



Behavioral Intention to Use AI-Chatbot among University Tourism Students: The Mediating Role of Learning Motivations

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Abstract

The research aims to discover the role of the TAM model in enhancing learning motivation among tourism students. In addition, it examines to what extent learning motivation affects the behavioral intention of an AI Chatbot adopting the TAM model. Finally, it clarifies the mediating role of learning motivation in the relation between the TAM model and behavioral intention to adopt the Chatbot Model. The current research utilized a questionnaire as a quantitative approach to collect primary data from tourism students, the valid responses were 347 and the research deployed SMART-PLS for statistical analysis. The results demonstrated that the TAM model positively affects learning motivation among tourism students. Besides, learning motivation positively affects the behavioral intention to adopt an AI Chatbot. Learning motivation partially mediates the relationship between the TAM model and behavioral intention to adopt an AI Chatbot. The research presents effective practical implications for ensuring a good Chatbot experience among tourism students. These implications will facilitate and enhance the learning process of tourism students.

Keywords - Chatbots, Learning motivations, Behavioral intention, TAM, Tourism students

Introduction

Artificial intelligence is a learning system deploying mathematical algorithms to perform tasks implemented by human intelligence (Saif et al.,2024).AI Conversational agents can improve learning progression(Chiu et al.,2022; Ait-Baha et al.,2024). One of the latest technologies applied in education is Chatbot(Lin and Yu,2024) supported with NLP and ML techniques (Kurdi et al., 2020; Kim *et al.*,2022).Chatbot is a channel designed for finding solution and a suitable answers for both simple and complicated situations / questions(Dibitonto et al.,2018). Chatbots save times and facilitate studying process due to its ability to deal with different level of students' intelligence(Dibitonto et al.,2018; Huang et al.,2022a). Recently, educational organizations including universities started to apply Edu Chatbot into their websites to provide information for students(Maheswari and Nagarajan,2024). Chatbot is considered a guide for students in their academic path(Wu et al.,2020).Particularly, Chatbots help newcomer/ junior students perform the required tasks and understand academic life (Carayannopoulos ,2018).

Literatures illustrated that Technology Accepting Model (TAM) is the main reason beyond adopting new technologies, especially AI(Yousafzai et al.,2010; Liu et al.,2024;Beldad and Hegner, 2018).The basic features of TAM are ease of use and perceived usefulness (Marangunic

and Granic, 2015), then social influence was added to the model due to the conviction power of social environment towards adopting new technologies (Beldad and Hegner, 2018 ; Annamalai et al.,2023). Chiu (2024) illustrates that students' motivations are essential for setting learning goals. In this context, AI accelerates the interaction processes and learning practices (Ocaña-Fernandez et al., 2019).Today, university students are more immersed with digitalization tools including AI which strengthens critical thinking and develops their future career(Martín-Núñez et al.,2023). Intelligent tools including AI can be generators of learning motivations which increase the prosperous of learning process(Huang et al.,2023).

Digitalization is indispensable in the tourism industry, including the technology of big data (Kumar et al.,2024).Regarding the role of AI in tourism education, AI technology enables students and researchers to attain large amounts of data, accelerate the way they get information, gain a perfect solution for their complex questions / issues, and discover new trends in marketing and strategic planning in the tourism industry (Dogru et al.,2024).

In particular, Iskender et al. (2024) confirmed that it is essential to encourage students to use technology to upgrade their skills and mindset, and prepare for job market. From this point, there is a scarcity of academic research that attempted to link the TAM theory with learning motivation, especially among tourism students, as Skavronskaya et al.(2023) confirmed that the role of Chat GPT in tourism education is still unclear. In this regard, scholars call to search and conduct experimental research about the reasons beyond adopting AI for upgrading learning motivations among students (Ryan and Deci ,2020). On the other hand, it is necessary to investigate the role of Chatbot in learning (Liden and Nilros, 2020; Hwang and Chang, 2021), especially, the reasons beyond using AI technology as a learning motivation tool are still vague (Chiu et al.,2023).The current studies focus on the role and appliance of AI (Chatbot) in learning language (Pillai et al.,2024). Thus, the current study is considered one of the little attempts in the field of tourism education that focus on the role of TAM theory in using Chatbot for upgrading leaning motivation among tourism students.In addition to that, the study examines the role of learning motivation in behavioral intention of adopting Chatbot in the future. The research questions are:

