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## Unveiling the Pathways: Exploring Influential Factors Shaping the Intentions to Engage with ChatGPT

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### Abstract

Artificial intelligence (AI), notably embodied in ChatGPT, has transformed various sectors, including education and content creation. Initially conceptualized in the 1950s, AI's integration into education has facilitated personalized learning and dynamic evaluations. ChatGPT, an AI language model, exhibits advancements in natural language processing, aiding users in generating custom content. ChatGPT has rapidly gained popularity, reaching over 100 million monthly users. Its educational potential lies in providing tailored learning experiences and streamlining administrative tasks. However, there is a lack of research in the literature on factors influencing the use of ChatGPT among university students in Malaysia for educational purposes. Therefore, the objective of this review paper is to explore the factors that contributed to the intention to use ChatGPT which include academic content creation, information seeking, novelty, convenience, perceived usefulness and perceived ease of use. This study will use quantitative research methodology and a questionnaire will be created for the target respondents, the undergraduate students at Multimedia University at the Cyberjaya campus. A minimum of 109 responses will be collected for this study and the data will be processed for data analysis, using the SPSS software to analyze the collected data. The intention to ChatGPT among undergraduate students at MMU Cyberjaya was notably impacted by academic content creation, information seeking, convenience and perceived usefulness. In contrast, novelty and perceived ease of use did not exhibit significant influence. In summary, this study aims to provide valuable insights into the

factors influencing the use of ChatGPT among university students in MMU Cyberjaya, offering significant implications for academics, researchers, policymakers, and AI developers. The outcome of this study holds significance for academics, researchers, policymakers and AI developers, contributing to their understanding of how individuals engage with and derive meaning from ChatGPT software in the education sector. The study emphasizes how difficult it is for schools to adapt to new technologies and how crucial it is to address a variety of issues in order to do so successfully. When integrating ChatGPT and other educational technologies, executives, education leaders, and other stakeholders should consider these factors. Policymakers could create policies addressing privacy and security issues, and educational institutions should build security, usability, and practicality into their digital plans.

**Keywords:** Undergraduate Students, Intention to use ChatGPT, Academic Content Creation, Information Seeking, Novelty, Convenience, Perceived Usefulness and Perceived Ease of Use

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## 1.0 Introduction

Artificial intelligence (AI), a nascent field in computer science, appears to possess a transformative influence on society, industry and health (Rowland, 2020). Scientists first looked into the idea of artificial intelligence (AI) in the 1950s, while chatbots and AI were developing as technologies (Oravec, 2019). According to Haenlein et al. (2019), “artificial intelligence” refers to a system’s ability to effectively analyze external data, acquire knowledge from it and utilize that information to achieve specific goals and tasks by making flexible adjustments. The increasing accessibility of artificial intelligence (AI) has led to its widespread adoption in the field of education.

AI in mixed-learning settings enables customized learning, dynamic assessments and meaningful interactions (Zhang & Aslan, 2021). There is an argument suggesting that with the advancement of AI, an increasing number of individuals would rely on computers for knowledge and learning, which might potentially harm education and lead to a decline in societal intelligence. A recent study has indicated that AI solutions might serve as effective replacements for significant administrative, personnel and educational roles (Keiper et al., 2023). In addition, e-learning resources, such as video conferencing, learning management systems, gamification, virtual reality, AI-driven adaptive platforms, collaborative tools and mobile applications, provided a variety of educational advantages (Sankey & Marshall, 2023).

Nevertheless, there are drawbacks associated with this approach, including inadequate connectivity, the potential for diversion, the absence of face-to-face interactions and substantial expenses (Ali et al., 2023). Furthermore, the incorporation of AI improves effectiveness and customization by providing data-based analysis and adapting content to meet user requirements. Hence, ensuring a good and comprehensive educational experience still relies on ethics, teacher preparation and human contact. With the continuous progress of technology, the increasing prevalence of AI is anticipated, necessitating ongoing endeavours to tackle privacy problems and uphold the crucial function of educators (Nguyen et al., 2023).

Moreover, natural language processing has advanced thanks to the ChatGPT artificial intelligence language model, which provides customized instructional support.

