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To cite this article: Zhengan Zhu, C. Michael Hall, Sara Naderi Koupaei, Feifei Lin & Zhenzhen Wang (31 Jan 2026): Influence of AI on usage intention in tourism and hospitality education: the mediating role of perceived trust, Current Issues in Tourism, DOI: [10.1080/13683500.2026.2622507](https://doi.org/10.1080/13683500.2026.2622507)

To link to this article: <https://doi.org/10.1080/13683500.2026.2622507>



Published online: 31 Jan 2026.



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RESEARCH ARTICLE



Influence of AI on usage intention in tourism and hospitality education: the mediating role of perceived trust

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ABSTRACT

Artificial Intelligence (AI) is playing an increasingly significant role in education, including in tourism and hospitality education. However, research on how AI affects student users' psychology and behaviour in tourism and hospitality education is still in an early stage. This study investigates the impact of system quality and authentic experience on perceived trust and the intention to use ChatGPT in tourism and hospitality education. Using Structural Equation Modelling analysis, the findings demonstrate that both system quality and authentic experience of ChatGPT positively affect perceived trust and student use intention. Furthermore, perceived trust positively mediates the relationship between system quality, authentic experience, and the intention to use ChatGPT. The current study enhances scholars' understanding of how students shape their intention to use ChatGPT and develops appropriate guidelines for its use to improve educational management.

ARTICLE HISTORY

Received 30 November 2024
Accepted 21 January 2026

KEYWORDS

System quality; perceived trust; ChatGPT; artificial intelligence; tourism and hospitality education

1. Introduction

Artificial Intelligence (AI) is transforming how people interact, travel, work, and live. The tourism and hospitality sectors, which are predicted to continue to grow rapidly in the future, are witnessing growing use of AI and increasing impacts on the tourism system (Christou, 2025; El Hajal & Yeoman, 2024; Gössling & Mei, 2025; Ivanov & Webster, 2019; Khan & Soomro, 2025; Mellors, 2025). The emergence of ChatGPT has enabled many users to experience its flexibility and practicality (Short & Short, 2023), including in educational settings. The application of ChatGPT in tourism and hospitality education has generated great interest. Hall and Cooper (2025) argued that the emergence of AI is disrupting the development of the education sector but that its adoption appears unavoidable. Similarly, Zhang et al. (2024) pointed out that ChatGPT can enhance the learning experience but identified various ethical, technical and teaching issues that arise in tourism and hospitality education. Although there are studies of the impact of AI on consumer behaviour, e.g. ChatGPT can influence tourists' usage intentions (Li et al., 2025) and their travel plans (Abou-

Shouk et al., 2025), there is relatively little research on how ChatGPT influences students' intentions to use it in tourism and hospitality education.

In tourism and hospitality education, ChatGPT and AI are often framed as highly challenging for the educational experience (Hall & Cooper, 2025). Moreover, given that ChatGPT helps users generate learning materials, different educational stakeholders have different attitudes towards AI as it may lead to unfair competition and misuse (Grassini, 2023). Therefore, exploring students' attitudes towards the use of ChatGPT can help tourism and hospitality educators and managers formulate better strategies and course positioning, and assist students in using ChatGPT more effectively and appropriately (Altun et al., 2024).

In the technological experience, some experiential perceptions, such as system quality, are considered to have a significant impact on use intention (Alkhwaja et al., 2022), but these perceptions have received insufficient attention in the AI experience. The measurement of perceived system quality can help understand whether the system meets user requirements. In ChatGPT, users mainly chat with artificial robots (Panda & Kaur, 2023), so these are crucial for helping users understand the system quality of ChatGPT. Previous studies related to system quality have often focused on digital technologies (Jung et al., 2015; Wang & Chen, 2011), but there is a lack of empirical evidence for identifying the impact of ChatGPT system quality on user behaviour.

Authenticity is an important psychological mechanism in the information technology experience (Kim et al., 2020). Authentic experience is a significant variable for understanding customers' overall technical experience (Alimamy & Nadeem, 2022). ChatGPT is a technological experience in which users send commands to ChatGPT (Lim et al., 2023; Ratten & Jones, 2023). Research indicates that interacting with ChatGPT generates questions of authenticity of response for users (Elkhatat, 2023). Therefore, in an educational context, when students use ChatGPT to generate answers to questions they ask, this process will also affect the perceived authenticity of the response.