- 1.Do ease of use, perceived usefulness, and social influence positively encourage students toward learning motivation?
- 2.Does learning motivation affect behavioral intention to adopt Chatbot?
- 3.Is learning motivation a mediator in the relationship between ease of use, perceived usefulness, social influence, and behavioral intention to adopt Chatbot?

Theoretical background and hypotheses development

Motivation is the engine of students to learn in higher education (Hamjah et al.,2011), it comprises intrinsic and extrinsic factors (Harandi,2015) that incentive students to accomplish their goals (Hamjah et al.,2011). Today, technology paves the way for seamless education due to its availability at any time (Fabian et al., 2016).In this vein, AI Chatbots provide ubiquitous learning material (Virtanen et al., 2018). AI features stimulate students to utilize it for studying and other different purposes such as building their future careers. Motivations play an incentive role in adopting new technologies among individuals (Yuan & Liu,2025).So, there is a need for more research about the factors that affect students' learning motivation, due to the instant

changing factors affect students' learning process (Poçan et al., 2023). From this point, the current research endeavors to find the effect of ease of use, perceived usefulness, and social influence on the learning motivation of tourism students. In addition, it is critical to measure the relationship between learning motivation and behavioral intention to adopt an AI Chatbot.

Theories

Theory of Technology Acceptance Model "TAM"

Technology Acceptance Model theory is the most widespread theory in the context of adopting new technologies, such as AI (Chatterjee et al., 2021; Saif et al., 2024). TAM theory was established based on the theory of reasoned action (Lim and Zhang, 2022; Li, 2023) which manifests that persons behaviors are results of behavioral intentions (Teo, 2012; Dahri et al., 2024). The TAM theory mainly includes two external factors affecting individuals to use new technologies, these are perceived usefulness and ease of use (Chen et al., 2024). Up to 40% of behavioral intentions of adopting AI can be affected by ease of use and perceived usefulness (Mohr & Kühl, 2021). Dahri et al. (2024) mentioned in their study that Perceived usefulness and perceived ease of use are indispensable predictors of behavioral intentions. Peers and social influencers surrounding users/students have a pivotal role in accepting and using Chatbot (Annamalai et al., 2023). TAM theory explains the behavioral intention beyond using new technology (Cheng, 2019; Liu et al., 2024).

Theory of Motivation

Motivation theory is applied in the educational sector, learning motivation is interconnected to social and cognitive factors "thoughts" (Anderman & Dawson, 2011). Motivation is a key drive, incentive, and purpose for students to learn, so, motivations are intrinsic and extrinsic (Price & Kadi-Hanifi, 2011). Students' motivation to learn is linked to attaining academic achievements and goals (Yin et al., 2024). Advanced technology features are prevalent in educational motivations by strengthening students' learning experiences (Huang et al., 2019). New technologies are affordable for many students, and it encourage students to achieve their academic and career ambitions (Thornhill-Miller & Dupont, 2016). According to Lee et al. (2015) the linkage between the acceptance of information communication technology and individuals' motivations is needed for more studying. In this line, there is a lack of sufficient studies that measure the role of Chatbots in learning motivations among university students. So, the research framework is illustrated in Figure(1).

