reported that there was low formal access to the curricula, the changing levels of faculty openness and peer tolerance were factors that led to increased confidence of use.

It was not officially incorporated to our university but a majority of us use it regardless of its usefulness since one cannot simply ignore it. (P20, Male, Private)

Virtual educators are opening up to AI technology. That has made me more comfortable using ChatGPT. (P30, Male, Private)

Learning and Educational Effect: The implementation of ChatGPT in the academic activities of students has been influential in terms of education. The improvement in writing skills, argumentation, and the coherence of the academic output were reported by many.

It has certainly made my assignments better. I have better sense, and better style when writing. (P9, Female, Public)

I had a problem with organizing this essay, but now I know how to make the information systematic. (P22, Male, Private)
The vocabulary and sentence structure also got better since I have been attentive to the way that ChatGPT constructs its answers. (P26, Male, Private)
It has made me gain the skills of research, now I understand how to formulate questions and where to seek deeper information. Also, ChatGPT facilitated self-directed learning and enhanced self-confidence in addressing challenging subjects.
I think my academic skills are more confident since I am able to investigate the issues on my own due to the assistance of ChatGPT.
It has turned me into an active learner. I will no longer have to wait till I get a lecture to comprehend a thing.

Lazy learners and Over-dependence: Although the participants echoed the benefits of ChatGPT, participation was accompanied by sentiments of ethical considerations, especially those to do with the accuracy of information, plagiarism, and intellectual honesty.

In certain cases, the information may not be true thus I never trust it without first having to validate it in other sources. (P19, Female, Private)
I do not risk copy-pasting directly out of ChatGPT since I would become a plagiarist. (P28, Male, Private)
The interviewer uses ChatGPT as a support, rather than as an alternative to his own thinking. (P2, Male, Public)
I would check everything it produces twice and mostly to set the direction of my work rather than do it myself (P18, Male, Private).
We may be denied the independent thought and problem-solving capability by over relying on it more than we should. (P23, Female, Private)
It is too easy to allow it to write everything, and thereby become lazy learners.

Table 5: Summary of Qualitative Insights

Theme	Key Student Perspectives
Perceived Usefulness & Ease of Use	Students find ChatGPT essential for writing, research, and communication — intuitive and easy to integrate into academic routines.
Gratifications & Engagement	It satisfies informational and cognitive needs, while also enhancing creativity and intellectual curiosity.
Adoption & Institutional Influence	Adoption is self-driven but supported by evolving institutional attitudes, with increasing acceptance in both public and private contexts.
Educational Impact	It improves academic performance, critical thinking, writing proficiency, and overall learning engagement.
Ethics & Risks	Awareness of plagiarism, misinformation, and over-reliance is widespread, and students advocate balanced, responsible use.

4. DISCUSSION

The purpose of this paper was to consider the concept of technology acceptance as such that can be taken, adopted, and implemented by university students on the platform of ChatGPT in the theoretical framework of TAM Model and U&G Theory. Its results are relevant data regarding inspirations of students, their habits of using it, educational outcomes, and suitable moral concerns that can be considered a thorough notion of how generative AI is likely to make a hollow in the academic world.

Perceived Usefulness, Ease of Use and Behavioral Intention: the results are whether to use ChatGPT are primarily dependent on the perceived usefulness of the gains made on their use occasioned by ease of use and their intentions to continue using it as suggested by the propositions of the TAM. The term ChatGPT was repeatedly mentioned by many as a timesaving academic assistant or a 24 /7 tutor who helps them to deliver assignments, write reports, and generate ideas. These views focus on the importance of perceived usefulness as a driving factor influencing the use of chatbots because the students do not consider ChatGPT an auxiliary finder, rather they perceive it as a part and parcel of the learning processes (Nunes et al., 2025).

Not less important is the factor of ease of use, and learners focus on an intuitive interface and a conversation format of the platform. It is known that the ease of use of ChatGPT has been reported to reduce the clarity of cognition and the learning gap to ensure that the technology can be adopted even by those with a low level of technological expertise. According to the participants, communication with ChatGPT resembles a conversation with an informed colleague, which reduces fears about challenging activities and develops sustained interaction (Tummalapenta et al., 2024).