Potential advancements may have resolved issues related to bias and data privacy in AI models while simultaneously enhancing the user-friendliness and integration of AI in e-learning systems.

Furthermore, the advent of ChatGPT, an AI-powered interface and one of the chatbots, has significantly transformed the landscape of internet-based technology since its inception (Jishnu et al., 2023). Hetler (2023) described ChatGPT as an AI chatbot that uses natural language processing to mimic human speech. It can generate many forms of written material, such as emails, articles, essays, code and social media posts, while also being capable of replying to user questions. ChatGPT is designed to generate spontaneous and colloquial writing as a reaction to user prompts. Hence, AI technology will give people succinct answers to their inquiries (Jishnu et al., 2023). ChatGPT was developed and propelled by Open AI, a non-profit company established in 2015. The organization was established by a consortium of entrepreneurs and scholars, which included Sam Altman and Elon Musk (Jishnu et al., 2023).

ChatGPT has demonstrated remarkable progress in the field of educational technology, especially in the integration of conversational AI. The AI model's remarkable understanding of context and natural language results from extensive language training conducted over several years (Shaengchart et al., 2023). The potential of ChatGPT in education is immense since it can provide students with personalized learning experiences. This is achieved by adjusting the level of complexity of the learning materials based on the individual development of each learner. In addition, ChatGPT can streamline administrative tasks such as evaluating, maintaining records and offering students immediate feedback on their assignments (Shaengchart et al., 2023).

Moreover, artificial intelligence-generated content, also known as AIGC, is regarded as one of the most captivating emerging technologies. Users can employ artificial intelligence (AI) to autonomously generate content tailored to their specific requirements, including text, photos, and videos (Wu et al., 2023). The continual development of AI algorithms and network topologies has led to significant breakthroughs in AIGC. In 2022, leading technology firms created and improved several AIGC products using the cited technical developments. OpenAI's DALL-E-2 can

generate high-fidelity visuals accompanied by intricate explanations, whereas Meta's Make-A-Video directly converts text into video format (Wu et al., 2023). OpenAI released the public version of ChatGPT in late 2022, garnering more attention because of its impeccable ability to respond accurately to any human request given in natural language.

In addition, as an AIGC member, ChatGPT has exhibited robust proficiency in several language comprehension and generation tasks, such as multilingual machine translation, code debugging, phrase construction, mistake recognition and even refusal of inappropriate requests (Wu et al., 2023). Unlike previous chatbots, ChatGPT can remember user inputs, enabling seamless and uninterrupted communication. In March 2023, OpenAI's GPT-4 (the premium version) was launched, resulting in major changes to ChatGPT, including the introduction of additional functionalities such as summarising articles, annotating pictures, detecting plagiarism and analyzing charts (Wu et al., 2023).

Furthermore, the uses and gratifications theory (UGT) is one of the key ideas that scholars employ to understand media consumption, as noted by Malik et al. (2016). Though the notion was postulated as early as the 1940s (Chen et al., 2023), it was not until the late 1950s that it acquired popularity when researchers began looking into the effects of mass media campaigns (Blumler, 1979). At the time, research indicated that mass media would have the same effect on all of its audiences. On the other hand, according to Katz et al. (1973), UGT sees viewers as active rather than passive. Therefore, based on individual differences, the UGT implies that the impact will vary. Understanding the motivations for consumption can be done using UGT from the very beginning of any new media. The uses and gratification theory-based study focuses on four factors: academic content creation, information searching, novelty, and convenience that affect ChatGPT usage. Lastly, according to Martínez et al. (2020), attitudes towards technology include preconceived notions and beliefs that can affect how students are taught and learn, as well as how well they perform academically and professionally. This is especially true for students who use technology as a study aid. An increasing number of scholars are exploring the field of technology-integrated education as more educators use it to improve learning (Shaengchart et al., 2023). Hence, the Technology Acceptance Model (TAM), which Davis created in 1986, asserts that a technology's usefulness and

ease of use have a significant impact on users' intentions to adopt it. Behavioural intention, in this sense, describes a person's deliberate planning or propensity to participate in or abstain from particular behaviors (Shaengchart et al., 2023). As a result, researchers are able to predict consumers' willingness to adopt technology by using the TAM model to analyze users' personal views.