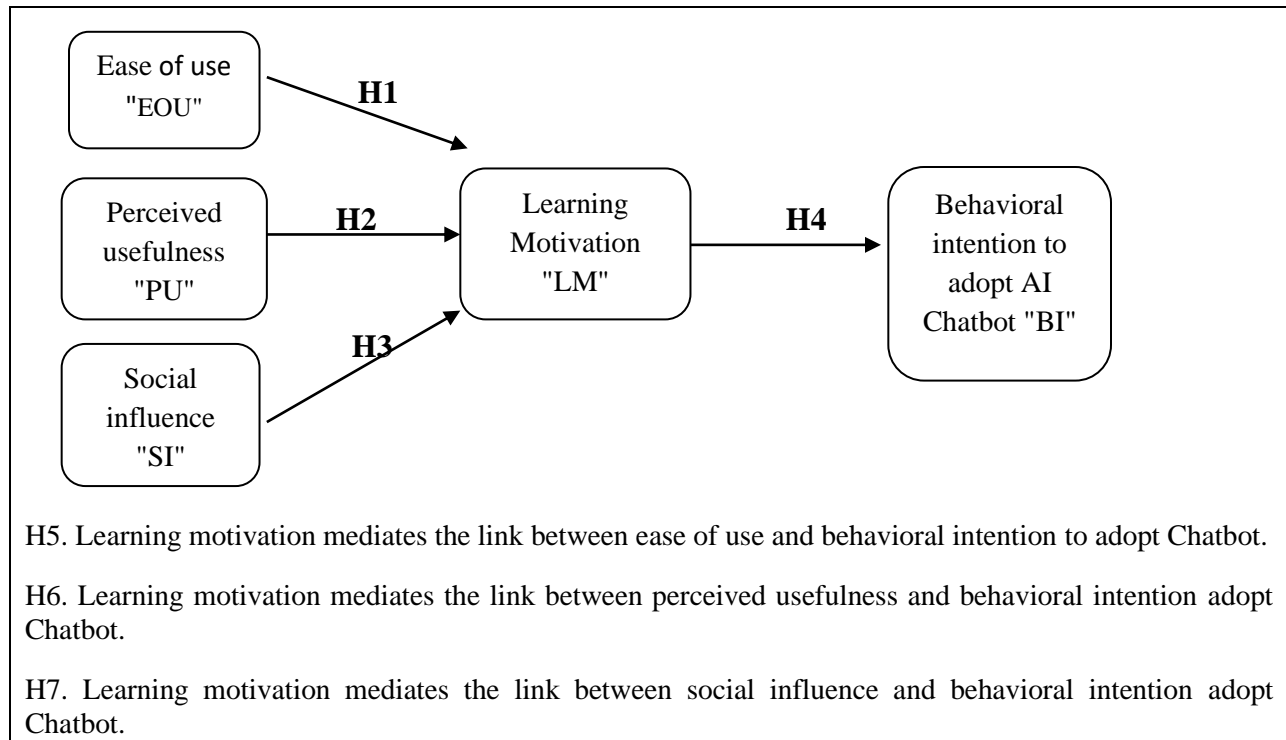


Figure (1):Hypotheses Framework

Ease of use (EOU) of AI and learning motivation

Ease of use means that the tool or the system is not complicated to use and saves the effort too(Huang et al.,2020). According to the technology acceptance model, ease of use is a reason beyond accepting new technologies (Artificial intelligence)among students(Tiwari et al.,2024). In different cultures, students consider new technologies indispensable due to their ability to save effort and time (Huang et al.,2020;Widyaningrum et al.,2024). Chat GPT accelerates and smooths the progress of learning among university students (Acosta-Enriquez et al.,2024). Chatbot increases the learning motivation among students by stimulating students' self-regulated learning and setting their learning goals (Hew etal.,2021).

H1. Ease of use AI technology positively affecting learning motivations

Perceived usefulness of AI and learning motivations

Perceived usefulness refers to the value that a person can get due to using such innovative systems (Kashive etal.,2021). AI applications like Chatbot enhance students' learning skills such as critical thinking (Huang et al.2022b; Strzelecki,2023). Most students use AI applications to ensure the high quality of their assignments, including a lack of grammar errors and accurate and precise information (Abbas et al.,2024). Increasing the number of assignments leads to increasing workload. Hence, students are obliged to use Chat GPT and other AI technologies to facilitate the end up of required assignments(Niloy etal.,2024). Chatbot features have pedagogical roles that boost students' learning motivation including precise content , different queries , and self-assessment (Yin etal.,2021). Chatbots are assistant tools utilized to improve students' learning motivations and adequacy (Ait-Baha etal.,2024).