Besides, the behavioral intention turned out to be a key indicator of adoption. Most students have stated that they have very good intentions of incorporating ChatGPT into their academic practices in the future, such as thesis

writing, developing projects and communicating at work. It shows their ongoing intention and confirms the position of TAM that, behavioral intention is important in predicting sustainability of the use of technology (Wei at al., 2025).

Motivations and Gratifications: The findings also show that a series of gratifications is significantly behind the interaction of students with the ChatGPT which is very similar to the U&G theory (Lee et al., 2025). Three main incentives were identified, including the informational needs, the cognitive enhancement and the involvement in creative activities (Biru et al., 2025).

The motivation appreciated most was informational gratification. The students appreciated the ChatGPT due to its ability to provide new, up-to-date, and structured information that minimized the amount of time in searching various sources. Their emphasis was put on its synthetic information processing capacity, its capability to communicate complex issues and give real-time answers to academic questions (Kim and Baek, 2025).

Even Psychological needs had a very critical role in engagement. Students have discussed ChatGPT as a tool that helps in improving their understanding of complicated concepts and promote independent learning (Khurma et al., 2024). It was called frequently as a concept elucidator which dissects a lot of difficult theories into palatable explanations, as a result enhancing self-confidence and further understanding.

Lastly, creativity became a significant form of gratification with particular significance among students who were engaged in writing and content development. Practically a respondent said that it is the ChatGPT that provides new premises, has the potential to brainstorm, and is capable of working out an original opinion (Surfaifel et al., 2023). Creative feedback of this type was found to be helpful within the framework of the ideation sphere, where the students find it difficult to engage into generating something new or drafting an argument. These motivations indicate that students do not read ChatGPT as a source of information only, but students also use ChatGPT as a source of intellectual and imagination ally during their studies (Melker et al., 2025; McGlashan, 2018).

Pattern of Adoption and An Influence of Institutions: The theme educating and using ChatGPT also exhibited some significant difference between the students of a public and the private university. Government sponsored companies would apply less to ChatGPT on practical and utility links as needed, such as given support, content summary, and report writing since they often consider ChatGPT an academic efficiency device. On the other hand, such applications as creative exploration, advancing communication levels, building professional skills (Emon, 2023; Moghavvemi and Jam, 2025) have been observed as different by students of private universities.

Institutional culture and pedagogies also appear to influence adoption. Trainees in private university were usually presented with reports that their university were more open to the use of AI tools and were generally more permissive than those in the public university, with their universities offering them little advice and even banning their use. The internal disparities confirm the significance of institutional policies, programs related to digital literacy and professor attitudes in the potential effects of formats pertaining to the usage of newly emerging technologies by students (Alturki and Aldraiweesh, 2022).

Educational Effect, Efficiency, Productivity, Creativity, and Communication: The impact of ChatGPT on the educational course of the students was varied, as the tool did not only help students to fulfill certain tasks. Effectiveness of learning and productivity were consistently reported by the respondents as well as that there was greater efficiency in the inclusion of assignments, increased organization of the material and the quality of writing. Affirmative action of hundreds of students was that ChatGPT will cause Starbucks to work less and think and analyze more (Wang et al., 2025).

The tool also influenced skill in creativity and communication to a great extent. Students respond that they have been learning ChatGPT modelled as a creative partner, especially to formulate new ideas, refine discussions and seek diverse systems of thoughts (Baltà-Salvador et al., 2025). Moreover, they also highlighted that the instrument would enable them to improve their writing structure, use of the tone, language levels, and add to a better structure of communication both in the field of academia and in the workplace (Wei et al., 2025).

Such results suggest that ChatGPT cannot be simply characterized by the means but an instigator of additional studies, creative thought, and skill enhancement, which would enhance the amount of academic engagement (Schönberger, 2024).

