

# The Impact Of Trust In AI On Inspiration And Intention To Use AI In Teaching Among University Lecturers

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## ABSTRACT

This study investigates the relationship between trust in AI, inspiration, and faculty intention to use AI in teaching, integrating the technology acceptance model (TAM) and cognitive emotion theory (CET). Using partial least squares structural equation modeling (PLS-SEM), data from 332 university lecturers in Ho Chi Minh City were analyzed. The results reveal that trust in AI outcomes ( $\beta = 0.441$ ) and inspiration ( $\beta = 0.412$ ) significantly and positively influence intention to use AI in teaching. Notably, inspiration mediates the relationship between trust and intention (indirect effect  $\beta = 0.213$ ), highlighting its critical role in translating trust into actionable intentions. The proposed model explains 59.5% of the variance in AI usage intention, confirming its robustness. Additionally, trust in AI outcomes strongly predicts inspiration ( $\beta = 0.517$ ), emphasizing the importance of fostering both trust and emotional engagement to enhance AI adoption in higher education. Based on these findings, the study suggests practical strategies, including developing an “AI Trust Ecosystem,” launching an “AI Inspiration Movement,” and implementing an “AI-Integration Roadmap”. These strategies aim to build trust, inspire faculty, and ensure effective AI integration in teaching practices. The study contributes to expanding TAM by incorporating emotional factors from CET, offering a novel perspective on technology acceptance in education.

**KEYWORDS:** AI, Higher education, Teaching innovation, Inspiration, Trust in AI

## 1. Introduction

Artificial Intelligence (AI) is creating a powerful transformation wave in global higher education, opening unprecedented opportunities to revolutionize teaching methods, learning, and educational management. From adaptive learning systems and automated assessment tools to virtual teaching assistants, AI is gradually reshaping the landscape of modern higher education (Zawacki-Richter et al., 2019). However, despite its enormous potential, the adoption rate of AI in higher education remains limited, especially in developing countries (Almenara et al., 2024). This gap between technological potential and practical application raises important questions about the factors influencing faculty members' intention to use AI - those who play a key role in bringing technology into educational practice.

Research on technology acceptance in traditional education typically focuses on cognitive factors such as usefulness and ease of use according to Davis's Technology Acceptance Model (TAM) (1989). However, recent studies suggest that the technology acceptance process is much more complex, particularly for disruptive technologies like AI, where emotional factors and trust play equally important roles (Almenara et al., 2024; Cabellos et al., 2024). Lazarus's Cognitive Emotion Theory (CET) (1991) suggests that positive emotions like inspiration can be powerful catalysts for technology acceptance behavior. However, the relationship between AI trust, inspiration, and intention to use AI in higher education contexts remains understudied, particularly the potential mediating role of inspiration in this relationship.

This research aims to bridge the theoretical gap by exploring the relationship between AI trust, inspiration, and university faculty's intention to use AI in teaching, through

combining TAM and CET theories. Specifically, the study focuses on three main objectives: (1) determining the influence of inspiration on the intention to use AI in teaching; (2) evaluating the impact of trust about AI outcomes on inspiration and intention to use AI; and (3) examining the mediating role of inspiration in the relationship between trust in AI and intention to use AI. The research findings not only contribute to enriching the theory of technology acceptance in education but also provide important practical implications for education policymakers and university leaders in promoting effective AI application. In the context of ongoing digital transformation in education, understanding the psychological drivers that motivate faculty to accept and apply AI becomes particularly important to ensure the success of educational innovation initiatives.

## 2. Theoretical foundation

### 2.1. Intention to use AI in teaching

The intention to use technology reflects faculty members' readiness to adopt new technology in teaching. Müller & Leyer suggest that this intention is influenced by personal attitudes, peer norms, and behavioral control (Müller & Leyer, 2023). Although faculty members often express positive intentions, actual implementation depends on technology familiarity and available infrastructure (Müller & Leyer, 2023).