H2. Perceived usefulness of AI positively influences learning motivation

Social Influence and learning motivation

Social influence refers to the power of trusted communities, such as friends and family on individuals' beliefs towards technology acceptance and usage(Hong,2022; Figueroa-Armijos et al.,2023). Social influence includes teachers who constitute an antecedent to accept and apply AI among students for strengthening their learning and setting academic goals (Chiu et al.,2023).Regarding new technology, social influence has an impact on others' perception and motivation (Tummalapenta et al.,2024).In this regard, students are inspired by their peers to use AI Chatbots such as ChatGPT for their learning purposes due to its benefits(Tummalapenta et al.,2024).

H3. Social influence has a positive effects on learning motivation

Learning motivation and behavioral intention

Learning motivation is defined as " the sum of the incentives that positively force the choice of a specific behavior or purpose" (Li, 2023,p.3). Chatbot enhances learning motivations among students through supporting intrinsic and extrinsic motivations (Yin et al.,2021). AI Chatbot is used to achieve academic excellence (Chiu et al.,2023). Students depend on the technology of Chatbot as a path to increase their learning interests, take an instantaneous feedback , enhance the customization of the learning process (Fidan & Gencel,2022). One of the main motivators to use Chatbot is its tutorship capacity and mentorship (Al-Abdullatif et al.,2023). Chatbot enables students to keep their performance during learning process besides promoting self-regulation and self-efficacy in education (Cabrera et al., 2022). In addition to that, students are enthusiastic about using AI Chatbots as they enhance their argument skills which are so important in their career (Chai et al.,2022; Guo et al.,2023).So, the prominent reason beyond using AI Chatbot is its learning motivator function.

H4. Learning motivation increases behavioral intention to use AI Chatbot.

The mediator role of learning motivation

As mentioned above, there are many reasons pushed students to adopt AI Chatbot, the main reasons are ease of use, perceived usefulness, and social influence. These reasons affected students learning motivation. Regarding ease of use, AI Chatbot has capacity to be available at any time and its distinguished with its ability of providing information, this increase students learning motivation (Khlaisang & Koraneekij,2024). Chatbot functions enable students to personalize their learning experience which reflects in putting their goals and evaluating their performances during implementing tasks (Esiyok et al.,2024).

Artificial intelligence characteristics of natural language processing, information retrieved, and deep learning (Quiroga-Perez et al., 2020) enhances the educational role of AI Chatbot as alternative instructor for students especially in large class sizes(Fidan & Gencel,2022). Chatbots as conversational agents are pivotal for providing personalized learning processes tailored to different types of student's skills and needs(AitBaha et al.,2024). Chatbot motivates learners to regulate, analyze then evaluate their developmental performance(Gabrielli et al., 2020). Goal setting function of Chatbot is deployed to help students set their learning goals regarding the courses they attend and to provide a suitable recommendation for students, this function increases the engagement between Chatbot and its users (Hew et al.,2023).

Influencers and social environments surrounding students encourage them to use artificial intelligence in their studies because of the benefits of AI technology in knowledge prerequisites (Changalima et al.,2024). In this vein, the features and functions of AI motivates students to achieve their goals and build their future careers (Lin et al.,2021) which increases their intention to use AI technology. Hence the following hypotheses are assumed:

H5. Learning motivation mediates the link between ease of use and behavioral intention to adopt Chatbot.

H6. Learning motivation mediates the link between perceived usefulness and behavioral intention to adopt Chatbot .

H7. Learning motivation mediates the link between social influence and behavioral intention to adopt Chatbot.