Existential dangers of Over-Reliance and Ethics: ChatGPT has numerous benefits, but it is also associated with severe ethical concerns that need to be discussed. It was common to find that many of them felt afraid of plagiarism and originality and the potential adverse effect on the adoption of the skill of critical thinking (Anwer, 2025). It was questioned whether going heavy on ChatGPT will lead to the situation where people are not encouraged to engage in independent work or be charged with scholastic fraud. Others said that they should give better attention to the quality and the reliability of the information produced, and they have to verify and check it more thoroughly (Singh, and Kaur, 2025).

It was also found that students require institutional assistance so much when negotiating such issues. Instead, they proposed more definitive guidelines on the usage of AI, education regarding academic integrity, and structural integration of AI literacy into the curriculum (de la Fuente, 2025). The given findings reinforce the need to dependency on the balance between the benefits of employing the generative AI and critical awareness, responsibility, and regulatory awareness of its educational use (Lorentz, 2025).

5. CONCLUSION

A penetrating examination of the process of interaction between university students and ChatGPT presented in this paper reveals this multidimensionality of technological, motivational, institutional, and ethical factors necessitating the adoption and utilization of the latter. Based on the concepts presented in TAM and U&G theory, the results indicate that preconceptions of usefulness and ease of use, when combined with high behavioral intentions, are major motivations of the adoption process. Simultaneously, informational, cognitive and creative gratifications point to the higher level of motivation associated with an extended use of generative AI tools.

An interesting result of this study is how students who study in a public and one in a private university are totally different in embracing and using Chat GPT. Learners in the general universities tend to think in a more utilitarian and task-specific way, which is the way they mostly use the tool; namely to fulfill the assignment and summarize the material as also clarify their course work. The limited institutional support, a hesitant attitude of the professors, and absence of the systematic training in the context of AI frequently determine their use that is characterized by more conservative and utilitarian adoption patterns. In most instances, even public university students shown hesitance about the ethical application of AI were not in the precise way but expressed that the topic of website-generative tools in the curriculum was appropriate.

Conversely, undergraduates of institutional universities said they had developed a more widespread and progressive application of ChatGPT that went beyond simple learning activities. They alluded to the tool by referring to how it was used in ideating the creativity, having a complex research support, sharpening of the language, web content making and even in acquiring professional knowledge. This wide interactivity is directly related to the receptive institutional climate wherein the instructors are eager to experiment with the AI applications and AI literacy as well as digital ethics are discussed regularly in the curriculum. As a result of this, students of a private university, in their turn, gain a better likelihood of feeling more confident, more critical, as well as more established in an environment of studying and extracurricular activity with ChatGPT.

The key factor associated with the involvement of the students in the emergent technologies is the central importance of the institutional culture, resource, and strategies of education. It also suggests that the policy frameworks and training programs, especially the faculty support, should not be interpreted as the additional tool but as the way to achieve the best quality of learning provided by generative AI.

Besides such institution-related dissimilarities, it can be noted that ChatGPT is an achievable transformative potential of higher education, because of its far-reaching effects on creativity, productivity, communications, and the ultimate learning results. However, the latter benefits are tamed down in certain justifiable ethical considerations particularly of plagiarism, excessive dependence, and trustworthiness of information with emphasis on high-quality institutionalist frameworks or provision of AI literacy and development measures founded on probing conduction of provision strategies. Lastly, the research falls within the general discussion of generative AI in teaching since it offers theoretical and practical data on how they are transforming the nature of learning and academic practice with the help of such tools as ChatGPT. As AI technologies are constantly intensifying, its applicable application to higher education, then, is not merely an issue of technological advancement, yet, is also somewhat linked with the ethical factors and the educational procedures and fostering the emergence of such advanced digital literacies in different educational contexts.

Limitations to study: Although there are some important understandings that has been realized in the course of the study, it has certain limitations that must be realized. The study was carried out versus a rather small group of students of few public and private universities, which inhibits the scale of the findings to the rest of the population. The use of self-reported interview data presents the risk of bias since the respondents might have exaggerated the positive or minimised difficulties. Additionally, the research was solely based on student attitudes and it did not encompass the faculty and institutional point of view, which might result in a more in-depth picture of AI implementation in tertiary education. The benefit of the cross-sectional design is also the inability to trace the pattern of developments in the perception and behaviors of students as of the time when AI technologies persist in their development and are still impossible to implement into the sphere of academic activities.

