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Factors Influencing the Acceptance of ChatGPT for Students: Analysis of UTAUT2 Framework with Personal Innovativeness

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ABSTRACT

ChatGPT has advanced significantly across various sectors, including education. The growing interest and potential acceptance of ChatGPT among students highlight the importance of understanding learners' perceptions. This study examines variables influencing student adoption and use of ChatGPT, particularly in education. The analysis uses the UTAUT 2 model combined with the PI (Personal Innovativeness) aspect. The factors studied are EE (Effort Expectancy), PE (Performance Expectancy), H (Habit), FC (Facilitating Condition), HM (Hedonic Motivation), and PI toward BI (Behavioral Intention). Data were collected from 101 respondents and quantitative data analysis using IBM SPSS Statistics 27. At the initial stage, the overall influence of all independent variables on BI was tested using the F-test. Then, the partial influence of each independent variable (EE, PE, H, FC, HM, PI) was tested using the T-test. A one-way ANOVA was used to compare BI based on respondent attributes, namely gender (G) and education level (EL). The findings indicated that PE and H are most influential variables on the intention to use ChatGPT. EE, FC, HM, and PI have no significant partial effects. Nevertheless, BI will still impact with 68% when all variables are combined. Gender and education level do not show significant differences in behavioral intention.

Keyword*: chatgpt, utaut 2, personal innovativeness, behavioral intention, education*

Faktor-Faktor Yang Mempengaruhi Penerimaan Chatgpt Oleh Mahasiswa: Analisis Kerangka Kerja UTAUT2 Dengan Inovasi Pribadi

ABSTRAK

ChatGPT telah berkembang signifikan di banyak sektor, termasuk sektor pendidikan. Minat yang meningkat dan potensi penerimaan ChatGPT oleh para pelajar menyoroti pentingnya memahami persepsi pelajar. Penulis meneliti variabel-variabel yang mempengaruhi adopsi dan penggunaan ChatGPT oleh pelajar, khususnya domain pendidikan, untuk mengamati bagaimana mereka melakukannya. Instrumen analisis menggunakan model UTAUT 2 dengan kombinasi aspek PI (Personal Innovativeness). Faktor-faktor yang dimaksud adalah EE (*Effort Expectancy*), PE (*Performance Expectancy*), H (*Habit*), FC (*Facilitating Condition*), HM (*Hedonic Motivation*), dan PI (*Personal Innovativeness*) terhadap BI (*Behavioral Intention*). Data dari 101 responden dikumpulkan dan dianalisis secara kuantitatif menggunakan perangkat lunak IBM Statistics 27. Tahap awal, pengaruh seluruh variabel independen terhadap BI diuji secara simultan dengan uji F. Setelahnya dilakukan uji secara parsial pada variabel independen (EE, PE, H, FC, HM, PI) terhadap BI dengan uji T. Uji perbandingan rata-rata untuk melihat perbedaan BI antar atribut responden menggunakan uji Anova satu arah. Atribut responden yang dimaksud adalah jenis kelamin (G) dan tingkat pendidikan (EL). Temuan menunjukkan bahwa PE dan H berpengaruh terhadap niat penggunaan ChatGPT. Secara parsial, EE, FC, HM, dan PI tidak berpengaruh signifikan terhadap BI. Secara simultan, niat perilaku tetap terpengaruh dengan nilai determinasi sebesar 68%. Jenis kelamin dan tingkat pendidikan tidak berbeda secara signifikan.

Kata kunci: chatgpt, utaut 2, keinovatifan pribadi, niat perilaku, pendidikan

INTRODUCTION

Artificial intelligence (AI) technology has advanced quickly in the last several years and is increasingly being applied in various sectors, including education. AI brings significant transformation in the way we access, manage, and utilize information. AI is being utilized in the education sector to produce more customized and adaptive learning experiences through online learning platforms and e-modules that can adjust to each individual's learning needs and pace. It also helps in analyzing student learning data to provide more precise feedback and improve teaching effectiveness. Along with the developments, AI is predicted to continue playing an important role in creating a more sustainable and all-encompassing educational system (Bartneck et al., 2021).

