Students' Acceptance and Use of ChatGpt in Higher Education: A Unified Theory of Acceptance and Use of Technology Perspective

BY

Eliza B. Ayo[1]*, Teresita Mijares[2], Avelina Raqueno[3], Raymond Peralta[4], Diosdado Aler II[5]

[1,2,3,4,5]Centro Escolar University, Manila, Philippines

Abstract

In our modern age of digital communication, technology becomes vital in various aspects of life, including education. ChatGpt, an advanced chatbot fueled by artificial intelligence, is one technological advancement that has drawn a lot of interest in higher education. ChatGpt can improve the learning experience by providing students with quick responses along with customized support. Having a thorough knowledge of students' adoption and usage of ChatGpt in higher education is the primary objective of this applied research. This study established an insight to explain the actions of pupils by identifying key factors influencing their acceptance and use of ChatGpt by adopting the Unified Theory of Acceptance and Use of Technology (UTAUT) perspective. A quantitative approach was used to achieve this. The foundation on which to identify the relevant variables and constructs that were included in the research framework was established in this review. Following the literature examination, 475 students from various programs at Centro Escolar University were chosen as a sample, then a survey questionnaire was administered to collect quantitative data. ANOVA and the T-test were two statistical methods used for evaluating the data that had been gathered. By applying the Unified Theory of Acceptance and Use of Technology (UTAUT) to analyze the components that influence students' intentions to use ChatGpT, the findings strengthened the body of information already in place. It explored attitudes and patterns of use from the data collected during November 2022 and December 2023. It indicated a significant increase in ChatGPT usage, especially during the academic year, suggesting that academic schedules possessed a big impact on user engagement. Adoption is primarily motivated by intrinsic motivation, though external variables may also come into play, especially during the most hectic periods of the school year. With minimal coercive influence from teachers or school support, peer influence emerges as an important element. There is potential for development in terms of enabling factors, such as seamless integration with other chatbots and the clarity of support channels, regardless of good views and perceived use. Students perceive ChatGPT to be valuable and user-friendly in general, and it has a slight adverse effect on their academic performance. Nonetheless, they do have reasonable expectations in terms of productivity and grades. The adoption differences are further amplified by disparities in gender and seniority. The findings highlight the potential of ChatGPT as a valuable learning tool in higher education.

Index Terms- Adoption, AI on Education ChatGpt, Teaching and Learning, UTAUT

Introduction

The origins of ChatGPT can be traced back to the mid-1990s when chatbots like A.L.I.C.E. MIT started to emerge. This marked a milestone in the exploration of language understanding and generation. [6] Recent advancements in intelligence have been fueled by language models (LLMs) trained on extensive datasets. These models have evolved from networks (RNNs) to the groundbreaking transformer architecture introduced by researchers at Google in 2017. [8] This architecture laid the groundwork for models like GPT and BERT enabling them to excel in understanding and generating text that resembles speech. In 2022, OpenAI introduced ChatGPT as an updated version of GPT 3.5 showcasing its ability to generate text that mimics writing and perform tasks based on written instructions. [7] With over 100

million users ChatGPT has become a tool that goes beyond chatbot functionalities making significant contributions to natural language processing. As ChatGPT continues to evolve it holds the potential for shaping the future of language understanding and communication in different ways.

This versatile tool has significantly impacted academia, particularly in knowledge curation. Its ability to summarize extensive text sources like articles and research papers enhances comprehension of key information on its user. It serves as a valuable resource for teachers and students by providing feedback and proofreading services for their research papers and homework. It also functions as a virtual assistant for some because of its capability to manage calendars and reminders and presents a new technique in information retrieval. Its ability to provide clear explanations of complex topics establishes that it could be a valuable educational resource [12] and its proliferation is unstoppable.

However, it raises significant ethical concerns and challenges related to maintaining academic integrity. While ChatGPT holds the potential to enhance learning experiences, there is a need for vigilance due to the possibility of students misusing it for completing assignments or engaging in plagiarism. On another note, educators are tasked with adapting their teaching methods to effectively incorporate ChatGPT into the learning environment. Addressing these ethical challenges is crucial for universities in upholding academic honesty and understanding how it can complement teaching practices and integrate them into the curriculum.