Perceived trust is an important psychological variable to assess how authenticity perception and system quality affect students' intention to use it. With ChatGPT use and that of other AI systems becoming increasingly common with users, ongoing trust in AI becomes a risk concern (Zhou et al., 2024) and may further influence users' behaviour. Therefore, perceived trust may be an important prerequisite for understanding users' behaviour towards ChatGPT (Choudhury & Shamszare, 2023; Kim et al., 2025). However, these conjectures require empirical examination.

To address the above research gaps, this study explores the relationships between system quality, authenticity, perceived trust, and usage intention through integrated trust transfer theory. Based on this aim, this paper proposes three specific research questions: (1) Does system quality have a positive impact on perceived trust?; (2) Does authenticity have a positive impact on perceived trust?; and, (3) Does perceived trust positively mediate the relationship between system quality, authenticity and usage intention?

2. Literature review

2.1. ChatGPT in tourism and hospitality studies

ChatGPT is becoming widely used in tourism and hospitality since it can help create marketing context and detailed descriptions of accommodation, destination attributes, food, service, products, and attractions; better communicate with tourists; enhance the travel experience; and improve business operations (Pham et al., 2024). However, tourism and hospitality have unique characteristics, including expertise in service, flexibility to deal with unexpected situations, long periods of operation and management, and use of technological management, marketing and service systems, for which ChatGPT may have special benefits (Ali, 2023).

In an education context, ChatGPT has been reported as having several advantages and disadvantages, ChatGPT can potentially provide expertise in studying materials (Iskender, 2023) and a personal response that may assist students in completing tasks quicker (Ivanov & Soliman, 2023).

Using ChatGPT could help users gain skills in planning and communication (Ivanov & Soliman, 2023), including language translation (Baidoo-Anu & Ansah, 2023). ChatGPT can also support interactive learning and has been considered a virtual tutor (Baidoo-Anu & Ansah, 2023). Nevertheless, there are drawbacks to using ChatGPT (Christou, 2025; Cong-Lem et al., 2025; Hall & Cooper, 2025). The privacy and personal information of students using ChatGPT may be compromised (Ali, 2023), while ChatGPT lacks critical thinking and creativity, which can potentially have negative effects on the quality of academic research (Ali, 2023; Yu, 2023). Thus, it is necessary and important to investigate students' intentions for using ChatGPT based on its potential benefits and disadvantages.

2.2. System quality

System quality is described as the quality of the information system, and it is the basis of system performance evaluations of the system provider that has an ability to provide quality service (Martono et al., 2020). System quality is an important prerequisite for system success (Alkhawaja et al., 2022). Systems with excellent quality can be used better and bring satisfaction (Hambali, 2020) and enhance perceived usefulness and usage intention (Martono et al., 2020). The performance and popularity of ChatGPT are mainly based on ChatGPT-based chatbot systems (Panda & Kaur, 2023). Therefore, a good information quality system can help users obtain a more convenient and efficient experience.

Although system quality has received attention in different technical application studies (Jung et al., 2015; Wang & Chen, 2011), and current research emphasises that system quality affects perceived usefulness and usage intention (Alkhawaja et al., 2022), perceived ease of use (Martono et al., 2020), and attitude (Lee et al., 2020). Martono et al. (2020), in integrating the Technology Acceptance Model and the Information System Success Model, found that the influence of system quality on user behaviour has a positive effect in financial information systems. However, in contrast, Mailizar et al. (2021) reported that the system quality of e-learning has a positive impact on perceived usefulness and attitude but does not affect the intention to use. This indicates that the relationship between system quality and usage intention is complex. In the new experience context, the research on the system quality generated by AI systems therefore holds significant research value. However, relevant research on whether it will continue to influence users' intention to use it is still limited.