Methodology

Samples and procedure

The study used a pilot questionnaire to determine a suitable sample that could understand the utilization of Chatbots in upgrading their learning motivation. The results of the pilot questionnaires elucidated that students of the tourism studies department are aware of the Chatbots' role in learning motivation. So, the sample is students enrolled in (year 2 and year3) and postgraduate students of the Tourism Studies Department at Helwan University. The questionnaire was distributed online through Google Forms. The research depended on a purposive sampling technique (Sarker & Al-Muaalemi,2022), where a questionnaire was directed to students who knew how to use Chatbots for learning motivations. Of 500 responses, 357 were collected, and 347 were valid for analysis.

Measures

The questionnaire contains three parts. Part one presents demographic information about participants including, age, gender, and if they have previous experience using chatbot. Part two presents constructs related to the TAM theory, as follows: construct one represents ease of use (3 items), perceived usefulness(3 items) , and social influence(3 items) which are adopted from(Bilquise et al.,2024). The third part presents the learning motivation (6 items) adopted from (Li.,2023). The fourth part presents the behavioral intention to adopt AI Chabot (3 items) adopted from (Bilquise et al.,2024).

Data Analysis

Smart PLS software was used to analyze data and test research hypotheses. Smart PLS was chosen because it is the most popular and comprehensive statistical software for exploratory studies and for prediction(Sarstedt & Cheah, 2019). In addition, PLS-SEM is used to develop the theory(Hair et al.,2019). In this regard, the factories that influence behavioral intention to adopt chat bot is not determined yet and the role of learning motivation is not well- explained till now.

Results

Demographic characteristics of the sample

Table 1 elucidates that most of participants are females (64.8), while the percent of males participants is (35.2%). The participants' age ranges between 21-25 years old (45%), followed by 17-20 years old (43.8%). while most of the participants are related to undergraduate (85%) and 15% were post-graduate.

Table 1 .Demographic Characteristics

Characteristics	Frequent	Percentage
Gender		
Male	122	35.2
Female	225	64.8
Age		
17- 20	152	43.0
21-25	156	45.0
More 25	39	12.0
Educational level		
undergraduate (Grades2 &3)	295	85.0
postgraduate	52	15.0

Measurement Model

The study measured Cronbach Alpha (CA) ,Composite Reliability (CR), and Average Variance Extracted (AVE)as presented in table (2).CA values range between 0.798 and 0.868, which are ensured the internal consistency(Straub ,1989).To measure convergent validity, AVE was applied (values are between 0.676 and 0.791) which are more than 0.5 and prove that the latent variables can explain the model (Rubia ,2019).In addition, table 3 illustrates Discriminant validity through measuring HTMT which less than 0.90.The study used the measure of SRMR to test the goodness of the model and NFI(Çakıt et al.,2020) . SRMR is 0.4 <0.8 and NFI is 0.91 closed to 1, which ensures the model goodness.

Table 2 .Validity measures

	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)
BI	0.868	0.919	0.791
EOU	0.705	0.836	0.630
LM	0.904	0.926	0.676
PU	0.858	0.914	0.779
SI	0.798	0.881	0.712

Table 3. Heterotrait-Monotrait ratio (HTMT) - Matrix

	BI	EOU	LM	PU	SI
BI					
EOU	0.732				
LM	0.848	0.868			
PU	0.676	0.858	0.782		
SI	0.750	0.801	0.857	0.744	

Table 4 . Discriminant validity

	BI	EOU	LM	PU	SI
BI	0.890				
EOU	0.572	0.794			
LM	0.752	0.693	0.822		
PU	0.585	0.668	0.689	0.883	
SI	0.629	0.605	0.734	0.617	0.844

The bold is the square roots of AVE

Table 5 .Descriptive analysis means , STD, loading factor, t- value

<u>Items</u>	<u>Means</u>	<u>STD</u>	<u>Loading</u>	<u>T- value</u>
Ease Of Use "EOU"				
1. I think I can use the Chatbot for my advising queries without any help	3.61	0.85	0.77	23.89
2. I think it would be easier to use the advising Chatbot to find the information I need on my own	3.94	0.82	0.83	36.63
3. I think learning to use the advising Chatbot would be easy for me	3.93	0.80	0.77	26.2
Perceived Usefulness PU				
1. I think using the advising Chatbot is useful for getting advising- related information	4.11	0.82	0.85	44.91
2. I think using the advising Chatbot would help me accomplish my advising requests more quickly	4.13	0.78	0.90	61.27
3. I think using the advising Chatbot would help me	4.12	0.75	0.88	61.27