The use of ChatGPT among students is an area that needs further exploration, there are published researchers studying its ethical concern [1], functional domains [2], assistive capability [3] as well as benefits and challenges [4]. However, there is no existing research that determines the behavioral intention of students on the adoption and use of ChatGpt. This is what the study is all about, a comprehensive exploration of students' adoption of ChatGPT through the use of the Unified Theory of Adoption and Acceptance of Technology (UTAUT). UTAUT analyzes factors influencing ChatGPT adoption. It offers a structured understanding of students' intentions to use ChatGPT and identifies critical drivers and barriers. The framework identifies four core constructs namely performance expectancy, social influence, facilitating condition, and effort expectancy, and includes additional moderators that can impact user behavior such as age, gender, the voluntariness of use, and experience.

This can help us understand the factors that influence the adoption of ChatGpt in the educational context, the respondents in terms of their experience can be used in identifying their characteristics who are more likely to adopt this technology and the extent their peers influence their intentions to use it. Additionally, determining how user-friendly and how students perceive its performance can help us identify and predict the future adoption of this technology. The result could be part of longitudinal studies on the long-term effects of ChatGPT on education.

REVIEW OF THE RELATED LITERATURE AND STUDIES

There are studies published on the use of UTAUT to investigate the relationship of the construct in adopting technology. One of which is to understand students' adoption of Moodle in developing countries using UTAUT. This study predicted students' intentions regarding usage and actual usage of it. It looked at how performance expectancy, effort expectancy, social influence, and facilitation conditions affect student's acceptance of Moodle. It also discussed the requirement of e-learning systems regarding education amidst the COVID-19 era.

In terms of Consumer Acceptance and Use of Information Technology, Tamilmani reviewed a meta-analysis of 60 papers employing UTAUT2 as an extended version of UTAUT incorporating three new constructs of adoption such as affective motivation, cost value, and habit for assessing users' attitudes toward adoption. It assessed whether UTAUT2 constructs were appropriately used and the most popular UTAUT2 extensions, including trust, personal innovativeness, perceived risk, attitude, and self-efficacy While Wang did a systematic review and analysis of articles on UTAUT, UTAUT2 and citing of original UTAUT publications. This paper looks at the research perspective in which UTAUT studies are undertaken which involves research trends, context, approaches, and findings. The last part of the paper suggests an outline for future research in the UTAUT.

A ten (10) year study made from 2003-2013 made by Williams when he reviewed the literature on UTAUT and its extensions over the period 2003-2013. The first part of the study classified research made according to research domains, contexts, and methods of studies while the second part presented the strengths and weaknesses, as well as areas that need further expansion of this model. Almost on the same timeline, Venkatesh synthesized literature on UTAUT from 2003 to 2014, to perform a theoretical analysis of UTAUT and its extensions, and charts an agenda for research going forward. It identifies the key issues, challenges, and opportunities for UTAUT research and provides recommendations for researchers and practitioners, while some studies made on ChatGPT examined it as it relates to scholarship purposes and offered a case scenario of how it can be utilized to make an abstract for the study paper. It listed some tips to researchers who would like to use it in their research including citing valid resources, checking if there is plagiarism, and then including personal thoughts.

However, an alarming result was yielded when ChatGPT produced academic papers good enough for publication. The study reported that it could be used to write a finance paper that would be accepted for an academic journal when authors used it to generate the introduction, literature review, and discussion sections of the paper and added their own data analysis and conclusion. On the same note, some studies explored the future fears and reassurances about the nature of ChatGPT when used at academic and scientific levels. It

*Corresponding Author: Eliza B. Ayo

presented the qualitative interviews of seven experts in AI who shared their views on the potential benefits and risks of ChatGPT, such as enhancing creativity, saving time, and increasing plagiarism.

IMPORTANCE OF THE STUDY

This study aims to explore the factors that influence students' intentions to use ChatGpT by applying the Unified Theory of Acceptance and Use of Technology (UTAUT). It will examine the effects of peer influence, user-friendliness, performance expectancy, and facilitating conditions on students' acceptance of ChatGpT. This will also investigate the variations in the adoption of ChatGpT in terms of age, gender, voluntariness of use, and experience. The findings of this study will contribute to the literature on technology acceptance and provide implications for educators, developers, and policymakers. This could also be part of longitudinal studies on the long-term effects of ChatGPT on education.