This research explores the influence of trust in AI on university faculty's intention to use AI in teaching through the combined lens of the Technology Acceptance Model (TAM) and Cognitive Emotion Theory (CET). TAM suggests that AI usage intention may relate to perceived usefulness and ease of use (Müller & Leyer, 2023), while CET suggests the

additional role of emotional factors in this process (Ezekiel & Akinyemi, 2022). Trust in AI may not only lead to rational evaluation but can also evoke emotional responses such as interest or anxiety, potentially affecting usage inspiration (Roy et al., 2022). Considering both theories can help better understand why faculty with similar AI perceptions may have different usage intentions due to varying emotional experiences (Roy et al., 2022). This suggests that universities may consider developing approaches that both provide information about practical benefits and create environments that encourage positive emotions, helping faculty not only understand but also feel more comfortable with new technology.

## **2.2. Relationship between trust in AI outcomes and intention to use AI in teaching**

The relationship between Trust in AI outcomes (TAIO) and Intention to Use AI in Teaching (IUAI) forms the foundation of the cognitive pathway in understanding faculty behavior towards AI adoption in educational contexts. Trust in AI outcomes refers to the belief among faculty that AI technologies can deliver reliable and beneficial results in teaching practices. This belief is critical as it shapes their willingness to integrate such technologies into their pedagogical approaches. The Technology Acceptance Model (TAM) provides a robust theoretical basis for this relationship, positing that trust-related constructs, such as perceived usefulness, directly influence usage intentions (Davis, 1989). When faculty perceive AI as a trustworthy tool that enhances teaching efficiency or student outcomes, they are more likely to develop a positive intention to adopt it. Empirical research supports this connection, with studies indicating that performance expectancy, which aligns closely with trust in outcomes, significantly impacts faculty's intention to adopt AI in educational settings (Almenara et al., 2024). Furthermore, trust serves as a rational evaluation of technology, reducing perceived risks and fostering confidence in its application, which is particularly relevant in the rapidly evolving field of AI in education. This cognitive appraisal of AI's potential benefits directly correlates with behavioral intent, as faculty members assess the practical value of the technology in their professional roles. The significance of trust is also evident in broader technology adoption literature, where cognitive factors consistently predict usage behavior across various domains. Therefore, based on TAM and supporting empirical evidence, this research proposes Hypothesis *H1: Trust in AI outcomes positively influences faculty's intention to use AI in teaching.*

## **2.3. Relationship between trust in AI outcomes and faculty inspiration towards AI**

The connection between Trust in AI Outcomes (TAIO) and Faculty Inspiration towards AI (FIAI) explores the emotional pathway that complements the cognitive aspects of technology adoption in educational settings. Trust in AI outcomes, as a cognitive appraisal, reflects faculty members' belief in the reliability and positive impact of AI on teaching and learning processes. This belief can evoke emotional responses, particularly inspiration, which is a motivational state that compels individuals to actualize ideas (Thrash et al., 2014). Cognitive Emotion Theory (CET) provides a theoretical

lens for this relationship, suggesting that cognitive evaluations of technology benefits can trigger positive emotional states such as inspiration (Lazarus, 1991). When faculty trust that AI will lead to beneficial educational outcomes, such as improved student engagement or streamlined administrative tasks, they are likely to experience a sense of emotional motivation and inspiration to explore and integrate these technologies into their teaching practices. This emotional response is distinct from purely rational assessments, as it involves a personal connection to the potential of AI to transform education in meaningful ways. Empirical studies further support this link by demonstrating that positive perceptions of technology often lead to emotional engagement, which in turn fosters a willingness to experiment with innovative tools (Cui et al., 2020). Inspiration, in this context, serves as a response to the perceived value of AI rather than its source, promoting the translation of trust into a motivational drive to apply AI in teaching (Thrash, 2021). This relationship is particularly relevant in the context of AI in education, where the novelty and complexity of the technology may require emotional catalysts to overcome initial hesitations or uncertainties. The interplay between trust and inspiration highlights how cognitive and emotional dimensions of technology acceptance are interconnected, shaping faculty behavior in nuanced ways. Therefore, grounded in Cognitive Emotion Theory and supported by empirical insights, this research proposes Hypothesis *H2a: Trust in AI outcomes positively influences faculty's teaching inspiration.*