## **2.0 Problem Statement**

There is a lack of research in the literature on factors influencing the use of ChatGPT among university students in Malaysia for educational purposes (Yifan et al., 2023). Thus, this study fills this gap by identifying the factors that influence the intention to use ChatGPT among undergraduate students, specifically at Multimedia University at the Cyberjaya campus in Malaysia. Also, Tiwari et al. (2023) claim that there is not much research currently available on ChatGPT usage in the education sector due to its novelty. Hence, this study seeks to understand the behavioural intention to use ChatGPT among undergraduate students using factors such as academic content creation, information seeking, novelty, convenience, perceived usefulness and perceived ease of use.

Furthermore, university students today face several issues, such as growing expenses, information overload, the constant need to learn and grow new skills and the short time limits for meeting the desired learning objectives (Aver, 2021). Consequently, cutting-edge AI solutions like ChatGPT can be helpful in overcoming these obstacles by enhancing learning process efficiency at a low cost and enhancing the acquisition of new skills by offering a customized educational experience (Sallam, 2023). As a result, increasing university students' AI literacy seems to be crucial for their ability to use these tools responsibly, ethically and competently (Hornberger, 2023).

## **2.1 Research Questions**

This study addresses the following research questions:

1. What is the relationship between academic content creation and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus?
2. What is the relationship between information seeking and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus?
3. What is the relationship between novelty and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus?
4. What is the relationship between convenience and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus?
5. What is the relationship between perceived usefulness and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus?
6. What is the relationship between perceived ease of use and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus?

## **2.2 Research Objectives**

The objective of this study is to examine the factors influencing the intention to use ChatGPT among undergraduate students at Multimedia University's Cyberjaya campus. Hence, this study has the following specific objectives:

1. To identify the relationship between academic content creation and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus.

2. To identify the relationship between information seeking and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus.
3. To identify the relationship between novelty and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus.
4. To identify the relationship between convenience and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus.
5. To identify the relationship between perceived usefulness and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus.
6. To identify the relationship between perceived ease of use and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus.

### **3.0 Literature Review and Hypotheses Development**

This section reviews recent literature related to this research.

#### **3.1 Underpinning Theories 3.1.1 Uses and Gratifications Theory (UGT)**

Uses and gratification theory can be defined as a theory from the sociology of mass communication that looks at how audiences use media to make choices and establish objectives (Drew, 2023). Jishnu et al. (2023) assert that the uses and gratifications theory (UGT) is a prominent framework scholars employ to understand media consumption. Despite being hypothesized as early as the 1940s (Chen et al., 2023), the theory gained traction in the late 1950s when scholars started examining the effects of mass media campaigns (Blumler, 1979). Accordingly, the UGT suggests that the impact will vary



depending on the individual. From the beginning of every new medium, UGT can be used to comprehend the reasons behind usage.

The UGT focuses on the reasons behind using a specific medium and the variables influencing those reasons. It also suggests that different people use the media for various purposes. The uses and gratifications hypothesis has been applied to several internet-based technologies since the introduction of the internet (Jishnu et al., 2023). Research has uncovered the reasons behind several social media sites, including Facebook, Instagram, TikTok, YouTube, WhatsApp and more (Menon, 2022). Additionally, some research uses the theory of uses and pleasure to determine why people use artificial intelligence applications. Also, the motivations behind employing artificial intelligence-powered virtual in-home voice assistants Alexa and Siri have been studied (Malodia et al., 2021).

Jishnu et al. (2023) stated that despite ChatGPT's popularity among learners, very little research has been done on why they use it. Thus, this study looks at ChatGPT's various applications and satisfactions from the viewpoint of the student. As a result, this study employs ChatGPT, an AI-powered chatbot and the uses and gratifications theory to identify particular gratifications beyond those found in traditional and new media. In short, the uses and gratifications theory (UGT) explores varied media motivations and effects on individuals, including its application to internet technologies and the underexplored usage motivations of the AI-powered chatbot ChatGPT, particularly among students.