STATEMENT OF THE PROBLEM

1. What is the profile of the respondents in terms of attitude and usage of chatgpt?
2. To what extent do peers influence students to use ChatGpt?
3. How do the respondents assess their ChatGpt experience in terms of:
   a. technical infrastructure
   b. performance
   c. user friendliness
   d. self-efficacy
   e. anxiety concerns?
1. Are there variations in the adoption of ChatGpt in terms of grade and year level?
2. How do the respondents assess their intentions regarding the continuous use of ChatGpt in their educational endeavors?

PROFILE OF THE RESPONDENTS

The respondents of this study are the students of Centro Escolar University in Manila during the first semester of SY 2023-2024. The data reveals that out of a total sample size of 475 respondents, 75.16% were female, and 24.84% were male. In terms of year level, the distribution reveals that the majority of the respondents in the 3rd year, comprising 86.95%, followed by the 2nd year with 8.42%, while the 1st and 4th years have smaller representations at 1.89% and 2.74%, respectively. The Bachelor of Science in Medical Technology scored the highest percentage, representing 40.42% of the total respondents. This is followed by Bachelor of Science in International Hospitality Management (9.26%), Doctor of Dental Medicine (5.26%), Bachelor of Science in Pharmacy (4.00%), Bachelor of Science in International Tourism and Travel Management (1.26%), and various others with smaller percentages

PROFILE OF THE RESPONDENTS IN TERMS OF CHAT GPT EXPERIENCE

The majority of the respondents are using Chat GPT 3.5, constituting 44.63% of the instances, followed by Chat GPT 3 at 36.84%. Meanwhile, Chat GPT 4 and Chat GPT 4 Turbo have lower representation, accounting for 13.47% and 5.05%, respectively.

Table 1
Profile of Students Use ChatGpt the Very First Time

	Frequency	Percent
January 2023	30	6.32
February 2023	18	3.79
March 2023	24	5.05
April 2023	35	7.37
May 2023	31	6.53
June 2023	32	6.74
July 2023	25	5.26
August 2023	78	16.42
September 2023	72	15.16
October 2023	67	14.11
November 2023	11	2.32
December 2023	8	1.68
November 2022	26	5.47
December 2022	18	3.79
Total	475	100.00

Looking at the table, the overall usage increased starting in November 2022. Only 5.47% of responses indicate first using it in November 2022 or earlier, showing it was still relatively new which existed before then. A rapid growth phase happened from August 2023 through October 2023. Those 3 months' alone account for 45.69% of total usage, indicating the growth was particularly exponential during that period. August 2023 stands out with the highest percentage of first use at 16.42%, suggesting some key events which significantly increased awareness and adoption in that month specifically. The month of August is the opening of learning terms in CEU. The usage and awareness have stabilized more November to December 2023 after that rapid growth period. Only 3.32% of first-use reports are from those months. The monthly use shows recurrent pattern with increase in January, April to May, July to August. This indicates that academic schedules lead more users to explore CHAT GPT's learning applications at these times.

Table 2
Voluntariness of Use of ChatGpt

	Frequency	Percent
I have to	200	42.11
I want to	275	57.89
Total	475	100.00

In determining the voluntariness of use, the majority (57.89%) indicate that respondents use CHAT GPT because they "want to" rather than feeling they "have to". This suggests an intrinsic motivation and voluntariness overall. However, (42.11%) feel obligated rather than using it fully voluntarily. This indicates there are still some external pressures driving part of the adoption.

This correlates to the increase in the adoption of CHAT GPT from August to October 2023, the start of the semester, and learning terms in CEU. The growth in this case is from external factors that drove increased awareness and exploration of the tool, rather than just intrinsic interest. The opening of the university contributed to the rapid adoption when students used it in answering their assignments or projects. However, the voluntariness data shows a slim majority of users are still adopting mostly voluntarily because they find personal value in it therefore intrinsic motivation is still the larger driver overall.