People's behavior in accepting and using AI technology varied widely and was affected by a number of variables, including perceived advantages, level of technical knowledge, and voiced concerns. Many people show enthusiasm for AI because of its ability to improve efficiency and convenience in daily life. AI has been widely adopted in some applications, like virtual assistants (like Alexa and Siri), product recommendations in e-commerce, and streaming services. In addition, the business sector uses AI for data analysis, process automation, and customer service improvement (Bartneck et al., 2021; Eosina et al., 2024).

In the education sector, AI is positively received as it can provide more personalized and effective learning solutions. AI-powered online learning platforms that customize content to students' needs are getting more and more well-liked. For examples, AI applications in education include interactive e-modules, virtual tutors, and automated grading systems. Despite the excitement, there are serious worries over the security and privacy of data. Concerns of data collection, storage, and utilization are brought up by the application of AI to personal data. These concerns are often connected with a lack of transparency from tech companies (Zhang and Aslan, 2021).

The sophisticated AI-based language model ChatGPT, developed by OpenAI, has evolved significantly in a number of fields. However, there has been a mixed response to ChatGPT in the education sector, marked by both excitement and apprehension. The majority of educators have a positive attitude toward incorporating information and communication technology (ICT) into their lessons and are aware of the advantages, which include enhanced communication, better information availability, and higher levels of student involvement. Higher education has used ChatGPT for a number of things, including as assignment feedback, facilitating collaborative learning, and creating individualized learning experiences (Xu et al., 2024).

Nonetheless, the increasing curiosity and possible broad acceptance of ChatGPT among students underscores the significance of comprehending student viewpoints, which are pivotal in ascertaining the efficacy of incorporating this instrument into the

learning process. The author will examine the variables influencing students' adoption and use of ChatGPT, particularly in the educational domain, in order to observe how they do so. In comparison to BI (behavioral intention), the following factors were examined: EE (effort expectancy), PE (performance expectancy), H (habit), FC (facilitating condition), HM (hedonic motivation), and PI (personal innovativeness). The analytical tool incorporates elements of PI (personal innovativeness) with the UTAUT 2 paradigm.

AI has developed rapidly in recent years, brought various innovationns that affect many aspects of human life (Bartneck et al., 2021). One particularly prominent and useful form of AI is ChatGPT, Chat Generative Pre-trained Transformer is what it stands for. OpenAI created the language model ChatGPT with the goal of comprehending and producing text that mimics human speech. An artificial intelligence model called ChatGPT was trained using millions of text data points from multiple sources. It is built on deep learning technology. Pre-training is the first phase of ChatGPT development. In order to teach the model linguistic patterns, sentence structures, and overall context, a significant amount of content from the internet is used during this training phase. The model learns how words and phrases relate to each other in various contexts. After the pre-training stage, the model is further trained on a more specific and high-quality dataset, including formatted dialogues. At this stage, the model is given more targeted and specific instructions to perfect its ability to produce text appropriate to the context of human conversation. When used, ChatGPT receives input in the form of text from the user and then generates a response based on the knowledge gained during training. The model uses the given conversational context to create coherent and relevant responses (Xu et al., 2024).

ChatGPT has various applications that are useful in various fields, namely customer service, education, writing and content, product development, and personal assistant. ChatGPT can be used to create chatbots for customer service that can answer inquiries from customers, offer technical assistance, or conduct order processing. This helps companies improve their customer service efficiency and reduce operational costs. In the education sector, ChatGPT can be used as a learning assistant that helps students understand lesson material, provides answers to questions, and even offers personalized study guidance. In the area of writing and content, ChatGPT can help writers by providing suggestions, drafting, or even generating complete content based on specific input. This is very useful for creating articles, blogs, or marketing content. In product development, ChatGPT can be used to gather feedback from users, guide the brainstorming process, and assist in user experience design. As a personal assistant, ChatGPT can function as a virtual assistant that helps users organize schedules, remind tasks, or provide relevant information quickly and efficiently (Xu et al., 2024).