### **3.2 Technology Acceptance Model (TAM)**

Davis created the Technology Acceptance Model (TAM), a theoretical framework that explains why individuals accept information technology based on the principle of rational behaviour (Shaengchart et al., 2023). TAM holds that how a person really uses a technology is determined by their behavioural intention. According to Shaengchart et al. (2023), there is a notable effect that perceived usefulness and ease of use have on a person's behavioural attitude. Together with other external variables, perceived ease of

use also has a substantial impact on perceived usefulness. Accordingly, perceived usefulness and ease of use are two crucial factors that have a beneficial impact on a user's behavioural intention (Woodeson, 2022).

Furthermore, according to Limna et al. (2023), the term "easy to use" describes how users perceive the ease of comprehension of a system and the amount of time required to utilize it efficiently. Users' perceptions of a system's ease of use are a good indicator of how willing they are to interact with it (Shaengchart et al., 2023). This is a crucial component for the initial adoption of technology as well as its continued use. Research indicates that users are more inclined to frequently utilize a technology if they perceive it to be user-friendly (Prastiawan, 2021). However, perceived usefulness describes how much a person believes technology may increase their productivity and efficiency (Shaengchart et al., 2023). It is an assessment of the ways in which technology can make obtaining desired services easier.

Finally, it is critical to talk about the issues and challenges with TAM-to-ChatGPT adoption and utilization in order to determine future research paths and demands. The extent to which an individual is motivated to utilize technology is frequently dictated by their perception of its value. Additionally, when individuals see technology as useful, they are more likely to utilize it. Accordingly, the advantages of technology use are closely tied to concepts like productivity and efficacy (Wardana et al., 2022). The two TAM variables, which are perceived usefulness and perceived ease of use, are highlighted in this study.

### **3.3 Dependent Variable**

#### **3.3.1 Intention To Use ChatGPT**

The goal of carrying out actions or duties utilizing a certain method is known as behavioural intention (Hetler, 2023). Additionally, Hetler (2023) stated that ChatGPT is an artificial intelligence (AI) chatbot that uses text summarization and natural language processing to mimic human speech. ChatGpt has evolved into a vital academic resource for undergraduate students (Jishnu et al., 2023). It is because the platform is 24/7

accessible and customizable that students may learn more rapidly and have less stress. Given ChatGPT's extensive applicability, its usage in education is essential. It helps students improve their learning experiences by giving them opportunities that increase their intention to use ChatGPT (Hetler, 2023).

Rudolph (2023) examines the applicability of ChatGPT in higher education. The study looks at ChatGPT's advantages and disadvantages from the viewpoints of teachers and students. ChatGPT lacks critical thinking abilities and provides material in an unsuitable way, which turns off many scientists. Moreover, Arif et al. (2023) claim that there is a chance that a reliance on ChatGPT too much will impair students' capacity for original thought. Instead of replicating the design, researchers suggest utilizing ChatGPT as an enhancement to writing more effectively, analyzing data and rewording material. The study of ChatGPT is currently in its early phases of development (Arif et al., 2023).

Harrer (2023) raises worries over potential unethical student behaviour and technological unemployment. According to Dowling (2023), researchers have discovered that ChatGPT is useful for producing academic and scientific research papers, formulating hypotheses and finding resources. Furthermore, academicians, professionals and students in the journalism and media fields might gain from it by translating instructional materials into other languages (Baidoo-Anu, 2023). Despite these benefits, there are still challenges with research ethics, plagiarism, content created by AI, the possibility of errors, privacy concerns and data biases (Baidoo-Anu, 2023).