with many things				
Social Influence SI				
1. I would use an advising Chatbot if many of my classmates and friends will use it	3.57	0.97	0.77	23.21
2. People whose opinions I value would prefer that I use an advising Chatbot for advising-related queries	3.31	1.06	0.88	57.02
3. People who are important to me would encourage me to use an advising Chatbot	3.45	0.98	0.78	65.19
Learning Motivation LM				
1. Learning with AI-based systems is important for me to achieve my goals.	3.63	0.98	<u>0.82</u>	<u>46.61</u>
2. Learning with AI-based systems is important because I will be able to acquire relative knowledge that I need for my future career and income	3.86	0.80	0.85	53.47
3. Learning with AI-based systems is important because it could help me save time and money.	4.01	0.74	0.82	39.14
4. Learning with AI-based systems is efficient since I could access it anytime and anywhere.	4.04	0.82	0.75	29.38
5. I become more interested in my study by using AI-based systems.	3.59	1.01	0.83	39.5
6. I believe my interest to learn could be enhanced by using AI-based systems	3.66	0.94	0.81	35.12
Behavioral Intention to Adopt Chatbot (BI)				
1. I intend to use the				

advising Chatbot in the future	3.93	0.93	0.88	63.36
2. I would always try to use the advising Chatbot for my advising needs	3.63	0.97	0.88	48.73
3. I plan to use the advising Chatbot frequently	3.50	1.02	.090	75.67

Table 6 tests hypotheses by using path coefficient analysis (β), T-value and P-value to prove the impact of EOU, PU, SI on LM. The results prove that there is a positive and significant impact of EOU on LM ($\beta = 0.227$, $P=0.000$), PU ($\beta= 0.250$, $P=0.000$) AND SI ($\beta=0.412$, $P=0.000$) on LM, which demonstrate the positive and significant impact. So, H1, H2, H3 are supported. LM highly affects BI ($\beta = 0.752$, $P=0.000$), which indicates that H4 is supported.

6. Hypotheses test of direct relations

Hypotheses	Estimate	T-Value	P-Value	Result
H1 . Ease of use positively affects learning motivation	0.227	5.27	0.000	Supported
H2. Perceived usefulness affects learning motivation	0.250	5.09	0.0000	Supported
H3. Social influence affects behavioral learning motivation	0.412	8.85	0.000	Supported
H4. Learning motivation affects behavioral intention to adopt Chatbots	0.752	25.34	0.000	Supported

Mediation Analysis

to test the mediator role of LM between (EOU ,PU, SI) and BI, the study used mediation analysis through calculating the path coefficient, T -Value , P-value. Table 7 explains that hypotheses 5 , 6 , 7 were supported. there is a partial mediation of LM between "EOU, PU and SI" and "BI" ($\beta =0.208$, $P=0.000$), ($\beta= 0.188$, $P=0.000$), and($\beta= 0.310$, $P=0.000$).

Table7. Testing hypotheses of indirect effects

Hypotheses	Estimate	T-value	P-value	Result
H5. learning motivation mediates the link between ease of use and behavioral intention	0.208		5.137	0.000 Supported
H6 . learning motivation mediates the link between perceived usefulness and behavioral intention	0.188		4.916	0.000 Supported
H7. learning motivation mediates the link between social influence and behavioral intention	0.310	3.896	0.000	Supported