Despite its many benefits, using ChatGPT also raises challenges and moral issues. The use of AI in conversation requires secure data management to protect user privacy. AI

models can reflect biases present in their training data, which can lead to inaccurate or inappropriate responses. Relying too much on AI for human interaction can reduce the quality of human relationships and reduce users' critical abilities (Bartneck et al., 2021).

ChatGPT is a sophisticated example of how AI technology can change the way we interact with machines. With its ability to understand and generate text that resembles human conversation, ChatGPT opens up opportunities in a variety of fields, from customer service to education. However, it is important to use this technology responsibly, taking into account the ethical challenges and impacts that may arise. With the rigChatGPT's capacity to comprehend and produce text that mimics human speech creates prospects in a range of industries, including education and customer service. Nonetheless, it's critical to use this technology sensibly, considering potential ethical dilemmas and effects. When used properly, ChatGPT can be a very helpful tool for enhancing the effectiveness and caliber of interactions in the online environment (Bartneck et al., 2021; Strzelecki, 2024).

In the ever-evolving digital era, recognizing the interest in and acceptance of new technologies by individuals is crucial for application developers and marketers. A thorough framework for assessing the variables influencing people's adoption and usage of technology is provided by the UTAUT (Unified Theory of Acceptance and usage of Technology) analysis model. When Venkatesh et al. presented UTAUT in 2003, they combined eight different theories that had previously been utilized to describe technology adoption behavior, giving rise to a more comprehensive and detailed understanding (Andreas, 2012; van der Waal et al., 2022).

According to UTAUT, there are four primary constructs that affect users' intentions and behavior when implementing technology:

Performance Expectancy (PE). PE is the extent to which people think that utilizing a specific technology will enable them to perform better at work. For example, how online learning applications can improve student learning achievement or how project management applications can increase team work efficiency.

Effort Expectancy (EE). EE assessing the technology's usability. Technology designed with an intuitive and easy-to-learn user interface tends to be adopted more quickly. This includes ease of navigation, ease of access, and adequate technical support.

Social Influence (SI). SI determine the degree to which people feel that those who matter to them—like family, friends, or coworkers—think that they ought to use the technology. Social influence can be powerful, especially in the context of a community or collective work environment.

Facilitating Conditions (FC). FC describes how much a person believes that the technical support and infrastructure needed to use a technology are available. This includes hardware availability, internet access, and adequate training and technical support.

The original UTAUT model, first presented by Venkatesh et al. (2012), is expanded upon by the UTAUT2 model. In order to better comprehend technology adoption in a consumer environment as opposed to only an organizational context as in the original UTAUT, UTAUT2 introduced a number of new constructs. In addition to adding three additional constructs, UTAUT2 keeps the four original constructs from UTAUT and takes into account how various moderators may affect how the primary constructs and technology intention and use interact. Several elements from the original UTAUT are still in place, including performance expectancy, effort expectancy, social influence, and facilitating conditions (Andreas, 2012; Hidayat et al., 2020; Kašparová, 2023; Maharani, 2021; Osei et al., 2022; Palau-Saumell et al., 2019; Putri et al., 2023; Shi et al., 2022; Zhu et al., 2023).

Price value (PV), habit (H), and hedonic motivation (HM) are additional constructs in UTAUT2. Hedonic motivation is the term used to describe the enjoyment or fulfillment that comes from using technology. Because so many technologies and applications are utilized for leisure and enjoyment, hedonic motivation is seen significant in the context of consumers. Price value evaluates how much a person believes using technology will cost them. The pricing value will be positive and the intention to adopt the technology will increase if the advantages are thought to outweigh the costs. The degree to which people use technology out of habit is measured by habit. Automated behavior is reflected in habits, which can have a significant impact on technology use (Andreas, 2012; Hidayat et al., 2020; Kašparová, 2023; Osei et al., 2022; Palau-Saumell et al., 2019; Putri et al., 2023).