### **3.4 Independent Variables**

#### **3.4.1 Academic Content Creation**

The first factor is academic content creation. According to McCormick (2023), academic content creation can be defined as the act of producing, generating or assembling academic-related content. McCormick (2023) stated that any type of media that your audience may access and enjoy, including written, spoken, video and audio is considered content. According to recent studies, ChatGPT has become an essential learning resource for college students (Shamala et al., 2023). The platform may be tailored to each student's

unique needs and is available around-the-clock, enabling self-paced learning and a less rigorous learning environment. Hence, ChatGPT facilitates and accelerates students' learning by allowing them to make the appropriate modifications while they are learning (Jishnu et al., 2023). To determine the reasons behind undergraduate students' use of ChatGPT at Multimedia University, this study used the uses and gratifications theory and the technological acceptance model as its theoretical framework. A recent study conducted by Cambridge Assessment International Education examined the quality of essays written with ChatGPT assistance and contrasted it with essays written without ChatGPT assistance (Martina, 2023). It was expected that since the students were unfamiliar with the subjects they were writing about, they would utilize ChatGPT mostly for content creation, as it offers fast information and responses to queries (Martina, 2023). In addition, students frequently utilize ChatGPT to check their grammar for assistive technology, organize their responses, and have a more customized learning experience since it offers personalized feedback and increases learner engagement (Kasneci, 2023). However, one of ChatGPT's weaker areas, according to the research (University of Cambridge, 2023), is creating content, since the system frequently produces false information (also known as "hallucinations") and cannot be relied upon. According to the study, there is a chance that some learner profiles would be more inclined to use it mostly for content production (Martina, 2023). The study set out to comprehend what happens as a factor, Jishnu et al. (2023) said that their research indicates that students utilize ChatGpt for four main purposes: academic content creation, novelty, information seeking and convenience. The first-factor academic content creation represents how students utilize ChatGpt for various academic materials (Jishnu et al., 2023). The academic curriculum includes study notes, presentations, research papers and assignments. According to Jishnu et al. (2023), students mostly utilize ChatGpt for written assignments. Thus, ChatGpt provides material to them according to their requirements. However, Jishnu et al. (2023) have expressed worries about the potential negative impact this may have on the student's future creative thinking and writing abilities.

The research found by Martina (2023) stated that the students mostly utilized ChatGPT for content creation; specifically, they used it to quickly obtain specific knowledge on a topic and gain an overview of the subject they knew nothing about.

Students believed that ChatGPT's goal, which is to deliver information, was essentially the same as any other Internet search engine but considerably more quickly and easily navigable (Martina, 2023). In this case, it appeared that students could not distinguish between ChatGPT and Wikipedia or other online search engines based on the types of sources that were made available to them. For instance, it would be much simpler to locate a source using Wikipedia or Internet search engines if one checked the references provided on each Wikipedia page or the author or website of the pages provided by the search engines (Martina, 2023).

Furthermore, Martina (2023) claims that there were times when students tried to independently confirm the content that ChatGPT created ("verification") by requesting the source from ChatGPT or by using Internet search engines to find the sources. After gathering every piece of material that ChatGPT produced, they began to consider "structuring" their articles. As a result, by sifting, synthesizing, rewriting, and assessing the information produced by ChatGPT, the students at last began polishing their essays.

### **3.4.2 Information Seeking**

The second factor is information seeking. According to Tubachi (2018), information-seeking behaviour can be defined as the process through which people look for information and use it to finish the task at hand. It shows that students are using ChatGPT for a range of informational purposes. For example, students utilize ChatGpt to learn about a variety of topics, confirm, authenticate material and gather data for decisions regarding their professional and personal development (Jishnu et al., 2023). Also, students ought to confirm again how accurate the data supplied by ChatGPT is (Jishnu et al., 2023). However, there are complaints about ChatGPT's accuracy. It is therefore, necessary to confirm the information that ChatGPTt provides.

With ChatGPT, accessing and analyzing vast amounts of data will be simpler, which could transform knowledge discovery (Shaengchart et al., 2023). In an interactive conversational manner, ChatGPT can analyze unstructured data, including research articles and academic publications, deliver pertinent insights and information (Aydin, 2022). Scholars and researchers may find patterns and connections with this that they would not find with more conventional data analysis methods. Furthermore, by facilitating conversational interactions with difficult information, users, especially students and researchers, can obtain insights from academic sources in a way that is more natural and user-friendly.