## **2.4. Relationship between faculty inspiration towards AI and intention to use AI in teaching**

The relationship between Faculty Inspiration towards AI (FIAI) and Intention to Use AI in Teaching (IUAI) examines the role of emotional motivation as a driver of behavioral intent in the context of technology adoption in education. Inspiration is understood as a motivational state that compels individuals to translate creative ideas into actionable outcomes (Thrash et al., 2014). In the academic context, inspiration acts as a motivational construct where faculty recognize the value of AI and are driven to express this value through their teaching practices (Thrash, 2021). This emotional state differs from purely cognitive evaluations, as it involves a personal and affective connection to the potential of AI to enhance educational outcomes. The Technology Acceptance Model (TAM) provides a theoretical foundation for this relationship by identifying motivational factors akin to perceived usefulness as key predictors of usage intention (Davis, 1989). When faculty feel inspired by the possibilities that AI offers, such as personalized learning experiences or innovative assessment methods, they are more likely to develop a positive intention to integrate AI into their teaching. Empirical studies reinforce this connection, showing that inspiration plays a crucial role in forming behavioral intentions by fostering positive attitudes towards the behavior in question (Anh, 2021). Furthermore, inspiration complements effort in the creative process, challenging the notion that it is secondary to persistence or hard work (Thrash et al., 2014). In the specific domain of technology adoption, inspiration interacts with cognitive processes to positively influence the intention to use new tools, as demonstrated in research on memory and motivation in technology contexts (Rodger & Gonzalez, 2014). This emotional driver is particularly relevant in

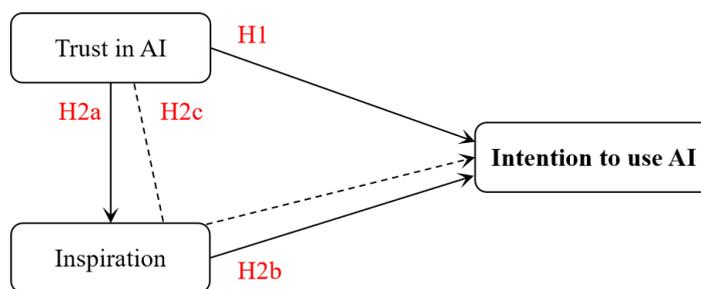
education, where faculty often face barriers such as time constraints or unfamiliarity with technology, and inspiration can serve as a catalyst to overcome these challenges. Additionally, inspiration is noted to be contagious, with inspired educators potentially influencing their peers or students, especially those open to new experiences (Cui et al., 2020). The significance of inspiration in shaping intention underscores the need to nurture emotional engagement alongside rational assessments of AI's benefits. Therefore, drawing from TAM and supported by empirical findings, this research proposes Hypothesis *H2b: Faculty's Inspiration towards AI outcomes positively influences their intention to use AI in teaching.*

**2.5. Mediating role of faculty inspiration in the relationship between trust in AI outcomes and intention to use AI in teaching**

The mediating role of Faculty Inspiration towards AI (FIAI) in the relationship between Trust in AI Outcomes (TAIO) and Intention to Use AI in Teaching (IUAI) integrates both cognitive and emotional pathways to provide a holistic understanding of faculty behavior in adopting AI technologies in education. Trust in AI outcomes represents a cognitive appraisal where faculty evaluate the reliability and benefits of AI in enhancing teaching and learning processes. This cognitive belief can evoke emotional responses, particularly inspiration, which is a motivational state that drives individuals to actualize ideas and translate perceived value into action (Thrash et al., 2014; Thrash, 2021). While trust directly influences intention through rational assessments, as proposed in Hypothesis H1, it can also indirectly shape intention by fostering inspiration, which in turn motivates faculty to adopt AI in their teaching practices, as outlined in Hypothesis H2b. Cognitive Emotion Theory (CET) supports this mechanism, suggesting that cognitive evaluations of technology benefits can trigger positive emotions like inspiration, which subsequently influence behavioral intentions (Lazarus, 1991).