The following moderators' roles in altering the connection between important constructs and technology intention and use are also taken into account by UTAUT2. Age, gender, experience, and voluntariness of use are the moderator variables under consideration. Depending on the age of the user, the main construct's influence may change. The ways in which each construct affects technology goals and use may also vary depending on gender. Adoption of new technologies might be influenced by prior experience with related technology. Within the variable of voluntary or required use, the aim and utilization of technology can be impacted by voluntary or mandatory use (Osei et al., 2022).

A more thorough framework for comprehending technology adoption and use in a consumer setting is provided by the UTAUT2 paradigm. UTAUT2 offers a more comprehensive understanding of the variables affecting technology acceptance by incorporating additional constructs like hedonic motivation, price value, and habits as well as taking moderator aspects like age, gender, experience, and voluntariness of use

into account. This enables developers, marketers, and researchers to design more effective strategies to increase technology adoption and use in various sectors (Hidayat et al., 2020; Palau-Saumell et al., 2019; Zeebaree et al., 2022).

It is crucial to use the technology acceptance and UTAUT analysis methodology because it is able to provide an overview of barriers and opportunities in using technology, understand how to market technology more effectively, understand how to improve the quality of user experience, and understand user behavior that supports decision making by technology providers. Through an awareness of the elements that impact the adoption of technology, developers can detect any obstacles that consumers might encounter. This allows them to customize features, improve the user interface, and provide the support necessary to overcome those obstacles. Knowing which aspects most influence technology acceptance allows companies to develop more targeted marketing strategies. For example, if social influence proves important, marketing campaigns can focus on testimonials and recommendations from early adopters or influential figures (Andreas, 2012).

By optimizing performance expectations and effort, companies can improve user experience, which in turn increases user adoption and retention rates. The features most appreciated by users can be further developed, while less used elements can be removed or improved. Data and insights from UTAUT analysis can help management make better decisions regarding product development, resource allocation, and technology implementation strategies (Zeebaree et al., 2022).

Within the framework of the world of education, using the UTAUT model can provide a more in-depth picture of the acceptance of stakeholders (students, teachers, school employees and parents) towards technology in education. As an example of applying UTAUT, let's see how this model can be applied regarding the use of education during the COVID-19 pandemic. A growing number of educational institutions are utilizing online learning tools including Microsoft Teams, Zoom, and Google Classroom (Lehmann et al., 2023).

In the performance expectations section, teachers and students believe that this application will allow the teaching and learning process to continue without interruption. In terms of business expectations, consumers of all ages and technical proficiency adopt apps with straightforward interfaces and user-friendly features more quickly. In terms of social influence, colleagues' recommendations and support from educational institutions have an impact on the adoption of this technology. Regarding the enabling circumstances, the adoption of this application is contingent upon the availability of gadgets like computers and smartphones in addition to sufficient internet access (Tolba and Youssef, 2022).

So understanding people's interest and acceptance of technology using the UTAUT analysis model is very important in the current digital era. This model offers developers and marketers useful insights for developing, promoting, and supporting technology that is relevant and helpful to users, in addition to aiding in the identification of critical elements impacting technology adoption. When used appropriately, UTAUT can be a highly powerful instrument for maximizing technology adoption and use across a range of sectors (Lehmann et al., 2023).

The author has seen several ChatGPT acceptance studies using the UTAUT model analysis. In finance, (Bouteraa et al., 2024b) research shows that the use of ChatGPT is positively impacted by performance standards, social influence, enabling circumstances, awareness, inventiveness, and system quality; on the other hand, technology self-efficacy and IT features have a negative impact. It's interesting to note that research confirms that central bank support has a moderating effect that is favorable for social influence and innovation, but bad for the relationship between bankers' intention, awareness, and self-efficacy in technology.

Alshammari & Alshammari (2024) in his research showed that students' intention to use ChatGPT was strongly influenced by the enabling conditions (FC) and performance expectations (PE). The results of effort expectancy (EE) and social influence (SI) were negligible, in contrast to predictions. by outlining the main elements that affect the use of ChatGPT.

In other studies, social influence, technological self-efficacy, educational self-efficacy, performance expectations, and individual anxiety all had a beneficial impact on ChatGPT usage. On the other hand, usage was found to be adversely affected by student integrity (Bouteraa et al., 2024a).