The term “information-seeking behaviour” (ISB) describes the methods, routines and preferences people use to find information (Hernandez, 2023). It has to do with how students approach and make use of a system or service to fulfil their information needs when it comes to programming-related information searches. Hernandez (2023) claims that other studies have looked at variables that influence people’s information-seeking habits, such as software engineers and academic scientists. It is possible to gain insight into students’ intentions to use ChatGPT for programming-related information searches by seeing how they use it to seek information.

### **3.4.3 Novelty**

The third factor is novelty. Novelty is defined as the characteristic of being novel, or, more specifically, of being striking, unique, or uncommon (Jishnu et al., 2023). According to Jishnu et al. (2023), students view it as an invention and a recent trend. Ethics must be taken into account while doing this as well. Concerns have already surfaced because of the potential for abuse of these developments (Jishnu et al., 2023). A recently developed metric called novelty value evaluates how much a product stands out from the competition because of its novelty and freshness, which is a crucial aspect of any new technology (Ma, 2023). According to previous research, novelty value is a fundamental assumption about technological advancements and is crucial to adopting new technologies (Ma, 2023).

In addition, Adapa et al. (2020) argue that when individuals perceive the innovative nature of technology, they are more likely to engage in activities with enjoyment, leading to a favourable impact on both the practical and pleasant aspects of their relationship with technology. Given ChatGPT's disruptive nature in natural language processing, its novelty will attract and keep users while mitigating their psychological resistance towards new technologies. Raman (2023) asserts that the distinguishing features of ChatGPT lie in its advanced natural language processing capabilities and profound deep learning methodologies.

Furthermore, OpenAI's ChatGPT language model has the potential to produce responses in real-time conversations that resemble those of people (Hernandez, 2023). Its main novelty is its ability to understand context, respond with coherence and contextual relevance, and adapt to various inputs. This versatility makes it a useful tool for various applications, from content creation and interactive user interaction to natural language understanding. The model is original and distinctive in the field of artificial intelligence because of its large-scale training data, which allows it to demonstrate a broad knowledge of language and context.

#### **3.4.4 Convenience**

The fourth factor is convenience. Convenience can be defined as the simplicity of using a system or service for information searches connected to any natural language processing task, such as ChatGPT (Hernandez, 2023). It includes elements like usability, reactivity and accessibility. According to Hernandez (2023), previous research has shown that convenience plays a major role in people's adoption of various technologies, such as mobile devices for learning English and e-learning platforms like Moodle, also applied to ChatGPT. Regarding ChatGPT, students are more likely to use it if they consider it a practical resource for swiftly and effectively discovering programming-related information. This component considers how easily the students use ChatGPT (Jishnu et al., 2023).

The future growth of ChatGPT will depend heavily on this convenience element. There is a greater likelihood of growing the user base with more convenient technologies (Jishnu et al., 2023). Therefore, it will be crucial that developers pay full attention to ease of use. Additionally, educators complimented ChatGPT for its ability to promptly react to students' inquiries and provide extra resources to increase their learning of a topic (Limna et al., 2023). Hence, a few instructors mentioned that ChatGPT lessened their burden by providing answers to frequently asked topics and freed them of their time to concentrate on more difficult problems.

Similarly, according to Kraiwanit et al. (2023), students thought ChatGPT was an easy-to-use and accessible option for academic help. The prompt response and after-hours support they received helped them keep pace with their studies, and they valued that feature. According to some students, ChatGPT's provision of trustworthy information and direction increased their confidence in their study ability (Pongsakorn, 2023). However, several instructors also worried about ChatGPT's possible drawbacks, especially its capacity to comprehend and react to intricate or nuanced queries (Jangjarat, 2023).

#### **3.4.5 Perceived Usefulness**

The second-last factor is perceived usefulness. The perceived usefulness of ChatGPT is determined by the conviction that it may enhance academic performance and optimize workflow, therefore demonstrating its efficacy as an instructional aid (Shaengchart et al., 2023). Hence, the TAM theory posits that consumers' attitudes and intentions to adopt technology are mostly influenced by their perception of its usefulness and ease of use (Khwannu et al., 2023). Perceived usefulness refers to the extent to which an individual feels that utilizing a technology would enhance their performance (De Luna et al., 2019). Davis established the Technology Acceptance Model (TAM), a conceptual framework that elucidates the factors influencing humans' adoption of information technology, grounded on the principles of rational decision-making.