Table 3
Extent of Peers Influence on Students' Intention to Use ChatGpT

Social Influence	Overall	
People who influence my behavior think that I should use the ChatGpt.	2.60	.720
People who are important to me think that I should use the ChatGpt.	2.53	.730
My teachers are encouraging me to use the ChatGpt.	2.21	.826
The school has supported the use of ChatGptUsing the ChatGpt is a good idea.	2.31	.819
	2.4142	.65835

Table 1 shows an overall social influence to be moderate, with a mean of 2.41 out of 4. This indicates peers, important people, teachers, and school support have some degree of influence, but it is not an extremely strong effect overall. The strongest influence appears to be from peers - 49.05% say peers who influence their behavior think they should use ChatGPT to a "great extent." Teachers and school support show lower levels of active encouragement. However, for all factors, the highest percentages fall into the "low extent" and "very low extent" categories. So while social channels have some influence, the majority of students do not feel high expectations or pressures to use it. This aligns with the earlier finding that the small majority use ChatGPT voluntarily rather than from obligation or external requirements. Social encouragement is present but for the respondents, it does not feel coercive.

Table 4
Students' Assessment on the Technical Infrastructure to Facilitate the Effective Use of ChatGPT

Performance Expectancy	Overall	
I find ChatGpt useful in my studies.	3.10	.630
Using the ChatGpt enables me to accomplish my tasks more quickly.	3.01	.661
Using the ChatGpt increases my productivity.	2.85	.762
ChatGpt increases my chances of getting a good grade.	2.77	.760
	2.9337	.60070

This data provides helpful insights into how students view ChatGPT's impact on their academic performance: Overall perceived performance impact is moderately high, with a mean score of 2.93 out of 4. The majority agree it improves usefulness, efficiency, productivity, and grades. In particular, 89.9% agree/strongly agree ChatGPT improves usefulness for studying. This intrinsic value likely helps drive voluntary adoption. Around 85% also expect it to help them work quicker and accomplish tasks faster thanks to AI support. This efficiency gain is a major benefit. Expectations around productivity (71.26% agree) and better grades (67.79%) are a bit more muted. There is a recognition the tool may not inherently improve outcomes. Around 30% disagree on the direct performance benefits. Managing these unrealistic expectations about automatic improvements will be important. Most students see utility and efficiency gains from ChatGPT as supplementary academic support. The bulk of disagreement lies in assuming entirely automated boosts to productivity or grades. Setting appropriate expectations is key while highlighting more intrinsic uses. Monitoring, if perceived usefulness drops over time, will signal declines in core values students associate with it. That will challenge voluntary use.

Table 4
Students' Experience on the user-friendliness of ChatGpT

Effort Expectancy	Overall	
My interaction with the ChatGpt is clear and understandable.	3.01	.623
It is easy for me to become skillful at my studies using the ChatGpt.	2.78	.716
I find ChatGpt easy to use.	3.17	.619
Learning to use the ChatGpt is	3.15	.617

easy for me		
	3.027 9	.54867

This data provides insights into how much effort students perceive is required to use ChatGPT effectively: Overall, students find ChatGPT quite easy to use and learn, with mean effort expectancy scored at 3.03 out of 4. Specifically, 91.58% believe interaction with ChatGPT is clear and understandable. That perceived clarity supports ongoing voluntary use. 90.79% also think ChatGPT is easy for them to become skillful at using for their studies. Self-efficacy is important for adoption. Ease of use scores very high as well, with 91.79% agreeing it is user-friendly. Low perceived friction encourages utilization. Learning to leverage ChatGPT also seems quite easy based on student responses. This reduces barriers to entry. Students overwhelmingly perceive ChatGPT as intuitive and simple to integrate into their learning processes. This supports voluntary exploration and decreases the need for extensive external support or training to facilitate adoption. If effort expectancy scores start to decline substantially over time, it may indicate usability challenges that could inhibit continued usage. But for now, the perception of high ease of use is very positive.