2.3. Authenticity

The term 'authenticity' is associated with something that is novel, real, and genuine (Kowalczyk & Pounders, 2016). Authenticity can enhance the contextualisation and situational nature of the learning process, enabling students to use technological devices to participate in 'real' learning activities (Yates et al., 2021). Authenticity is therefore an important stimulating factor because if technology users can feel that they are participating in 'reality' then they are more positive towards the technology (Alimamy & Nadeem, 2022), including technical education (Howard et al., 2021), and immersive technology (Zhu et al., 2023). When users interact with AI, by asking and answering questions, they can understand the AI generated content, enabling users to judge whether it is true or not, thus generating a sense of authenticity.

2.4. Perceived trust

Trust is an important element in online interaction and behaviour. For example, trust is an important prerequisite for online food purchase attitude (Nguyen et al., 2019). Kaushik et al. (2020) reported that perceived trust has a positive impact on mobile retail applications. However, Muflih (2023) found that perceived trust has no positive impact on the intention to use mobile service applications, which is different from previous studies on the intention to use smartphone applications (Jeon et al., 2019). Nevertheless, perceived trust is an important prerequisite for understanding consumers'

behaviour in technological experiences (Kaushik et al., 2020). The development of AI has made trust an important perception for AI users, although excessive trust in ChatGPT by users, especially in high-risk situations, may have serious consequences given that AI is not always accurate. Of course, if there is a lack of trust, consumers may not use ChatGPT (Choudhury & Shamszare, 2023). Although trust, defined as the degree to which users are willing to rely on technology and its outcomes (Mayer et al., 1995), has received much attention in many fields (Kim et al., 2025), in ChatGPT trust describes users' confidence in the accuracy and reliability of ChatGPT's functions (Salah et al., 2024). Therefore, this study adopts this approach and explores its role in the context of AI education.

2.5. Hypothesis development

Trust transfer theory explains how trust is transferred from a familiar environment or object to a novel and unfamiliar one (Zhu et al., 2024). Trust transfer theory posits that trust can migrate from one entity to another through association (Yu et al., 2025). This theory has been employed in prior research to explore consumer behaviour, such as the impact of celebrities and virtual anchors on consumers' purchase intentions (Yu et al., 2025; Zhu et al., 2024). From the perspective of theory, previous understandings of AI or Open AI operating companies and their brands might also further influence users' perception of trust in using ChatGPT. Thus, when users are experiencing ChatGPT's system quality, the system quality may affect their trust experience. Empirical evidence indicates that the system quality of VR has a positive effect on object-related authenticity (Nam et al., 2023), while system quality of ChatGPT is beneficial for authentic responses. Moreover, for perceived trust, studies indicate that system quality has a positive impact on trust in mobile commerce (Kanaan et al., 2023).

Previous research has also explored the relationship between authenticity and trust in different contexts. For example, in e-commerce marketing, Chatzigeorgiou (2017) found that authentic experiences created by influencer marketing do not positively impact trust. However, Chapple and Cownie (2017) noted that authenticity is an important factor driving trust in social media platform. In ChatGPT, which is also an information technology experience, it is unknown whether authenticity positively influences users' trust. Therefore, the following research hypotheses were proposed:

Hypothesis 1: System quality positively influences authentic experience.

Hypothesis 2: System quality positively influences perceived trust.

Hypothesis 3: Authentic experience positively influences perceived trust.

In terms of the relationship between perceived trust and intention to use, stimulus organism response theory has provided an effective explanation for the relationship, with perceived trust as an organism factor impacting the response factor, behavioural intention (Zhu et al., 2020). In a study of ChatGPT, it was found that perceived trust toward ChatGPT had a positive relationship with intention to use (Choudhury & Shamszare, 2023). Thus, the hypothesis is as follows:

Hypothesis 4: Perceived trust positively influences intention to use.

There is controversy over the relationship between system quality and intention to use. Mailizar et al. (2021) indicated that the system quality of e-learning did not have positive effects on students' use intention, while Sarkar et al. (2020) found that the system quality of electronic services has a positive relationship with trust which, in turn, positively impacts behavioural intention. Alkhawaja et al. (2022) revealed that the system quality of an e-learning system can significantly influence intention to use since users pay more attention to system quality, including capability and robustness. Thus, the system capability of ChatGPT may directly impact intention to use.