According to Tiwari et al. (2023), students who used ChatGPT reported that perceived usefulness positively impacted their attitudes. Studies using AI-based learning tools in earlier literature provided more support for this (Pillai et al., 2023). Because technology improves the quality of their learning, the students consider it valuable in the classroom. Thanks to this, they can even complete the academic assignment more swiftly and successfully (Tiwari, 2023). Students from various backgrounds could use the AI tool to find answers to a variety of questions and expand their knowledge on a range of topics.

Lastly, researchers have demonstrated that users' intentions to adopt new technologies are significantly influenced by their perceived usefulness (Abdaljaleel, 2023). The study's conclusions emphasized ChatGPT's many benefits for helping university students with academic work. This was demonstrated by the participants' generally high agreement on the "perceived usefulness" construct items, which highlighted ChatGPT's potential to increase productivity on university assignments and duties and matched students' perceptions of ChatGPT's value for learning (Rawas, 2023).

#### **3.4.6 Perceived Ease of Use**

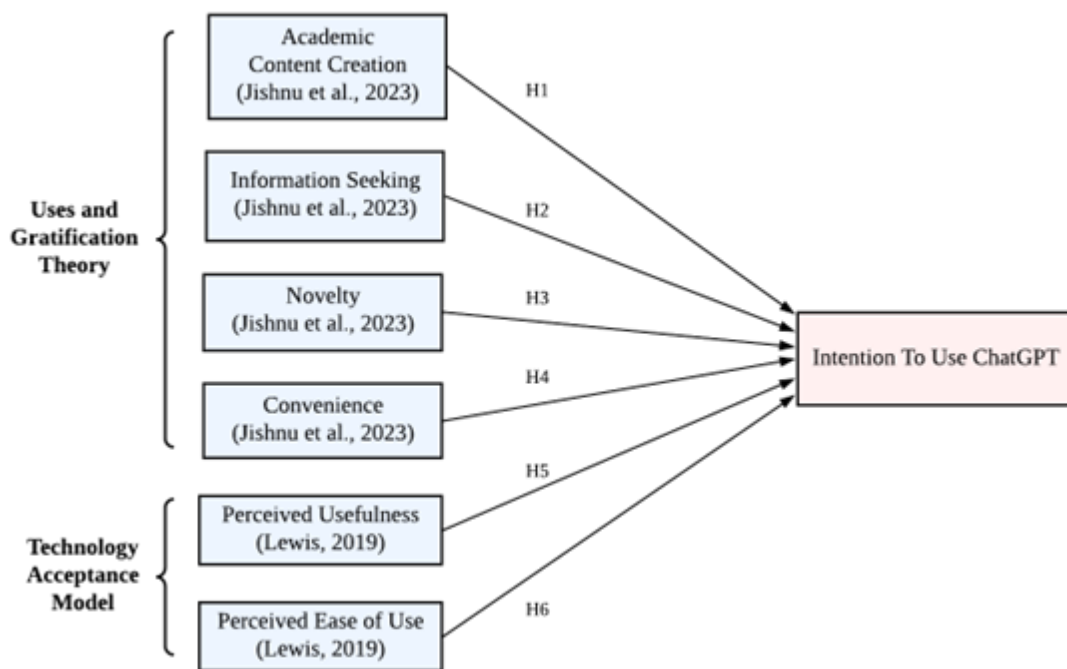
The last factor is perceived ease of use. Perceived ease of use pertains to the degree to which people perceive technology as being intuitive and easy to operate (Warsono et al., 2023). Perceived ease of use is the primary and often suggested factor to consider when evaluating the adoption of ChatGPT (Warsono et al., 2023). Belanche et al. (2019) suggest that the adoption of new technologies is primarily influenced by two aspects: perceived usefulness and perceived ease of use. These criteria are considered significant and dependable indicators of users' attitudes and intentions towards new technologies.