The mediating role of inspiration indicates that trust in AI outcomes not only impacts intention directly but also operates through an emotional pathway, enhancing the motivational drive to integrate AI. Empirical studies on technology acceptance further validate this indirect effect, demonstrating that emotional factors such as hedonic motivation often mediate the relationship between cognitive perceptions and usage intentions (Almenara et al., 2024). In the context of AI in education, inspiration serves as a bridge between the rational belief in AI's efficacy and the behavioral intent to apply it, reflecting how emotional engagement amplifies the effects of cognitive trust. This mediation effect is particularly significant in educational settings, where faculty may require both logical reasons and emotional encouragement to overcome barriers to adopting complex technologies like AI. The interplay of trust and inspiration highlights the multifaceted nature of technology adoption, where cognitive and emotional dimensions interact to shape faculty behavior in nuanced ways. Understanding this mediation mechanism provides valuable insights for educational institutions seeking to promote AI integration by addressing both rational evaluations and emotional motivators. Therefore, building on the theoretical foundations of CET and supported by empirical evidence, this research proposes Hypothesis *H2c: Faculty inspiration mediates the relationship between trust in AI outcomes and intention to use AI in teaching.*

The proposed framework combines the Technology Acceptance Model (TAM) and Cognitive Emotion Theory (CET) to provide a comprehensive understanding of faculty's intention to use AI in teaching. TAM emphasizes the cognitive pathway, where trust in AI outcomes directly shape usage intentions, while CET highlights the emotional pathway, where trust in AI evoke inspiration that further influences intention. This dual-pathway approach illustrates how rational evaluations and emotional responses jointly contribute to AI adoption, offering practical insights for promoting its integration in educational contexts.



**Figure 1:** Research theoretical framework

(Source: author's proposal)

**3. Research methodology**

The research was conducted through an online survey using Google Form at higher education institutions in Ho Chi Minh City, with a survey toolkit consisting of three parts: participant screening, assessment of latent constructs, and demographic information. The scales were developed from the theoretical foundation of previous studies, expert consultation, and underwent preliminary testing (n=30) to ensure reliability, validity, and discriminator validity. A total of 14 observed variables (Table 1) were used to measure 3 research concepts

using a 5-point Likert scale: (i) Scale for trust in AI usage outcomes with 5 observed variables (TAIO1- TAIO5) from Venkatesh et al. (2003) and Zawacki-Richter et al. (2019); (ii) Scale for faculty inspiration towards AI use with 5 observed variables (FIAI1- FIAI5) from Guskey (2002) and Zawacki-Richter et al. (2019); and (iii) Scale for faculty intention to use AI in teaching with 4 observed variables (IUAI1-IUAI4) from An et al. (2023).

Survey participants were selected using convenience sampling with three criteria: minimum 3 years of university

teaching experience, prior exposure to or knowledge of AI applications in education, and access to AI tools in teaching activities. Questionnaires were distributed via Email, Zalo, and Facebook Messenger. Although Hair et al. suggested a minimum sample size of 300 for structural equation modeling (SEM) analysis (Sarstedt et al., 2021), the research team distributed 400 questionnaires to ensure higher representativeness and received 332 valid responses (83% response rate).

Regarding sample composition, among 332 participating faculty members, there were 187 females (56.3%) and 145 males (43.7%). Age distribution included: 78 people (23.5%) aged 28-35, 153 people (46.1%) aged 36-45, 87 people (26.2%) aged 46-55, and 14 people (4.2%) over 56 years old. Regarding educational qualifications, 193 faculty

members (58.1%) held Master's degrees, 134 faculty members (40.4%) held Doctoral degrees, and 5 faculty members (1.5%) held Associate Professor/Professor titles. In terms of teaching fields, 97 faculty members (29.2%) were in Economics-Management, 76 faculty members (22.9%) in Information Technology, 58 faculty members (17.5%) in Social Sciences and Humanities, 53 faculty members (16%) in Engineering-Technology, 31 faculty members (9.3%) in Education, and 17 faculty members (5.1%) in other fields. Regarding teaching experience, 112 faculty members (33.7%) had 3-5 years of experience, 137 faculty members (41.3%) had 6-10 years, 58 faculty members (17.5%) had 11-15 years, and 25 faculty members (7.5%) had over 15 years of university teaching experience.