Hypothesis 5: System quality positively influences intention to use.

Daugstad and Kirchengast (2013) reported that authenticity is an important factor enhancing participation in tourism. Previous research found that authentic experience can also present indirect positive effects on behavioural intention in VR technology (Kim et al., 2020). Therefore, the current study also holds that in the context of ChatGPT, authenticity will positively influence tourists' travel intentions.

Hypothesis 6: Authentic experience positively influences intention to use.

Trust holds significant value for consumer choices. If users do not believe in the outcome, they may hesitate in their usage behaviour (Choudhury & Shamszare, 2023). Trust can also affect an individual's sense of security and confidence, as well as their behavioural intention (Shariffuddin et al., 2023). When users experience the quality and authenticity of the information perceived in ChatGPT, these factors may further affect their perception of trust. From the perspective of trust transfer theory, users are assumed to already have an understanding of AI technology or Open AI company brands in addition to that of the specific product. When they further experience the quality and authenticity of the information provided by ChatGPT, this perception of the wider company brand will further affect their trust perception and subsequently their behaviour. Therefore, this study holds that perceived trust can positively mediate the relationship between system quality, authenticity, and travel intention.

Hypothesis 7: Perceived trust positively mediates the relationship between system quality and intention to use.

Hypothesis 8: Perceived trust positively mediates the relationship between authentic experience and intention to use.

Drawing on the above, Figure 1 presents the proposed hypothesis relationship model.

3. Research method

3.1. Questionnaire design

In the first section of the questionnaire, respondents were clearly informed of the research purpose and background to the study. The screening indicators include two criteria: (1) Are you a tourism and hospitality management student? (2) Have you ever applied ChatGPT to your tourism and hospitality management studies? The answers of these participants were considered valid data only if they responded to both questions in the affirmative. In the second part of the questionnaire including

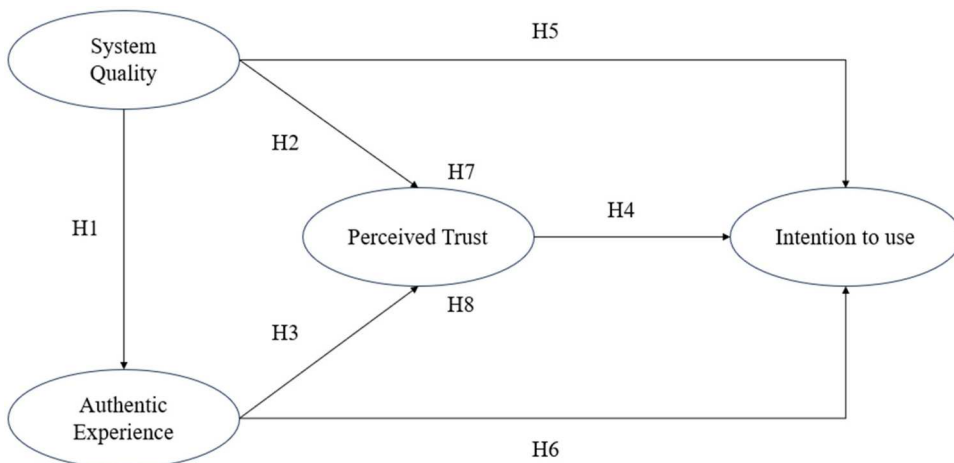


Figure 1. Research model.

measurement items for the research variables. Three measurement items for system quality came from Mailizar et al. (2021), due to Mailizar's research focused on e-learning experience; three measurement items for authentic experience were also derived from Kim et al. (2020), due to their focus on technology experience; three measurement items for perceived trust were derived from Choudhury and Shamszare (2023); and lastly, three measurement items for intention to use were derived from Bae and Han (2020) and Mailizar et al. (2021). All measurable items were adapted to the present study in the context of the ChatGPT. Seven-point scales (from 1 strongly disagree to 7 strongly agree) are used for the measurable items.

Finally, in the last section of the questionnaire, two questions on participant background were included: one on gender and the other on professional background. Since the current participants were Chinese students, the professional translation and proofreading of the measurement items were conducted by scholars who were familiar with the field of tourism and hospitality subjects.