Likewise (Chan and Zhou, 2023) research showed a small negative link between intended use of generative AI and perceived cost, and a high positive correlation between perceived value and intention to use. Ge & Wu (2023) suggests that key elements in its execution include societal influence, enabling conditions, data security, trust, and the performance and effort demands of professional software developers.

The strongest determining factor for Behavioral Intention (BI) in using ChatGPT in learning is Facilitating Conditions (FC). BI (Behavioral Intention) is the most important determinant of acceptance and use of ChatGPT (Habibi et al., 2023; Hasan et al., 2023; Polyportis and Pahos, 2024; Strzelecki, 2024). Menon & Shilpa, 2023 and Shilpa & Menon, 2024 research showed that the four UTAUT characteristics can be used to describe users' interaction and engagement with ChatGPT, as can two expanded constructs: perceived interactivity and privacy concerns. Additionally, the study discovered that expertise and age can mitigate the effects of several characteristics on ChatGPT use.

According to reports, performance expectations (PE), hedonic motivation (HM), and varied habit (H) have the greatest effects on behavioral intention (BI). Use behavior is primarily influenced by behavioral intentions, which are followed by habits and enabling circumstances (Strzelecki, 2024). Whereas (Tanantong and Wongras, 2024) revealed that the decision to adopt AI is significantly influenced by the factors perceived value, perceived autonomy, effort expectations, and facilitating situations. While intention is not directly impacted by social influence or faith in AI technology, perceived value is directly impacted by social influence. Effort expectancy is positively impacted by trust in AI technology (EE).

Data analysis on sample attributes showed that class was the most important factor, followed by age and major, out of the four factors that were examined: gender, age, and major. Graduate students showed a heightened worry for the security risks related to ChatGPT's adoption as well as an enhanced understanding of the technology's possible limitations in addressing academic concerns (Xu et al., 2024).

RESEARCH METHODS

Analysis of the acceptance and use of ChatGPT using the UTAUT 2 model in this study is limited by the variables EE (effort expectancy), PE (performance expectancy), H (habit), FC (facilitating condition), and HM (hedonic motivation). PI (personal innovativeness) was added as an independent variable which is predicted to influence acceptance and use of ChatGPT (Bouteraa et al., 2024b). These six variables were analyzed for their influence on BI (Behavioral Intention). BI is the most important factor determining the use of ChatGPT (Habibi et al., 2023; Hasan et al., 2023; Polyportis and Pahos, 2024; Strzelecki, 2024). The alternative hypothesis used in this research can be shown in Figure 1.

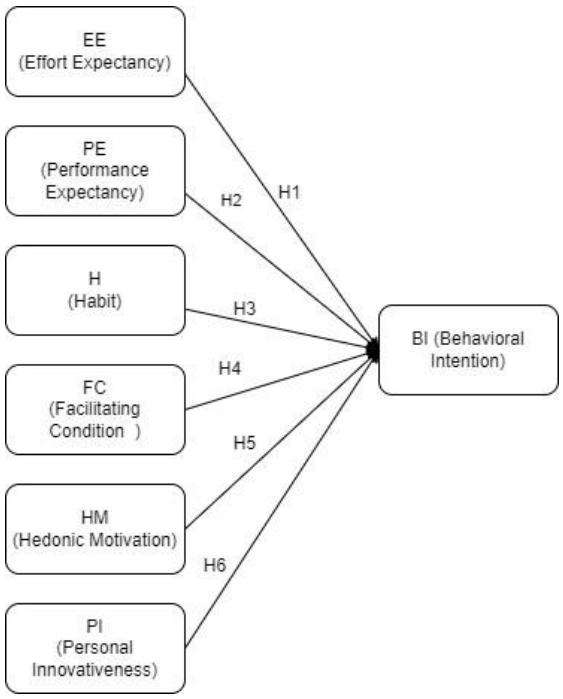

Figure 1. Alternative hypothesis regarding the influence of EE, PE, H, FC, HM, and PI on BI.