**Table 1:** Research concept measurement scales

Variable	Scale	Source
<i>Trust in AI outcomes</i>		
TAIO1	I believe that using AI will help me improve my teaching effectiveness	Venkatesh et al., 2003; Zawacki-Richter et al., 2019
TAIO2	I believe that AI will help me save time in preparing lessons and evaluating students	
TAIO3	I believe that integrating AI into teaching will improve student learning outcomes	
TAIO4	I believe that using AI in teaching will help me develop more creative pedagogical methods	
TAIO5	I believe that AI will help me provide personalized learning experiences for students	
<i>Faculty's inspiration towards AI outcomes</i>		
FIAI1	I feel excited to explore new teaching methods with AI support	Guskey, 2002; Zawacki-Richter et al., 2019
FIAI2	Using AI in teaching sparks creativity and helps me develop more unique teaching content	
FIAI3	I feel thrilled to discover new possibilities that AI brings to improving students' learning experience	
FIAI4	Learning to use AI in teaching inspires me for continuous professional development	
FIAI5	I feel excited when AI helps me connect with students in new and more meaningful ways	
<i>Faculty's intention to use AI in teaching</i>		
IUAI1	I plan to integrate AI tools into my teaching methods in the near future	An et al., 2023
IUAI2	I am willing to participate in training courses on AI applications in education to improve teaching effectiveness	
IUAI3	I intend to regularly update and apply new AI technologies in my teaching activities	
IUAI4	I intend to use AI as a support tool to personalize learning experiences for students	

(Source: preliminary research results)

All data was processed using SmartPLS software version 4.1, focusing on evaluating the reliability, convergent and discriminant validity of the scales, testing the theoretical model's fit, and subsequently drawing conclusions about the proposed research hypotheses.

**4. Research results and discussion**

**4.1. Research results**

**4.1.1. Measurement model assessment results**

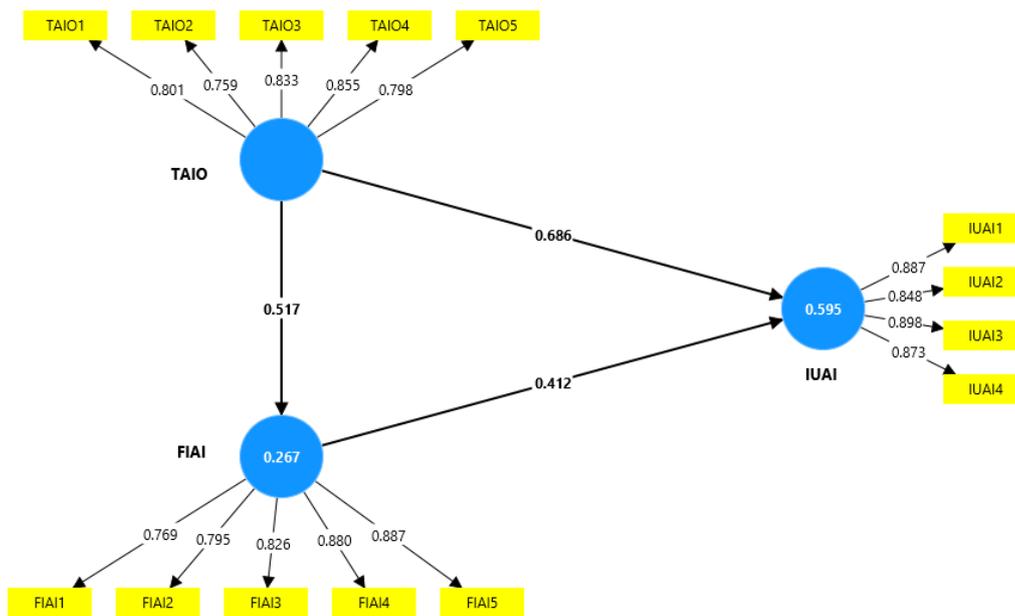
The analysis results of the measurement model show that all scales meet the requirements for reliability and

validity. Regarding reliability, all three constructs have Cronbach's Alpha (CA) and Composite Reliability (CR) coefficients exceeding 0.9 (IN: CA = 0.918, CR = 0.919; BF: CA = 0.904, CR = 0.905; IN: CA = 0.930, CR = 0.930), demonstrating very high internal consistency (Hair et al., 2019). For convergent validity, all outer loading indices exceed the threshold of 0.7 (ranging from 0.759 to 0.898), and the Average Variance Extracted (AVE) values of all constructs exceed the threshold of 0.5 (IN: 0.694, BF: 0.656, IN: 0.769), meeting the proposed criteria (Fornell & Larcker, 1981).