3.2. Data collection and analysis

This study used Tencent Survey, a professional questionnaire company in Mainland China (Zhu et al., 2024), which has been adopted in many AI studies for data collection (Li et al., 2025). Before the formal data collection, a pilot study with twenty participants was conducted to assess whether the content of the questionnaire could be clearly understood. All participants indicated that the questionnaire was clear and easy to understand. Following this feedback, no further modifications were made to the questionnaire. The formal data collection was completed in July 2023, 286 people participated in the survey collection, and some participants who did not meet the standard were removed (e.g. did not meet the screening conditions). Finally, 225 valid samples from different provinces in Mainland China were gained. The aim of the study was to explore the relationships between variables in a new area of research (e.g. ChatGPT). Partial least squares structural equation modelling (PLS-SEM) was considered a suitable method of statistical analysis for small samples analysis. Further, as the valid data is 225 samples, in line with Hair et al.'s (2019) recommendation that the sample size needs to be 10 times the number of measurement items, there were a total of twelve measurement items in this study. Therefore, from a methodological perspective, the current study did not continue to collect data because 225 valid samples are sufficient for the current research.

4. Findings

4.1. Participant information

Since the current research subjects are tourism and hospitality students, the background information of the participants consisted of two parts: the student's subject background (tourism management or hospitality management) and their gender. A total of 225 students with hospitality and tourism management backgrounds participated in the current study. Participants were not selected on the basis of geography and are therefore likely to come from different regions of China, thereby potentially enhancing the generalizability of the research findings. In terms of demographics, 44.4 percent were female and 55.6 percent were male. By subject students were divided almost evenly

Table 1. Sample background ($N = 225$).

Gender	Frequency	Percent
Male	100	44.4
Female	125	55.6
Subject		
Tourism management	113	50.2
Hospitality management	112	49.8

with 50.2 percent having a tourism management background, and 49.8 percent in hospitality management (Table 1).

4.2. Reliability and validity of measurement model.

According to the suggestions of Hair et al. (2019), for using PLS-SEM to analyze the data, factor loading indicators were first detected, and the data showed that all the factor loadings exceeded the threshold value of 0.7, thus providing an acceptable level of reliability (see Table 2). In order to detect the reliability of internal consistency, composite reliability was used. It is usually considered that a higher value of composite reliability usually indicates a higher level of reliability (Hair et al., 2019). Therefore, composite reliability values in the range of 0.600–0.950 are acceptable. The current composite reliability values are in the range of 0.716–0.836 and are therefore acceptable. In the third step, convergent validity refers to the extent to which the construct converges to explain the item variance. To assess convergent validity, the average extracted variance (AVE) of all items in each construct was examined, and the current study showed that all AVE values exceeded 0.5; therefore, the research model obtained good convergent validity (see Table 3). Finally, to assess the discriminant validity, Heterotrait-Monotrait ratio (HTMT) metrics were examined, and results showed that all HTMT metrics were below 0.9; therefore, the research model obtained discriminant validity (Hair et al., 2019).

4.3. Hypothesis testing

To avoid the potential influence of common method bias on the research, this study clearly informed the participants of the research purpose and background in the first part of the questionnaire, and that the answers would be treated anonymously with the participant's privacy protected. This step ensured the participants' voluntary participation in the research, met ethical guidelines, and reduced the potential for common method bias. Furthermore, in data analysis, the variance inflation factor (VIF) value was used to evaluate the variance of common methods in the PLS-SEM model (Ibrahim et al., 2024; Kock, 2017). Data analysis revealed that all internal VIF values were below 3.3. Therefore, based on the two approaches, common method biases had no effect on this study (Ibrahim et al., 2024; Kock, 2017).

The study also measured R-squared according to Hair et al. (2019), which is a metric that measures the explanatory power of a model. All R-squared values exceeded 0.26, thus the research model obtained good predictions. In addition to this, to assess effect sizes, we used f^2 , and all f^2 from

Table 2. Measurement items.