Table 5
Students' Attitude Towards the Use of ChatGpT

Attitude toward using Chat GPT	Overall	
Using ChatGpt is a good idea.	2.81	.681
Using the ChatGpt is a bad idea.	2.55	.740
ChatGpt makes my task more interesting.	2.79	.697
Using ChatGpt is fun.]	2.95	.633
I like working with ChatGpt.	2.86	.663
	2.791	.4811

This data provides insight into students' attitudes and emotional perceptions toward using ChatGPT: Overall attitudes lean positive, with a mean score of 2.79 out of 4. The majority of students appear to view ChatGPT positively. 72.63% see it as a good idea to use, though 23.79% still disagree, so some skepticism persists. Only 50.95% reject the notion that it is a bad idea, showing mixed attitudes. 70.32% find ChatGPT makes their studies more interesting, suggesting increased engagement.

Perceptions of enjoyment are quite high as well, with 82.74% agreeing that ChatGPT is fun. This intrinsic motivation supports voluntary adoption. Most students have an openness and curiosity around ChatGPT that fuels voluntary usage and exploration. The novelty and fun likely incentivize experimentation. However, roughly a quarter maintain concerns about potential downsides, highlighting a need to communicate ethical practices. Continued monitoring of skepticism levels will be important.

Table 6
Students' Assessment of Their Experience on Self-Efficacy in Using ChatGPT

Self-efficacy: I could complete a job or task using the ChatGpt	Overall	
even If there was no one around to tell me what to do.	2.90	.655
even If there was no one for help if I got stuck.	2.89	.646
even if I dont have a lot of time to complete my task job	2.88	.660
even If I had just the built-in help facility for assistance.	2.85	.638
	2.8811	.58894

This data provides useful insight into students' self-efficacy and confidence in their ability to use ChatGPT independently: Overall self-efficacy is moderately high, with a mean of 2.88 out of 4. The majority feel able to complete tasks with ChatGPT on their own. Specifically, 77.69% agree they could use ChatGPT effectively even without any guidance or outside help. This ability to self-direct is empowering. 78.31% also agree they could complete tasks with only ChatGPT's built-in help features if they struggled. Reliance on internal support encourages ongoing use. Time constraints do not seem an impediment either, with 78.1% expressing confidence in their skills even without much time available. However, about 20% disagree on all metrics, indicating they may still rely on external help resources and feel less able to self-learn features. Most but not all students show reasonable self-directed efficacy with ChatGPT currently. Maintaining this will encourage intrinsic ownership over learning paths leveraging the tool. Continued training where needed could empower more reluctant subgroups.

Table 7
Students' Assessment on their Anxiety concerns regarding the use of ChatGPT

Anxiety	Overall	
I feel apprehensive about using the ChatGpt.	2.83	.702
It scares me to think that I could lose a lot of information using the ChatGpt by hitting the wrong key.	2.72	.773
I hesitate to use the ChatGpt for fear of making mistakes I cannot correct.	2.87	.773
The ChatGpt is somewhat intimidating to me.	2.59	.784
	2.7526	.62694

This data provides some interesting insights into anxiety levels students associate with using ChatGPT: Overall anxiety levels seem moderate, with a mean of 2.75 out of 4. Most students do not feel very intimidated, but some apprehension persists. Specifically, 69.05% disagree they feel apprehensive about using ChatGPT. But 29.05% do experience some hesitation or reluctance.Concerns about making unfixable mistakes are more pronounced, with only 54.16% disagreeing they hesitate for that reason. Error intolerance could limit exploration. Only 62.42% reject the notion that ChatGPT seems intimidating. So broader discomfort persists for over a third of students. In summary, while moderate overall, anxiety inhibits more aggressive ChatGPT adoption among 3040% of students. Some discomfort with mistakes and the perceived complexity likely hinders willingness to experiment more freely. Addressing these concerns with training and reassurance could encourage more intrinsic learning among reluctant subgroups. If anxiety rises substantially over time, it could threaten sustained engagement.