**Table 2:** Results of scale reliability and validity assessment

	Outer Loading	CA	CR	AVE	HTMT		
					FIAI	TAIO	IUAI
FIAI	0,769 - 0,887	0,918	0,919	0,694			
TAIO	0,759 - 0,855	0,904	0,905	0,656	0,517		
IUAI	0,848 - 0,898	0,930	0,930	0,769	0,657	0,686	

(Source: data analysis results)



**Figure 2:** PLS-SEM analysis results

(Source: data analysis results)

Regarding discriminant validity, the HTMT (Heterotrait-Monotrait Ratio) indices between constructions are all below the threshold of 0.9 (FIAI-TAIO: 0.517, FIAI-IUAI: 0.657, TAIO-IUAI: 0.686), confirming that the three factors measure distinct concepts (Henseler et al., 2016).

4.1.2. Structural model assessment results

The analysis results of the evaluation model show that the model has good explanatory power and fits well with the empirical data. The R<sup>2</sup> value for faculty inspiration (FIAI) reaches 0.267 and for AI usage intention (IUAI) reaches 0.595, where the R<sup>2</sup> value for IUAI is considered strong according to Hair et al.'s (2019) criteria. All VIF indices are

less than 5 (all at 1.365), indicating no serious multicollinearity issues in the model (Hair et al., 2017). Regarding effect sizes, the f<sup>2</sup> values show that trust in AI outcomes (TAIO) has a strong influence on both FIAI (f<sup>2</sup> = 0.365) and IUAI (f<sup>2</sup> = 0.404), while FIAI also has a significant impact on IUAI (f<sup>2</sup> = 0.307), aligning with Cohen's (1988) assessment threshold suggesting that f<sup>2</sup> > 0.35 indicates a strong effect. The positive Q<sup>2</sup> values for FIAI (0.166) and IUAI (0.425) confirm the model's predictive capability, particularly for faculty's intention to use AI, meeting the criteria of Geisser (1974) and Stone (1974) that Q<sup>2</sup> > 0 demonstrates good predictive power.

**Table 3:** Structural model assessment results

	f <sup>2</sup>			R <sup>2</sup>	Q <sup>2</sup>	VIF		
	TAIO	FIAI	IUAI			TAIO	FIAI	IUAI
TAIO		0.365	0.404				1.000	1.365
FIAI			0.307	0.267	0.166			1.365
IUAI				0.595	0.425			

(Source: data analysis results)

4.1.3. Research hypothesis testing results

The results of the hypothesis testing, as presented in Table 4 and Table 5, provide a comprehensive evaluation of the relationships between Trust in AI Outcomes (TAIO), Faculty Inspiration towards AI (FIAI), and Intention to Use AI in Teaching (IUAI). The analysis employs structural equation modeling to assess direct, indirect, and total effects, with statistical significance determined by T-statistics and P-values.

These results offer empirical evidence to validate the proposed theoretical framework, which integrates cognitive and emotional pathways in the context of AI adoption in education.

Table 4 reveals significant direct effects supporting hypotheses H1, H2a, and H2b. For H1, the relationship between TAIO and IUAI shows a strong direct effect (β =

0.441,  $T = 18.368$ ,  $P = 0.000$ ), alongside a notable total effect ( $\beta = 0.686$ ), indicating that trust in AI outcomes substantially influences faculty intention to adopt AI, consistent with findings from Davis (1989) on perceived usefulness in technology acceptance. Similarly, H2a confirms that TAIO positively affects FIAI ( $\beta = 0.517$ ,  $T = 10.398$ ,  $P = 0.000$ ), supporting the role of trust in fostering inspiration as suggested by Cognitive Emotion Theory (Lazarus, 1991). Additionally, H2b is accepted with a significant path from FIAI to IUAI ( $\beta = 0.412$ ,  $T = 7.814$ ,  $P = 0.000$ ), highlighting inspiration as a key driver of intention.