Measurable items.	Factor loading
System Quality (SQ)	
SQ1: ChatGPT allows me to find information easily in learning.	0.783
SQ2: I do not encounter long delays when searching for information on my ChatGPT in learning.	0.792
SQ3: I feel secure in providing sensitive information through ChatGPT in learning.	0.818
Intention to use (IU)	
IU1: I will use ChatGPT with no hesitation in learning.	0.863
IU2: I will use ChatGPT if it is available in learning.	0.806
IU3: I will recommend using ChatGPT in the future learning.	0.884
Perceived Trust (PT)	
PT1: ChatGPT is competent in providing the information and guidance I need	0.794
PT2: ChatGPT is reliable in providing consistent and dependable information	0.883
PT3: ChatGPT is trustworthy in the sense that it is dependable and credible	0.885
Authentic experience (AE)	
AE1: Using the ChatGPT provided me with genuine experiences	0.869
AE2: Using the ChatGPT provided me with exceptional experiences	0.911
AE3: Using the ChatGPT provided me with unique experiences	0.821

Table 3. Reliability and validity.

Variables	Composite Reliability	AVE	Heterotrait-Monotrait Ratio (HTMT)			
			AE	PT	SQ	IU
AE	0.836	0.753				
PT	0.814	0.731	0.887			
SQ	0.716	0.636	0.793	0.784		
IU	0.811	0.726	0.835	0.828	0.774	

Notes: Average Variance Extracted = AVE.

0.050 to 0.625 exceeded 0.02, thus the results indicated the influence between these variables from small to large (Hair et al., 2019). Finally, bootstrapping with 5000 samples was used to examine the proposed hypotheses. Table 4 indicates that all the proposed research hypotheses are valid. That is, system quality positively affects authentic experience (0.620***), perceived trust (0.245**), and intention to use (0.196**). Authentic experience positively affects perceived trust (0.587***) and intention to use (0.345**). Perceived trust positively influences intention to use (0.309**). Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

4.4. Mediating role of perceived trust

This study also tested the mediating role of perceived trust. Through bootstrapping 5000 samples (Hair et al., 2019), results indicated that perceived trust positively mediates system quality and intention to use. Furthermore, results also indicated that perceived trust positively mediates authentic experience and intention to use (see Table 5).

5. Discussion

This study explores the impact of ChatGPT system quality on authentic experience, perceived trust, and use intention. Existing studies have pointed out that system quality is an important indicator of system success, and system quality can improve user satisfaction and intention to use (Alkhawaja et al., 2022; Hambali, 2020; Martono et al., 2020). As the AI corpus continues to improve, the knowledge that students acquire through conversations with AI is constantly being updated, and thus the quality of the information generated by AI may gradually change over time for students. The current findings further confirm the previous research indicating that ChatGPT has been proven to provide timely and effective responses when users input commands (Panda & Kaur, 2023). From these perspectives, only by obtaining sufficient perception of information quality can this further influence users' trust and behaviour.

Secondly, this study also found that authenticity has a positive impact on perceived trust. Previous studies have found that ChatGPT can provide users with authenticity of responses (Elkhatat, 2023). Studies have shown that positive perception of authenticity can significantly influence user behavioural intentions in digital experiences (Zhu et al., 2023). The perception of authenticity is of great significance for the information generated through conversations with AI. As students

Table 4. Results of PLS-SEM.

	Path coefficient	T Statistics	P Values	Confidence Intervals	
H1: System quality → Authentic experience	0.620	14.133	0.000	0.531	0.702
H2: System quality → Perceived Trust	0.245	3.344	0.001	0.103	0.394
H3: Authentic experience → Perceived Trust	0.587	9.02	0.000	0.453	0.71
H4: Perceived Trust → Intention to use	0.309	3.395	0.001	0.122	0.483
H5: System quality → Intention to use	0.196	3.198	0.001	0.072	0.313
H6: Authentic experience → Intention to use	0.345	3.432	0.001	0.155	0.541

Table 5. Mediation of perceived trust.