Some research on the adoption of ChatGPT has specifically examined the perceived ease of its usage. Studies have shown that the Technology Acceptance Model (TAM) is an effective psychometric instrument for evaluating user adoption of technology. It has been utilized to predict and elucidate the utilization of different information technologies (Abbasi et al., 2022). Moreover, further investigation has revealed a robust correlation between users' current and future evaluations of ease of use and their attitudes towards system acceptability (Davis, 1989). This exemplifies the ease of use and the perceived advantages of ChatGPT.

According to Abduljaleel et al. (2023), one of the tool's noteworthy features that promote its general accessibility and usage is ChatGPT's ease of use. As several studies have already demonstrated, ChatGPT can answer questions in several languages and has remarkable features that make it easier to create well-reasoned answers. According to the study's findings, university students can gain from integrating ChatGPT into their learning process because of its ease of use, which was found to be a key factor influencing the study sample's adoption of ChatGPT (Barakat et al., 2023). This conclusion is consistent with earlier research's findings that perceived ease of use played a significant role in determining the uptake of cutting-edge educational technologies like ChatGPT (Salim et al., 2023).

### **3.5 Theoretical Framework**

The theoretical framework is a framework that should be given a lot of attention because it plays such an important aspect of the research project. It is a framework that will aid in the comprehension of the study's findings.



**Figure 3.1: Theoretical Framework for This Study**

Figure 3.1 above clearly indicates the theoretical framework for this research study. According to Figure 3.1, six independent variables will be tested in this study. Four independent variables, such as information seeking, academic content creation, convenience and novelty, were adopted from the Uses and Gratifications Theory (UGT) proposed by Blumler (1940), which was adapted by Jishnu et al. (2023). Next, the two remaining independent variables, perceived ease of use and perceived usefulness, were adopted from the Technology Acceptance Model (TAM) proposed by Davis (1989), which was adapted by Lewis (2019). Every independent variable would be assessed to evaluate its factor on the intention to use ChatGPT among undergraduate students at Multimedia University's Cyberjaya campus.

### 3.6 Hypothesis Development

The following hypotheses are offered based on the above-mentioned variables:

- H1: There is a positive relationship between academic content creation and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus.
- H2: There is a positive relationship between information seeking and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus.
- H3: There is a positive relationship between novelty and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus.
- H4: There is a positive relationship between convenience and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus.
- H5: There is a positive relationship between perceived usefulness and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus.
- H6: There is a positive relationship between perceived ease of use and the intention to use ChatGPT among undergraduate students at Multimedia University at the Cyberjaya campus.

#### **4.0 Conclusion**

Overall, the outcome of this study holds significance for academics, researchers, policymakers and AI developers, contributing to their understanding of how individuals engage with and derive meaning from ChatGPT software in the education sector. The data results were collected through Microsoft Forms and distributed through social media platforms such as WhatsApp, Instagram and Facebook. SPSS version 29 was used to analyze the data. The behavioural intentions to use ChatGPT are analyzed in a quantitative survey among undergraduate students at Multimedia University at Cyberjaya campus. The data (200 respondents) that has been collected was evaluated through reliability analysis, normality analysis, descriptive analysis and multiple

regression analysis. The multiple regression analysis shows that four of the independent variables, namely academic content creation, information seeking, convenience and perceived usefulness, are positively correlated to the dependent variable, behavioural intentions. These findings were supported by Jishnu et al. (2023) and Tiwari (2023).

Despite its shortcomings, this study makes insightful suggestions for more research in the future. The dependence on self-reported data, which may be impacted by response and social desirability bias, and the use of convenience sampling, which may introduce bias and restrict generalizability, are among the drawbacks. Furthermore, the cross-sectional design only captures a moment of ChatGPT usage, not changes over time. Future studies could examine mixed-methods approaches to provide a better understanding, conduct longitudinal studies to monitor improvements, compare ChatGPT with other educational technologies, and use diversity sample techniques to promote representativeness.

Intervention studies are recommended to improve factors influencing ChatGPT acceptability. Privacy and security concerns should be prioritized for safer usage. Implementing these suggestions in further studies may improve our understanding of how technology is adopted in learning environments and create safer and more efficient learning resources, such as ChatGPT.

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