Table 5 focuses on the mediation effect proposed in H2c, confirming that FIAI mediates the relationship between TAIO and IUAI. The indirect effect through inspiration is statistically significant ( $\beta = 0.213$ ,  $T = 6.056$ ,  $P = 0.000$ ), indicating that trust in AI outcomes influences intention not only directly but also indirectly by inspiring faculty, as

supported by studies on hedonic motivation in technology adoption (Almenara et al., 2024). This result validates H2c and underscores the importance of emotional pathways alongside cognitive factors in shaping faculty behavior towards AI integration in teaching.

The findings from Tables 4 and 5 provide a robust empirical foundation for understanding the dual pathways - cognitive and emotional - that drive faculty intention to use AI in teaching. The significant direct and indirect effects highlight the intertwined roles of trust and inspiration, suggesting that both rational evaluations of AI benefits and emotional responses are critical for adoption. These results align with the integrated framework of the Technology Acceptance Model (Davis, 1989) and Cognitive Emotion Theory (Lazarus, 1991), offering practical insights for educational institutions to foster trust and inspiration among faculty to facilitate AI integration.

**Table 4:** Relationship testing results

Hypothesis	Relationship	$\beta$			T statistics	P-values	Conclusion
		Direct	Indirect	Total			
H <sub>1</sub>	TAIO → IUAI	0.441	0.213	0.686	18.368	0.000	Accepted
H <sub>2a</sub>	TAIO → FIAI	0.517	-	0.517	10.398	0.000	Accepted
H <sub>2b</sub>	FIAI → IUAI	0.412	-	0.412	7.814	0.000	Accepted

(Source: data analysis results)

**Table 5:** Results of mediation relationship testing

Hypothesis	Relationship	$\beta$	T statistics	P-values	Conclusion
H <sub>2c</sub>	TAIO → FIAI → IUAI	0.213	6.056	0.000	Accepted

(Source: data analysis results)

## 4.2. Discussion of research results

### *Impact of inspiration and trust on intention to use AI:*

The research results confirm both hypotheses H<sub>1</sub> and H<sub>2b</sub> with path coefficients of  $\beta = 0.412$  and  $\beta = 0.441$  respectively ( $p < 0.001$ ), demonstrating that faculty inspiration and trust in AI outcomes both have significant positive influences on the intention to use AI in teaching. This finding aligns with cognitive emotion theory (CET) and technology acceptance model (TAM) and is consistent with previous studies by Thrash et al. (2014), Nguyen et al. (2025), and Almenara et al. (2024). The  $f^2$  values of 0.307 and 0.404 respectively indicate that both factors have moderate to strong effects (Cohen, 2013), with belief having a slightly stronger impact than inspiration.

*Impact of trust on inspiration:* The study supports hypothesis H<sub>2a</sub> with a path coefficient of  $\beta = 0.517$  ( $p < 0.001$ ) and  $f^2 = 0.365$ , confirming that trust in AI outcomes has a strong positive influence on faculty inspiration. This result aligns with Lazarus's (1991) CET theory and is consistent with findings from Almenara et al. (2024) and Cabellos et al. (2024). This suggests that when faculty trust in AI effectiveness, they not only tend to use the technology but also feel excited and inspired about the potential to innovate their teaching methods.

*Mediating role of inspiration:* A key finding of the research is the significant mediating role of inspiration in the relationship between trust and intention to use AI, with an indirect effect coefficient of 0.213 ( $p = 0.006$ ). This demonstrates that trust in AI effectiveness not only directly promotes the intention to use AI in teaching but also indirectly through enhancing faculty inspiration. The total effect of trust in AI on intention to use AI is 0.686, comprising 0.441 direct effect and 0.213 indirect effect, indicating that both paths play important roles in shaping faculty's intention to use AI. The research model demonstrates good explanatory power with an  $R^2$  of 0.595 for intention to use AI, confirming the appropriateness and effectiveness of the proposed theoretical model.