Proposed mediating hypothesis	Indirect effect	P-value	Confidence Intervals	
SQ → PT → IU	0.076*	0.02	0.021	0.149
AU → PT → IU	0.181**	0.001	0.073	0.297

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

accumulate and encounter knowledge continuously, they have a certain understanding of all the knowledge they learn. Therefore, students will judge authenticity based on the content generated by AI. Therefore, the more authentic the content generated by AI is perceived to be, the more positive the trust. It is worth noting that authenticity, in contrast to system quality, has the strongest impact on trust perception. From this perspective, for the content generated by AI information, the perception of authenticity is of great significance. Only when students consider the content to be very genuine do they trust and adopt it.

Thirdly, this study also found that perceived trust has a significant positive impact on users' willingness to continue to use. From the perspective of the theory of trust transfer, even without actually using ChatGPT, students usually have developed a certain degree of understanding of it. This preconceived notion may lead some students to have a high level of trust in AI tools, while others may hold a reserved attitude. However, through interactive experiences, students gained a direct perception of the system's authenticity and operational quality. These experiences further strengthened and reshaped their previous understanding of ChatGPT, thereby effectively influencing their perception of trust. As studies have pointed out, perceived trust reflects the usage intentions formed by users after using ChatGPT (Choudhury & Shamszare, 2023). Furthermore, the huge user base of ChatGPT has also raised concerns regarding privacy and information security (Ali, 2023). Perceived trust thus becomes a key factor in evaluating how the AI experience affects user behaviour. In conclusion, when students build full trust in ChatGPT during the learning process, the perceived trust they form can significantly enhance their willingness to continue to use this tool.

6. Conclusion

6.1. Theoretical contributions

This study offers some theoretical contributions. Previous studies have indicated that high-quality systems can better serve users and enhance their satisfaction (Hambali, 2020). Therefore, good quality information technology systems can enhance use intention (Martono et al., 2020). Although previous studies have used system quality to examine digital technology services (Jung et al., 2015; Wang & Chen, 2011), given the significance of high-quality systems in the information technology experience, prior research lacks sufficient empirical studies to explore the impact of AI system quality on user behaviour in an educational context. Therefore, the first theoretical contribution of this paper lies in expanding the application of system quality in the educational use of AI and helping understand the importance of system quality in AI.

Secondly, this study helps explain the mediating role of perceived trust. Although previous studies have suggested that perceived trust is a basis for use of ChatGPT (Kim et al., 2025; Salah et al., 2024), research involving perceived trust has mainly focused on exploring the impact of perceived trust on use intention in the context of electronic services (Nguyen et al., 2019; Sarkar et al., 2020), with limited studies examining the mediating role of trust. Zhu et al. (2023) argued that authenticity affects tourists' attitudes in AI education, however, their study lacked consideration of how authenticity influences consumer behaviour through examination of mediating variables. This study fills this research gap from the perspective of mediating role of perceived trust. Kim et al. (2025) pointed out that perceived trust is highly valuable for interpreting tourist behaviour in ChatGPT use, however, the present study expands consideration of perceived trust to the context of AI

education and provides a solid theoretical foundation for future research to explore the value of perception.

Finally, this study has expanded the application of the trust transfer theory in the field of AI education. Although previous studies have successfully applied this theory to the field of livestreaming marketing, i.e. Yu et al. (2025) pointed out that consumers' trust in livestreaming can be further transferred to the products they endorse through the lens of trust transfer theory. This study suggests that users' previous understanding of ChatGPT can also influence their trust perception, and that trust perception can be evaluated through system quality and the perception of authenticity. This study therefore expands on trust transfer theory to better understand the impact of ChatGPT on users' intention to use it, while it also provides empirical evidence for the adoption of trust transfer theory in future AI research.

6.2. Practical contributions

This research has made several practical contributions to tourism and hospitality management education. System quality and authenticity perception are at the core of understanding information technology experiences. In ChatGPT, students with a background in tourism and hospitality management mainly receive guidance through chatting, enabling ChatGPT to complete the assigned tasks. Therefore, good system quality and authenticity are particularly important for students' willingness to use it.