Questionnaire data was taken from secondary data from 101 non-random samples who were willing to fill out the questionnaire. The secondary data sample profile consists of graduates or currently studying at junior high school to master's/doctoral level. Age ranged from less than 15 years to more than 30 years. The total number of men respondents was 51 people and 50 women respondents. A total of 40 respondents has not used ChatGPT, the remaining 61 respondents have used ChatGPT. Respondent data can be seen in Table 1.

Table 1. Education level and gender of respondents

Last Education Level	Number of Respondents	Age Range (year)	Men	Women
SMP	18	<15 - 30	15	3
SMA	29	15 - >30	11	18
S1	53	15 - >30	25	28
S2-S3	1	>30	-	1

The questionnaire instrument uses a 5 Likert scale with each independent variable containing 2-4 questions. The list of questions for each variable is detailed in Table 2. Quantitative data processing using IBM SPSS Statistics 27 software. In the initial stage, the influence of all independent variables on BI was also tested simultaneously with the F test. After testing the simultaneous influence of the variables, then the partial influence of each independent variable (EE, PE, H, FC, HM, PI) on BI was tested using the T test. The average comparison test to see the differences in BI between respondents' attributes used the 1-way Anova test. The attributes in question are gender (JK) and education level (TP).

Table 2. List of Statements in the Research Questionnaire

No	Variable	List of statements on the questionnaire
1	EE *(Effort Expectancy)*	1) It was easy for me to learn how to use ChatGPT. 2) My interactions with ChatGPT were clear and very understandable. 3) It was very easy for me to become proficient with ChatGPT.
2	PE *(Performance Expectancy)*	1) I believe ChatGPT is useful in my studies. 2) Using ChatGPT increases the chances of achieving important things in studies. 3) Using ChatGPT helps me complete tasks and projects faster. 4) Using ChatGPT increases my productivity in studies.
3	H *(Habit)*	1) Using ChatGPT has become a habit for me. 2) I have to use ChatGPT. 3) Using ChatGPT has come naturally to me.
4	FC *(Facilitating Condition)*	1) ChatGPT is compatible with the technology I use. 2) I can ask for help from others when I experience difficulties minta bantuan dari orang lain ketika saya mengalami kesulitan
5	HM *(Hedonic Motivation)*	1) Using ChatGPT is fun. 2) Using ChatGPT is a lot of fun. 3) Using ChatGPT is very entertaining.
6	PI *(Personal Innovativeness)*	1) I like experimenting with new information technologies. 2) Among my family/friends, I am usually the first to try technology. 3) In general, I do not hesitate to try new information technologies.
7	BI *(Behavioral Intention)*	1) I intend to continue using ChatGPT in the future. 2) I will always try to use ChatGPT in my studies. 3) I plan to continue using ChatGPT regularly.

RESULT AND DISCUSSIONS

The data processing results indicate that the six independent variables (PE-Performance Expectancy, EE-Effort Expectancy, H-Habit, FC-Facilitating Condition, HM-Hedonic Motivation, and PI-Personal Innovativeness) have a 68% coefficient of determination on BI (Behavioral Intention). From these data it can be concluded that the influence of 6 factors, namely expectations of effort, performance expectations, habits, facilitating conditions, pleasure motivation, and personal innovation have a 68% influence on behavioral intentions to use ChatGPT. The other 32% may be influenced by other factors, such as non judgemental expectancy (Slepankova, 2023) factor. The degree to which a person believes that employing a system will rob him or her of bias and personal judgment is known as nonjudgmental expectancy, or NE. Students at universities don't worried about prejudices or judgments since they view AI chatbots as an impartial communication tool (Slepankova, 2023). Other factors can further explore on the initiation of using ChatGPT is risk and limitation for student in health sector (Sallam et al., 2023) and trust (Choudhury and Shamszare, 2023).

Table 3. Coefficient of Determination of 6 Independent Variables (PI, FC, H, EE, HM, PE) on BI

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.836[a]	.699	.680	1.508

a. Predictors: (Constant), PI, FC, H, EE, HM, PE

The F test results indicate a significance level of 0.000b < 0.05 so it can be concluded that there is an influence of the 6 variables PI, FC, H, EE, HM, PE simultaneously on BI.