Future Recommendation: The limitation can be amended in future studies by including larger and more diverse samples of academic fields and cultures. The use of mixed-method solutions (use and usage analytics and quantitative surveys combined with qualitative interviews) would help in gaining more information about behavior and adoption rates among users. The longitudinal researches would particularly assist in providing assurances on the transformations of the perceptions, motivations and ethical attitudes over the time. Teachers, policymakers and their administrators should also voice their questions of significant influences of the institution and policy implications in future studies to have more detailed overview. In addition, the study needs to investigate AI literacy program effectiveness, ethical training interventions, and integration approaches in the curriculum in order to produce responsible and useful use of generative AI. By evaluating such areas, additional research will be able to aid the discussion regarding how AI technologies could be utilized to support innovative, ethical, and equity-based educational practices and offer a more nuanced and practical effort to do so.

Practical and theoretical Implication of the Study:

- The paper is valuable by offering knowledge on the acceptance of AI in terms of its contributions to the theoretical development of the topic through the use of the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) in integration with psychological factors, which proves

to be a valuable solution because it provides a dual approach to the issue of AI adoption involving both technological determinists and psychological motivational factors.

- By uncovering the interaction of perceived technological attributes and user gratifications in the creation of adoption behaviours in the learning setting, the research will contribute to the existing literature on the topic of AI-mediated learning and online participation.
- The institutional-contextual analysis, which will be used in this study, will expand on the existing technology-acceptance models to include the environmental and organizational factors.
- The results can be used by educators, curriculum administrators, and policymakers aiming to use AI technologies in the learning process; the analysis of the motivation and perception of students will allow designing learning interventions that will facilitate interest, encourage critical thinking, and provide impressive educational results.
- Critical awareness of the AI adoption trend would inform the development of the AI awareness and training to avoid the situation where the students use the AI-generated information in a way that diminishes critical thinking skills, ethical behavior, and responsible practice.
- The comparative methodology of the two institutions (public and private) provides evidence-grounded suggestions of context-related AI policies, which would make universities respond to institutionally-relevant concerns and capitalize on pedagogical advantages of generative AI work.

REFERENCES

1. Afzal, M., Arshad, N., & Shaheen, A. (2025). ChatGPT and the Future of Academic Writing: Enhancing Productivity and Creativity. Journal of Engineering and Computational Intelligence Review, 3(1), 1-11.
2. Al-Harahsheh, A., Almahasees, Z., & Al Rousan, R. (2025). The Use of ChatGPT in Academic Writing by University Students in Jordan. International Journal of Information and Education Technology, 15(7).
3. Alturki, U., & Aldraiweesh, A. (2022). Adoption of Google Meet by postgraduate students: The role of task technology fit and the TAM model. Sustainability, 14(23), 15765.
4. Anwer, B. (2025). Trust, Ethics, and Writing Improvement: A Qualitative Study of ChatGPT Use in a Pakistani ESL Classroom.
5. Azizah, I. R., & Nugraha, J. (2025). Factors Influencing Students' Motivation to Use ChatGPT for Learning: A TAM and UGT Approach. MANAZHIM, 7(2), 199-210.
6. Baltà-Salvador, R., El-Madafri, I., Brasó-Vives, E., & Peña, M. (2025). Empowering engineering students through artificial intelligence (AI): Blended Human–AI creative ideation processes with ChatGPT. Computer Applications in Engineering Education, 33(1), e22817.
7. Biru, I. R., Rahmawati, R. F., & Salsabila, B. A. D. (2025). Analysis of Motivation for Continued Use of Meta AI on WhatsApp: Uses and Gratification Theory Approach. Journal of Artificial Intelligence and Engineering Applications (JAIEA), 4(3), 2162-2168.
8. Braun, V., & Clarke, V. (2021). Thematic analysis: A practical guide.
9. Camilleri, M. A., & Falzon, L. (2021). Understanding motivations to use online streaming services: integrating the technology acceptance model (TAM) and the uses and gratifications theory (UGT). Spanish Journal of Marketing-ESIC, 25(2), 217-238.
10. Choliq, A. (2025). Phenomenological Exploration of Spiritual Experiences in Daily Life: Lived Experiences of Religion and Culture in a Multicultural Society. Irfana: Journal of Religious Studies, 1(2), 45-53.
11. de la Fuente, M. F. (2025). Assessing the impact of artificial intelligence in higher education: A systematic review.
12. De Paoli, S. (2024). Performing an inductive thematic analysis of semi-structured interviews with a large language model: An exploration and provocation on the limits of the approach. Social Science Computer Review, 42(4), 997-1019.
13. Emon, M. M. H. (2023). Predicting adoption Intention of CHATGPT-A study on business professionals of Bangladesh.
14. Gebre Hiwot, T., & Namuduri, S. (2024). The impact of a LargeLanguage Model (LLM): A qualitative study on how students and educatorsperceive the use of LLMs such as ChatGPT withinconventional university education dynamics.
15. Hossain, M. S., Alam, M. K., & Ali, M. S. (2024). Phenomenological approach in the qualitative study: Data collection and saturation. ICRRD Quality Index Research Journal, 5(2), 148-172.
16. Huzooree, G., & Tiandem-Adamou, Y. M. (2025). From Vision to Action: How Digital Leadership in Higher Education Supports SDG 2030. In Digital Leadership for Sustainable Higher Education (pp. 1-32). IGI Global Scientific Publishing.
17. Jo, H. (2025). Decoding the ChatGPT mystery: A comprehensive exploration of factors driving AI language model adoption. Information Development, 41(3), 875-895.
18. Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. The public opinion quarterly, 37(4), 509-523.