## 4.3. Policy implications

Based on research findings regarding the influence of trust in AI on inspiration and intention to use AI in teaching, higher education institutions need to develop comprehensive strategies to build faculty trust in AI technology. Creating an "AI Trust Ecosystem" to foster confidence in AI usage in universities is a necessary breakthrough. This can be achieved by establishing "Open AI Labs" where faculty can directly experience and test AI applications in a safe environment before implementing them in actual classrooms. Universities should implement an "AI-Buddy" model pairing AI-

experienced faculty with beginners, creating a practical peer support network. Simultaneously, they should deploy an “AI Faculty Certification” program with levels from basic to advanced, not only recognizing skills but also creating clear motivation for professional development. This program should be accompanied by specific benefits such as reduced teaching hours for AI content development or priority budget allocation for teaching innovation projects.

To launch an “AI Inspiration Movement” aimed at fostering creativity and excitement, universities can organize regular “AI-Hackathons” where faculty and students collaborate to solve real educational challenges using AI technology in short timeframes, creating an atmosphere of excitement and immediate achievement. Universities should also establish an “AI Innovation Fund” providing mini grants for creative ideas in AI teaching applications, with simple application processes and quick approval mechanisms to maintain momentum. Additionally, they should build an online “AI Success Stories” platform to share specific success cases with clear metrics on improved learning outcomes, time savings, and increased student engagement, thereby creating continuous inspiration and building evidence-based trust.

To ensure effective implementation, universities need to apply an “AI-Integration Roadmap” model with specific deployment phases for each department/subject area, accompanied by clear measurement indicators and progress monitoring mechanisms. An “AI Rapid Response Team” consisting of technical and educational experts should be established to support faculty within 24 hours when facing difficulties in applying AI, minimizing risks of failure and enhancing trust. Simultaneously, a multidimensional “AI Effectiveness Assessment Framework” should be developed to measure not only usage frequency but also the impact on teaching quality and learning experience, providing continuous feedback to adjust strategies and optimize AI application. This ensures that initial inspiration translates into sustainable changes in university teaching practices.

## 5. Conclusion

This study has expanded the understanding of AI technology acceptance in higher education through the integration of TAM and CET. The research findings have illuminated the dual impact mechanism of trust in AI on intention to use AI: directly and indirectly through inspiration. The most significant theoretical contribution is the identification of inspiration's mediating role - an emotional factor previously understudied in the context of educational technology acceptance. This finding can contribute to expanding the traditional TAM through integrating emotional factors from CET, suggesting that technology acceptance processes may not only rely on cognitive factors but can also be influenced by emotional experiences. The integrated model proposed in this study can provide a complementary perspective for examining technology acceptance behavior in higher education contexts.

Despite achieving notable results, the study has several limitations that need to be acknowledged. First, the geographical scope of the research is limited to universities in Ho Chi Minh City, which may not fully reflect the diverse context of Vietnam's higher education system, particularly in regions with limited access to AI technology. Second, the

research primarily focuses on individual factors such as trust and inspiration without deeply analyzing the influence of organizational contextual factors such as school culture, leadership support, or available technological resources, which could play important roles in shaping faculty's AI usage intentions. Third, while the sample is diverse, there is a concentration in Economics-Management (29.2%) and IT (22.9%), whereas fields like Education, Humanities, and others are underrepresented. This imbalance could potentially influence the results or introduce bias in perceptions and intentions toward AI use, as faculty from different disciplines may have varying levels of exposure to and expectations from AI technology.

Based on these limitations, future research could expand in three main directions. First, comparative studies across different regions and types of universities should be conducted to better understand the differences in AI acceptance processes across geographical contexts and organizational characteristics, thereby providing solutions tailored to specific target groups. Second, subsequent studies should integrate organizational and environmental factors into the research model, such as innovation culture, leadership support, technological infrastructure, and institutional policies to gain a more comprehensive view of the AI acceptance process. Third, future research should ensure a more balanced representation of diverse academic disciplines, particularly including fields like Education and Humanities, to capture a broader spectrum of faculty perspectives and reduce potential biases in results.

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