Table 4. The Simultaneous Effect Test of Variables PI, FC, H, EE, HM, PE on BI

ANOVA[a]						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	496.960	6	82.827	36.404	.000[b]
	Residual	213.872	94	2.275		
	Total	710.832	100			

a. Dependent Variable: BI

b. Predictors: (Constant), PI, FC, H, EE, HM, PE

Testing the influence of each variable (partial) on **behavioral intents (purpose to utilize)** ChatGPT shows that the significance level is EE 0.185 > 0.05, PE 0.003 < 0.05, H 0.000 < 0.05, FC 0.130 > 0.05, HM 0.979 > 0.05, and PI 0.300 > 0.05**.** Thus, it can be said that the intention to utilize ChatGPT is not much impacted by the expectancy of effort (EE) element. Use of ChatGPT intention is significantly influenced by expectations of ChatGPT performance (PE). Intention to use ChatGPT is significantly influenced by habit (H). The intention to use ChatGPT is not significantly impacted by conditions that enable (FC) ChatGPT use. Likewise, there is no discernible relationship between intention to use ChatGPT and pleasure motivation (HM) or personal innovation (PI). Therefore, it is evident from this research that only the Expectations for ChatGPT performance (PE) and Habits (H) components have a substantial impact on the intention to use ChatGPT if these factors operate independently (partially).

Table 5. T Test Results for each PI, FC, H, EE, HM, PE variable on BI

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
	Model	B	Std. Error	Beta	t	Sig.
1	(Constant)	.379	.844		.450	.654
	EE	.137	.102	.130	1.334	.185
	PE	.299	.099	.348	3.012	.003
	H	.417	.087	.444	4.768	.000
	FC	-.197	.129	-.122	-1.528	.130
	HM	.003	.118	.003	.027	.979
	PI	.113	.108	.100	1.043	.300

a. Dependent Variable: BI

The multiple linear regression formula between the dependent variable BI and the independent variables EE, PE, H, FC, HM, and PI based on the calculation results is as follows:

$$BI = 0{,}379 + 0{,}137EE + 0{,}299PE + 0{,}417H - 0{,}197FC + 0{,}003HM + 0{,}113PI$$

From the formula it can be seen that the intercept value is 0.379 and the most influential values are H and PE. Performance expectations (PE) can be interpreted as the expectations of ChatGPT users (or those who want to use) in the form of users' beliefs that ChatGPT is useful in their studies. They also have the hope that using ChatGPT can raise the likelihood that they will succeed in critical aspects of their education. Additionally, the hope of ChatGPT users is that tasks and projects are completed more quickly. In the end, users hope that ChatGPT can increase the productivity of respondents in the study. The significant influence of PE on BI is in line with the findings of earlier researchers (Alshammari and Alshammari, 2024; Bouteraa et al., 2024a, 2024b; Ge and Wu, 2023; Polyportis and Pahos, 2024; Shilpa and Menon, 2024; Strzelecki, 2024; Pasaribu, 2021; Pasaribu and Kemora, 2022).

The intention to use ChatGPT is significantly influenced by habit (H). The habit under consideration is the respondent's belief that they must use ChatGPT or that it has become a daily ritual (habit). According to the respondents, utilizing ChatGPT came naturally to them. The findings of this investigation are consistent with those of (Strzelecki, 2024). He discovered that habit (H) and performance expectancy (PE) had the greatest effects on behavioral intention. The habit component (H), which significantly affects the intention to use (BI) a new technology, is consistent with earlier research when examined in a larger research setting (Ciftci et al., 2023; Julita and Susy Suhendra, 2023; Wibowo and Sobari, 2023).