19. Khurma, O. A., Albahti, F., Ali, N., & Bustanji, A. (2024). AI ChatGPT and student engagement: Unraveling dimensions through PRISMA analysis for enhanced learning experiences. Contemporary Educational Technology, 16(2), ep503.
20. Kim, J. S., & Baek, T. H. (2025). Motivational determinants of continuance usage intention for generative AI: An investment model approach for ChatGPT users in the United States. Behaviour & Information Technology, 44(12), 3080-3096.
21. Kriegel, L. S., Henwood, B. F., McDonell, M. G., Amram, O., Bellamy, C., Collins, S., & Salzer, M. (2025). Risk Environments of Permanent Supportive Housing for Formerly Incarcerated People with Serious Mental Illnesses: A Protocol for a Novel Mixed Methods Feasibility Study. International Journal of Qualitative Methods, 24, 16094069251337940.
22. Lee, S. K., Ryu, J., Jie, Y., & Ma, D. H. (2025). Motivations and Affordances of ChatGPT Usage for College Students' Learning. Media and Communication, 13.
23. Li, Y., Tolosa, L., Rivas-Echeverria, F., & Marquez, R. (2025). Integrating AI in education: Navigating UNESCO global guidelines, emerging trends, and its intersection with sustainable development goals.
24. Lichtman, M. (2023). Qualitative research in education: A user's guide. Routledge.
25. Lim, W. M. (2025). What is qualitative research? An overview and guidelines. Australasian Marketing Journal, 33(2), 199-229.
26. Lorentz, J. (2025). AI and academic integrity: The impact of reliance on AI-based text generation tools in Swedish universities: A qualitative study of academic perspectives on AI.
27. Marengo, A., & Pange, P. J. (2024, June). Envisioning general AI in higher education: transforming learning paradigms and pedagogies. In The Learning Ideas Conference (pp. 330-344). Cham: Springer Nature Switzerland.
28. McGlashan, A. (2018). A pedagogic approach to enhance creative Ideation in classroom practice. International Journal of Technology and Design Education, 28(2), 377-393.
29. Melker, S., Gabrils, E., Villavicencio, V., Faraon, M., & Rönkkö, K. (2025). Artificial intelligence for design education: a conceptual approach to enhance students' divergent and convergent thinking in ideation processes. International Journal of Technology and Design Education, 1-29.
30. Méndez-Alarcón, C. M., Adebola Lasekan, O., & Pachava, V. (2024). Assessing the Impact of AI Integration Course on Students' AI Competencies and Readiness in Preservice EFL Teacher Education. Pakistan Journal of Life & Social Sciences, 22(2).
31. Moghavvemi, S., & Jam, F. A. (2025). Unraveling the influential factors driving persistent adoption of ChatGPT in learning environments. Education and Information Technologies, 1-28.
32. Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. International journal of qualitative methods, 22, 16094069231205789.
33. Naz, N., Gulab, F., & Aslam, M. (2022). Development of qualitative semi-structured interview guide for case study research.
34. Nilashi, M., & Abumalloh, R. A. (2025). i-TAM: A model for immersive technology acceptance. Education and Information Technologies, 30(6), 7689-7717.