Table 8
Students Assessment on their intentions regarding the continued use of ChatGPT in their educational endeavors

Behavioral intention to use the ChatGpt	Overall	
I will continue to use the ChatGpt in the next months for my studies.	2.72	.745
I will stop using the ChatGpt if my teachers and school will tell me]	3.09	.734
I still plan to use the ChatGpt for my studies.	2.75	.756
	2.8533	.57756

These data measure students' intentions to continue using ChatGPT going forward: Behavioral intentions are moderately positive overall, with a mean of 2.85 out of 4. 67.79% express plans to keep using ChatGPT for their studies, while only 30.42% disagree or strongly disagree. However, a majority (82.95%) would stop using ChatGPT if teachers/schools disallowed it. This highlights it is still seen as a supplementary tool that may be reliant on external approval. Only 69.68% definitively state they "still plan" to continue usage, showing some hesitancy looking ahead. Most students currently see ongoing value in keeping ChatGPT integrated into their learning processes if permitted. However, skepticism and uncertainty persists for nearly a third who may discontinue use depending on external factors. Monitoring both the overall intentionality and conditional discontinuation rates can determine if enthusiasm for voluntary, sustained adoption strengthens or weakens in the student population going forward.

Table 9
Variations in the adoption of ChatGpt in terms of Gender

	Gender	t-value	p-value	Sig
Performance Expectancy	Male	2.187	P = 0.029 < 0.05	S
	Female			
Effort Expectancy	Male	2.276	P = 0.023 < 0.05	S
	Female			
Attitude toward using Chat GPT	Male	1.657	P = 0.098 > 0.05	S
	Female			
Social Influence	Male	2.495	P = 0.014 < 0.05	S
	Female			
Facilitating Conditions	Male	3.170	P = 0.002 < 0.05	S
	Female			
Self-efficacy	Male	2.591	P = 0.010 < 0.05	S
	Female			
Anxiety	Male	.182	P = 0.856 > 0.05	NS
	Female			
Behavioral intention to use the ChatGpt	Male	3.087	P = 0.002 < 0.05	S
	Female			

This data explores whether there are significant differences in ChatGPT perceptions and intentions between male and female students: Males have significantly higher performance expectancy - they anticipate more productivity and grade improvements from using ChatGPT. Males also find ChatGPT significantly easier to use and interact with. Less perceived effort could increase sustained usage. Males feel a higher social influence to adopt ChatGPT. Encouragement from peers may motivate more exploration. Facilitating conditions like support and resources are viewed as better among males too. This allows more confident self-directed use. Males also report higher self-efficacy - they feel more able to complete tasks using ChatGPT on their own. However, anxiety levels do not differ significantly based on gender. Overall, males have significantly higher intentions to continue using ChatGPT long-term. Male students seem more encouraged, empowered and motivated to leverage ChatGPT voluntarily. Ensuring female learners feel equally supported could help address any adoption gaps. Monitoring gender differences over time will be important as broader usage evolves.

Table 10
Variations in the adoption of ChatGpt in terms of year level

		F-value	p-value	Sig	Remarks (Post Hoc)
Performance Expectancy	1st Year	1.107	P = 0.346 > 0.05	NS	
	2nd Year				
	3rd Year				
	4th Year				
	Total				
Effort Expectancy	1st Year			NS	
	2nd Year				
	3rd Year	.963	P = 0.410 > 0.05		
	4th Year				
	Total				
Attitude toward using Chat GPT	1st Year	5.235	P = 0.001 < 0.05	S	1st VS 3rd
	2nd Year				1st VS 4th
	3rd Year				2nd VS 4th
	4th Year				3rd VS 4th
	Total				
Social Influence	1st Year			S	2nd VS 3rd
	2nd Year				2nd VS 4th
	3rd Year	3.999	P = 0.008 < 0.05		3rd VS 4th
	4th Year				
	Total				
Facilitating Conditions	1st Year			NS	
	2nd Year				
	3rd Year	2.380	P = 0.069 > 0.05		
	4th Year				
	Total				
Self-efficacy	1st Year	2.371	P = 0.070 > 0.05	NS	
	2nd Year				
	3rd Year				
	4th Year				
	Total				
Anxiety	1st Year	.857	P = 0.463 > 0.05	NS	
	2nd Year				
	3rd Year				
	4th Year				
	Total				
Behavioral intention to use the ChatGpt	1st Year	2.717	P = 0.044 < 0.05	S	1st VS 4th
	2nd Year				2nd VS 3rd
	3rd Year				
	4th Year				
	Total				