For tourism and hospitality education administrators and teaching staff, it is also necessary to pay ongoing attention to the update of the AI corpora and improve content by providing timely and accurate information. For course construction, tourism and hospitality educational administrators could consider collaborating with specific AI companies. By partnering with AI companies in developing teaching resources, they can enhance the construction of the corpus and provide better convenience and experiences for students. For the authenticity of AI and the quality of information, tourism and hospitality education managers could also potentially establish professional advisory committees to comment on the appropriate use of AI in course development. However, it is extremely important to recognise that the use of AI in tourism and hospitality education needs to be considered as a means to achieve educational and course objectives and to encourage learning, not as something to be undertaken in isolation or for its own sake. Christou (2025), for example, warned of overdependence on AI in tourism in a general context, the same applies to its use in education.

Secondly, perceived trust is the core factor influencing students' use of ChatGPT. When students use ChatGPT, what they care about is the possible problems that may occur in the ChatGPT chat system, such as the quality of responses and whether the same answers will be repeated for questions raised by similar users. Therefore, administrators of ChatGPT or similar AI systems may need to respond promptly to users' concerns to address this issue. Perceived trust plays a significant role in users' psychological motivation and behaviour. Tourism and hospitality education administrators and teaching staff need to encourage users' sense of trust. For instance, when conducting AI-inclusive teaching, it is necessary to establish appropriate AI values for students and help them understand that AI is an auxiliary tool to assist them in learning, rather than a complete solution to all their educational challenges (Liang & Wu, 2024; Royer, 2024; Yu, 2023). Furthermore, current research has also found that perceived trust has a significant mediating effect between system quality, authenticity perception and use intention. From the perspective of trust transfer theory, before users experience ChatGPT, they already have a certain understanding of AI technology or Open AI company in general and this perception may affect users' trust perception of ChatGPT. Tourism and hospitality educational administrators therefore need to promote and publicise AI tools appropriately, having students believe that they are auxiliary tools but cannot replace other forms of learning.

Finally, although ChatGPT offers new opportunities for tourism and hospitality education, challenges also exist. Tourism and hospitality educators and their institutions need to appropriately guide students in using ChatGPT and formulate corresponding ethical usage guidelines as part of

best practices and appropriately embrace the opportunities brought by new technologies. For instance, tourism and hospitality educators should look at the relative value of AI and non-AI evaluations in the broader pedagogical context, provide transparency rules, and check sources of assignment submissions and references to enhance educational quality. These measures can effectively focus on the fairness of education and the ethics of AI use. Most importantly, as a major factor in current economic and social development, educational administrators and teaching staff need to embrace learning about AI, but at the same time, they must also address the related issues and concerns in AI education.

6.3. Limitations and future studies

Despite the paper's contributions there are still some research gaps in the current study for future research to consider. Firstly, although 225 research samples are sufficient from the perspective of SEM data analysis, it is recommended that future studies adopt experimental designs or cross-regional large sample data collection or mixed research to enrich the research results. Second, the current study focused only on Chinese students, and future research could expand the participants' backgrounds and educational and technological cultures as well as look at change over time. Third, this study did not compare the attitudes of different genders, ages, and courses towards ChatGPT. Therefore, future studies may consider using multiple sets of analyses to evaluate and compare the attitudes of users of different genders, ages, and courses towards ChatGPT as well as, potentially, other AI programmes. It could be very interesting, for example, to compare the attitudes and perceptions of doctoral students with undergraduates, or even first year undergraduates to final year so as to see if there is any relationship in AI use and the development of critical thinking and knowledge levels. Finally, with the rapid development of AI, researchers should consider exploring the impact of other mainstream AI, like DeepSeek, on tourism and hospitality education students based on the current research model and the advantages and disadvantages of different systems.

Author contributions

CRediT: **Zhengan Zhu:** Investigation, Writing – original draft; **C. Michael Hall:** Supervision, Writing – original draft; **Sara Naderi Koupaei:** Writing – review & editing, and research design; **Feifei Lin:** Conceptualization, Writing – original draft, Writing – review & editing; **Zhenzhen Wang:** Conceptualization, Writing – review & editing.

Disclosure statement

No potential conflict of interest was reported by the author(s). C. Michael Hall is the editor of Current Issues in Tourism but has not played any part in the peer review and decision-making process.

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