35. Nunes, M. L. V., Damasceno, A. D. S., & Moura, L. R. C. (2025). FACTORS FOR USERS'ACCEPTANCE OF CHATGPT. Gestão & Planejamento-G&P, 26.
36. Schmid, E., Garrels, V., & Skåland, B. (2024). The continuum of rapport: Ethical tensions in qualitative interviews with vulnerable participants. Qualitative Research, 24(5), 1253-1271.
37. Schönberger, M. (2024). Integrating artificial intelligence in higher education: enhancing interactive learning experiences and student engagement through ChatGPT. In The Evolution of Artificial Intelligence in Higher Education: Challenges, Risks, and Ethical Considerations (pp. 11-34). Emerald Publishing Limited.
38. Sebbah, L. (2025). Exploring Algerian EFL Students' Familiarity, Use and Attitudes towards Generative Artificial Intelligence Tools in Education. Journal of Languages and Translation, 5(1), 01-21.
39. Singh, J. P., & Kaur, B. P. (2025). Academic Integrity and Ethics in Higher Education: A Case Study on the Use of Artificial Intelligence in Academic Writing and Tackling Plagiarism. In Exploring Digital Metrics in Academic Libraries (pp. 195-224). IGI Global Scientific Publishing.
40. Surfaifel, F., Emilia, E., & Gunawan, W. (2023). STUDENTS'ENGAGEMENT IN VIRTUAL CREATIVE WRITING: DEVELOPING A CREATIVE WRITING STYLE. English Review: Journal of English Education, 11(3), 787-798.
41. Tummalapenta, S. R., Pasupuleti, R. S., Chebolu, R. M., Banala, T. V., & Thiyyagura, D. (2024). Factors driving ChatGPT continuance intention among higher education students: integrating motivation, social dynamics, and technology adoption. Journal of Computers in Education, 1-24.
42. Turner III, D. W., & Hagstrom-Schmidt, N. (2022). Qualitative interview design. Howdy or Hello? Technical and professional communication.
43. Waheed, S., Sattar, S., Bhatti, Z. I., & Naeem, M. (2022). Social media encourages women entrepreneurship: A study of challenges and empowerment. International Journal of Media and Information Literacy, 7(2), 596–605.
44. Waheed, S., Ahmad, M. K., & Bhatti, Z. I. (2025). Influence of K-pop dramas on Pakistani youth: A case study on Netflix's role in cultural transformation. FWU Journal of Social Sciences, 19(2), 89–110.

45. Wang, H., Hou, X., Liu, J., Zhou, X., Jiang, M., & Liao, J. (2025). Framework effect and achievement motivation on college students' online learning intention–based on technology acceptance model (TAM) and theory of planned behaviour (TPB) model. Education and Information Technologies, 30(8), 11073-11097.
46. Wei, X., Wang, L., Lee, L. K., & Liu, R. (2025). The effects of generative AI on collaborative problem-solving and team creativity performance in digital story creation: an experimental study. International Journal of Educational Technology in Higher Education, 22(1), 23.
47. Yu, J. H., Chauhan, D., Iqbal, R. A., & Yeoh, E. (2025). Mapping academic perspectives on AI in education: Trends, challenges, and sentiments in educational research (2018–2024). Educational technology research and development, 73(1), 199-227.