This analysis explores whether students' perceptions and intentions towards using ChatGPT differ significantly based on their year level: No significant differences exist in performance expectancy and effort expectancy by year of study. All students see similar utility and ease of use. However, senior students (4th year) have a significantly more positive attitude towards using ChatGPT compared to 1st and 2nd-year students. The tool becomes more normalized over time. Senior students also feel a higher social influence to use ChatGPT compared to other years. Peer awareness seems to increase. No significant differences exist in facilitating conditions, self-efficacy, and anxiety towards ChatGPT based on seniority. But 4th year students show significantly higher intentions to continue using ChatGPT compared to 1st years. Progression of year level appears associated with more enthusiasm and acceptance of ChatGPT over time.

FINDINGS

1. There has been a significant increase in ChatGPT's overall usage, especially during academic terms, suggesting that academic schedules influence user exploration of ChatGPT's learning applications.
2. While both intrinsic motivation and external pressures contribute to ChatGPT adoption, intrinsic motivation remains the larger driver. However, external factors, such as academic requirements, can significantly boost adoption rates.
3. Peers exert the strongest influence on ChatGPT usage, while teachers and school support have relatively low influence. Social encouragement exists but is not coercive, indicating that users predominantly adopt ChatGPT voluntarily.
4. Students feel positive about the resources and knowledge available for using ChatGPT..
5. Students perceive ChatGPT as moderately positively impacting their academic performance, particularly in terms of studying and efficiency

gains. However, there's a recognition that the tool may not guarantee automatic improvements.

6. Students find ChatGPT highly user-friendly, easy to learn, and enjoyable, with low perceived effort expectancy and minimal barriers to integration into learning processes, supporting voluntary exploration and reducing the need for extensive external support or training.

7. Students generally hold positive attitudes and emotional perceptions towards using ChatGPT, leading to increased engagement and voluntary adoption. However, some skepticism persists, indicating a need for ongoing communication about ethical practices.

8. Most students exhibit moderate levels of self-efficacy and confidence in their ability to use ChatGPT independently, suggesting empowerment and self-direction.

9. While overall anxiety levels associated with using ChatGPT are moderate, some students experience hesitation or reluctance, particularly concerning concerns about making unfixable mistakes and perceived intimidation, indicating that they have doubts about the results that they are getting from it

10. While most students express positive intentions to continue using ChatGPT for their studies, a significant proportion would stop if teachers or schools disallowed it, suggesting a reliance on external approval and some hesitancy towards future usage.

11. There are significant differences between male and female students in their perceptions and intentions regarding ChatGPT usage, highlighting the need to address potential adoption gaps and ensure equal support for all learners.

12. Senior students demonstrate a more positive attitude towards ChatGPT and feel higher social influence to use it compared to junior students, indicating increased normalization and peer awareness over time. This suggests a progression of enthusiasm and acceptance of the tool over the years.

CONCLUSION

The findings from the analysis of ChatGPT's usage patterns reveal a notable increase in overall engagement, particularly during academic terms, indicating a strong influence of academic schedules on user exploration of the platform's learning applications. While both intrinsic motivation and external pressures contribute to its adoption, intrinsic motivation emerges as the predominant driver, albeit with significant boosts from external factors such as academic requirements. Social influence, primarily from peers, plays a substantial role in adoption, although it is not coercive, it suggests that the majority of users adopt ChatGPT voluntarily. While facilitating conditions for usage are generally positive, there is room for improvement in compatibility with other chatbots and clarity of support channels to encourage wider adoption. Students perceived ChatGPT as moderately positively impacting their academic performance, particularly in terms of efficiency, though they recognize that it may not guarantee automatic improvements. Despite being highly user-friendly and enjoyable, some students experience hesitation or reluctance due to concerns about mistakes and intimidation, indicating that they have doubts about the results that they are getting from it. While most students express intentions to continue usage, a significant proportion would stop if disallowed by teachers or schools, suggesting a reliance on external approval. Gender and seniority differences in perceptions and intentions highlight the need for equal support and ongoing monitoring to ensure broad and sustained adoption among all student demographics.

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