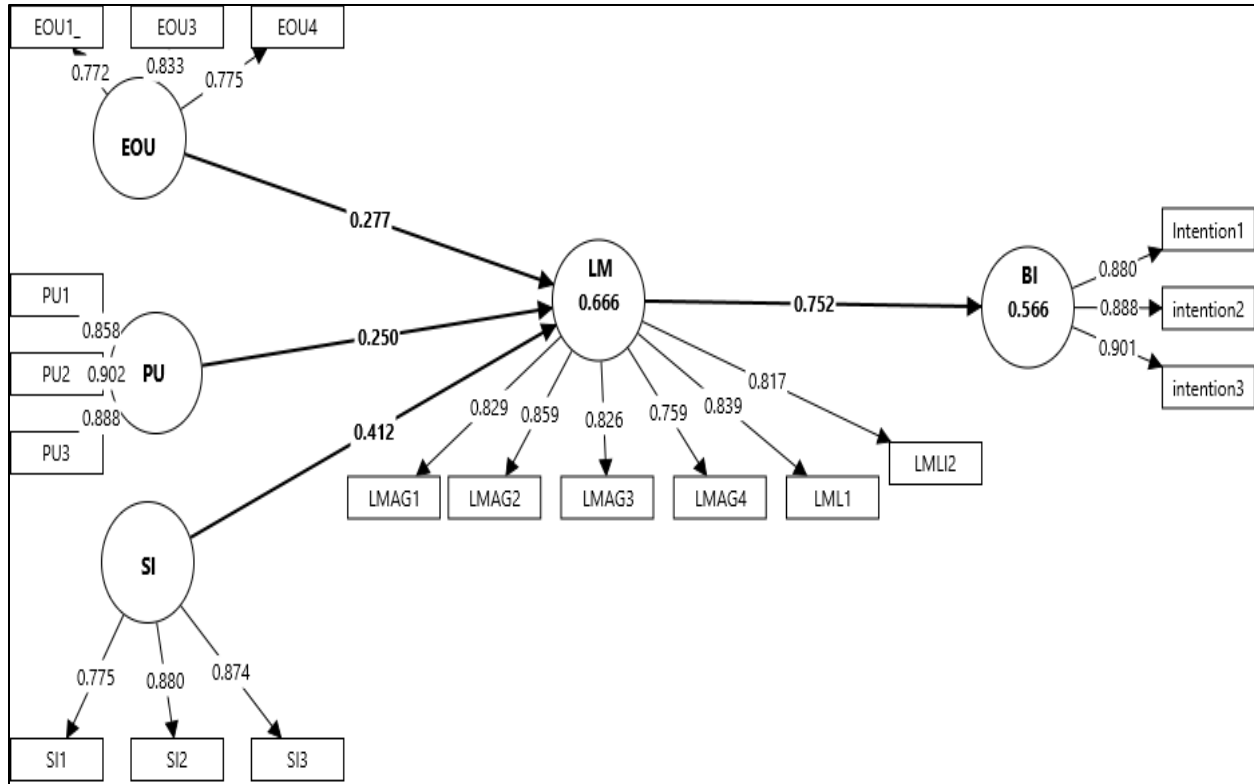


Figure 2. Structural model

Discussion

The study's main aim is to investigate the role of learning motivation towards the behavioral intention of adopting Chatbot among tourism students. It is essential to explore the impact of TAM theory as an antecedent factor of learning motivation. Finally, the study sought to investigate the mediation role of learning motivation in the relationship between ease of use, perceived usefulness, social influence, and behavioral intention to adopt Chatbot technology. Results revealed that ease of use positively and significantly affects the learning motivations of tourism students, this is in line with Li(2023) who manifested that ease of use affects the learning motivation of college students. The perceived usefulness of Chatbots is related to students' learning motivation, as Chatbots are considered a store of much information which enhances students' learning experience (Yin et al.,2021; Khlaisang & Koraneekij,2024). This outcome is compatible with the result of (Li, 2023). Classmates, friends, and the surrounding environment of students, it is paramount to use Chatbots for studying (Chiu et al.,2023). In this situation, social influence highly affects the learning motivations of students. According to Terblanche & Kidd (2022) sometimes people are affected by others when they seek to use technology. The study revealed that learning motivation is the most influential factor that strengthens the behavioral intention to adopt Chatbot among tourism students. From this perspective, the study of Yuan and Liu (2025) emphasized that motivations are correlated with adopting new technologies. The current study found that each of ease of use, perceived usefulness, and social influence positively affect behavioral intention to adopt Chatbot through the mediation role of learning motivations. This indicates that learning motivations construct works on strengthening the effects of TAM theory on behavioral intention to adopt Chatbot among tourism students.