The author wants to know whether the respondents' attributes in the form of gender and level of education have different intentions to use ChatGPT (BI) or not. The results showed that the standard error was 0.415 (men) and 0.322 (women), both > 0.05 so there was no difference. The significance level is 0.114 or > 0.05. This shows that both men and women have the same tendency to intend to use ChatGPT. The descriptive analysis of the respondents' intention to use ChatGPT, broken down by gender, shows that there are no appreciable differences in this area between men and women. Specifically, the mean intention to use ChatGPT is 10.98 for men and 10.14 for women, with standard errors of 0.415 and 0.322, respectively. The lack of statistical significance in the intention difference between the genders is further supported by the significance level of 0.114, which is higher than the 0.05 criterion. These results are in line with earlier studies that suggested gender might not be a significant predictor of technology adoption behavior (Venkatesh et al., 2012). Consequently, both men and women show similar tendencies towards intending to use ChatGPT, indicating that gender does not play a crucial role in this contex.

Table 6. Comparison of BI for men and women

Descriptives

BI

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Laki-laki	51	10.98	2.963	.415	10.15	11.81	3	15
Perempuan	50	10.14	2.277	.322	9.49	10.79	7	15
Total	101	10.56	2.666	.265	10.04	11.09	3	15

Table 7. Significance level of BI difference test between men and women

ANOVA

BI

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	17.831	1	17.831	2.547	.114
Within Groups	693.000	99	7.000		
Total	710.832	100			

The same thing also happens in the education level category. The difference test using one-way ANOVA shows that the standard error for SMP, SMA, and SI-S2-S3 respectively is 0.473; 0.483; and 0.398, or > 0.05. The significance level shows 0.999 or > 0.05, thus indicating there is no difference between each level of education regarding BI. This means that both respondents with junior high school, high school and S2-S3 education have the same intention to use ChatGPT.

Table 8. Comparison of BI among respondents with TP SMP, SMA, and SI-S2-S3

Descriptives

BI

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
SMP	18	10.56	2.007	.473	9.56	11.55	7	15
SMA	29	10.55	2.599	.483	9.56	11.54	7	15
S1,S2,S3	54	10.57	2.924	.398	9.78	11.37	3	15
Total	101	10.56	2.666	.265	10.04	11.09	3	15

Table 9. Significance Levels of BI Difference Tests from SMP, SMA, and S1-S2-S3 TP attributes

ANOVA

BI

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.011	2	.006	.001	.999
Within Groups	710.821	98	7.253		
Total	710.832	100			

Table 10. Test of differences between education level attributes on BI
Multiple Comparisons

Dependent Variable: BI						
Bonferroni						
		Mean Difference			95% Confidence Interval	
(I) TP	(J) TP	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
SMP	SMA	.004	.808	1.000	-1.96	1.97
	S1,S2,S3	-.019	.733	1.000	-1.80	1.77
SMA	SMP	-.004	.808	1.000	-1.97	1.96
	S1,S2,S3	-.022	.620	1.000	-1.53	1.49
S1,S2,S3	SMP	.019	.733	1.000	-1.77	1.80
	SMA	.022	.620	1.000	-1.49	1.53

The research results also show that the average comparison test between education level (TP) attributes is not significantly different with a significance level value of 1 > 0.05. From table 10 it can be explained that the average difference test between BI at TP SMP and SMA or SMP and SI-S2_S3 is not significantly different. Likewise, tests between attributes of high school and S1-S2-S3 education levels. Therefore, it can be said that educational attainment has no bearing on a person's intention to utilize ChatGPT.

CONCLUSION

An Artificial Intelligence (AI) with a role in education is called ChatGPT. Acceptance and usage of ChatGPT can be observed in the UTAUT 2 construct known as behavioral intention (BI) or in the variable intention to utilize ChatGPT. Expectations for ChatGPT performance (performance expectancy) and usage habits (habit) are the main elements influencing the inclination to use ChatGPT. Intention to utilize ChatGPT is not significantly impacted by expectations about effort (EE), facilitating conditions (FC), pleasure motivation (HM), and personal innovation (PI). With a determination of 68%, the factors PE, H, EE, FC, HM, and PI will still have an impact on the behavioral intention to utilize ChatGPT if they operate in tandem. Gender and education level are not significantly different in behavioral intentions in using ChatGPT.

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