Theoretical Implications

The current study has theoretical contributions to tourism education literature. Most studies measure the factors that affect student attitudes toward adopting chat GPT / Chatbot concerning learning languages in schools. There is a shortcoming of tourism literature related to factors beyond the behavioral adoption of Chatbots among tourism students in developing countries. Subsequently, the theoretical contributions of the research are as follows; firstly, the current study focused on the learning motivation role in adopting Chatbot among tourism students. Secondly, the study explains the antecedents that can influence the learning motivation of students towards adopting Chatbot, these antecedents are ease of use, perceived usefulness, and social influence. Thirdly, the study explains how both TAM theory and motivation theory have an influential impact on adopting Chatbots through the mediation role of learning motivations.

Practical Implications

The research presents effective practical implications for ensuring a good Chatbot experience among tourism students. The study found that learning motivation is the most influential factor affecting the behavioral intention of adopting AI Chatbots. Hence, it is recommended that Chatbot applications be integrated into the tourism syllabus to increase students' awareness of the role of AI in the academic route. In addition, teaching staff should conduct workshops about how AI Chatbots can build students' knowledge about the tourism industry as, AI has an indispensable impact on tourism marketing, sustainable tourism and reservations, such as booking hotels and tickets. Chatbot workshops will be an orientation for students about applying Chatbots in studying and creating a vision for their future careers.

Regarding academic performance, several students depended on AI applications to perform assignments instead of searching for information to save time and effort. So, teaching staff should train students on applying critical thinking while using Chatbots in lectures to enhance students' academic performance. Teaching staff should be well-trained to apply Chatbot in education to pave the way for seamless education for extreme learning motivation among tourism students. Furthermore, it is recommended to provide training courses in cooperation with artificial intelligence experts in different fields, including tourism marketing and travel agencies.

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النية السلوكية لإستخدام ربات الذكاء الاصطناعي بين طلاب السياحة: الدور الوسيطى لدافع التعلم

المستخلص

يهدف البحث إلى إكتشاف دور نموذج TAM في تعزيز الدافعية التعليمية لدى طلاب السياحة. بالإضافة إلى ذلك، فإن الدراسة تهدف إلى قياس إلي أي مدى يؤثر دافع التعلم على النية السلوكية تجاه ربات الذكاء الاصطناعي للردشة الآلية الذي يتبنى نموذج TAM. أخيرا تهدف المقالة إلي توضيح دور المتغير الوسيط لدافع التعلم بين متغيرات نموذج TAM ومتغيرات النية السلوكية لتبني تطبيق ربات الذكاء الاصطناعي " Chatbot " بين الطلاب. كما إعتد البحث الحالي على توزيع الإستبيانات كنهج كمي لجمع البيانات الأولية من طلاب السياحة، وكانت عدد الاستجابات الصحيحة 347 واستخدم البحث-SMART PLS للتحليل الإحصائي. حيث أظهرت النتائج أن نموذج TAM يؤثر بشكل إيجابي على دافعية التعلم لدى طلاب السياحة. إلى جانب ذلك ، يؤثر دافع التعلم بشكل إيجابي على النية السلوكية لإعتد ربات الذكاء الاصطناعي للردشة الآلية. كما يتوسط دافع التعلم بشكل جزئي العلاقة بين نموذج TAM والنية السلوكية لإعتد ربات الذكاء الاصطناعي للردشة الآلية. كما تقدم الدراسة توصيات تزيد من دوافع التعلم بين الطلاب من خلال تكنولوجيا الذكاء الاصطناعي.

الكلمات الدالة: ربات الذكاء الاصطناعي للردشة الآلية، دوافع التعلم، النية السلوكية، نموذج قبول التكنولوجيا، طلاب السياحة.