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Exploring Factors Influencing E-Learning Acceptance: An Integration of Transactional Distance Theory and Technology Acceptance Model

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ABSTRACT

This study endeavors to scrutinize and ascertain the factors that impact students' acceptance and utilization of E-learning platforms. Combining the Transactional Distance Theory (TDT) and the Technology Acceptance Model (TAM), the methodology employed in this research was quantitative, gathering data from 255 participants engaged in higher education via E-learning platforms and data were analyzed by SPSSAU. The proposed model demonstrates five key determinants that influence students' acceptance of E-learning. The empirical evidence implies that the structure, dialogue, and learners' autonomy significantly influence students' intention to utilize E-learning platforms. Furthermore, the two constructs of TAM - perceived ease of use and perceived usefulness - correlate positively with the same. The study's results thus substantially validate the conjunct integration of TDT and TAM relating to E-learning utilization intent, providing crucial insights for key stakeholders in higher education institutions to strategize, evaluate, and implement E-learning systems more effectively.

Keywords: TDT, structure, dialogue, learners, autonomy, TAM

INTRODUCTION

In tandem with the rapid progression of information technologies, there has been a substantial upsurge in internet-based learning activities. E-learning, noted for its flexibility and non-dependence on temporal and spatial constraints (Cheng, 2012), has emerged as a viable extension to conventional classroom-based instruction. Nonetheless, it is not devoid of limitations such as diminished social presence affecting learner motivation and outcomes (Tang & Hew, 2019). Despite these constraints, E-learning continues to be recognized as a potent substitute to traditional pedagogy (Liu et al., 2010).

The Technology Acceptance Model (TAM), a seminal framework for examining technology acceptance and rejection (Davis, 1986; 1989), has been extensively deployed in academic environments (Al-Emran et al., 2018). Supporting the model's robustness are numerous studies that have consequently led to TAM evolving into a fundamental theory to understand predictors of user intention towards technology usage (Granić & Marangunić, 2019). However, empirical studies focusing on Chinese learners' technology acceptance remain sparse, particularly those investigating drivers of technology adoption for learning (Hao et al., 2017; Huang et al., 2019; Teo et al., 2019; Yang et al., 2017; Zhou, 2016).

In response to the 2020 directives of the Ministry of Education of the People's Republic of China, online pedagogy has been fervently endorsed for higher education, leading to the creation and utilization of numerous E-learning platforms. Yet, meritorious online learning is not solely contingent on provisioning an E-learning system, but necessitates the consideration of varied dimensions including system architecture, course development, and user dynamics (Persico et al., 2014). Consequently, investigating learner-related factors becomes indispensable in enhancing the efficacy of remote education, specifically during unforeseen exigencies.

Following this perspective, the present study, employing TAM as a theoretical framework, endeavors to discern potential determinants influencing students' acceptance of an E-learning platform at a Chinese university. The objective is multifold: to augment the original TAM model, identify precursors to technology use from the user's vantage point, guide future implementations of online education, and contribute to the design improvement of online education platforms, enhancing overall learner acceptance.

RESEARCH QUESTIONS

E-learning leverages untapped educational opportunities for students and provides viable solutions for institutions facing infrastructure-related problems due to increasing enrollments. Yet, the acceptance and efficiency of this instructional method have been met with apprehension, illuminated by negative feedback from educators and students, particularly due to the physical separation and altered learning experience. However, the escalating body of evidence countering these sentiments and the burgeoning participation and interest necessitates further examination. This study focuses specifically on the structure of E-learning platforms and its relation to aspects such as student autonomy and dialogue (student-to-student and student-to-

instructor interactions), aiming to enhance the effectiveness of E-learning experiences. The major research question that is anticipated to be answered is:

How could we improve students' acceptance towards E-learning course?

To be able to answer this question, it is required to examine numerous sub-questions which have been stated as follow:

Q1: How does the structure of a E-learning course affect students' acceptance?

Q2: How does the dialogue of a E-learning course affect students' acceptance?

Q3: How does the learners' autonomy affect their acceptance towards the E-learning courses?

THEORETICAL BASIS AND HYPOTHESIS DEVELOPMENT

E-Learning Course

The landscape of modern education has witnessed a significant shift with the advent of E-learning course. This digital derivative of education, also known as electronic learning, has caught the attention of various researchers and scholars over recent years. According to Al-Fraihat et al. (2020), E-learning is the use of electronic technologies to create a flexible, learner-centric education model that is accessible from anywhere, anytime. E-learning is commonly structured around two main axes: synchronous and asynchronous learning. Synchronous learning, as defined by Dabbagh (2007), involves real-time, interactive teaching methods, such as live lectures, web-based discussions, and instant feedback mechanisms. On the other hand, asynchronous learning, according to Hrastinski (2008), is centered around flexibility and self-paced learning, employing methods such as pre-recorded lectures, emails, and other online resources that learners can access as per their convenience.

Research on factors affecting E-learning efficacy has pinpointed crucial elements such as course structure, learners' autonomy, dialogue, and technology. A study by Huang et al. (2015) emphasizes that a well-structured course with clearly defined learning objectives, instructions, and appropriate resources is crucial to enhancing learning outcomes. Furthermore, learner autonomy in E-learning has proven to be a significant factor in learner's participation and motivation (Moore, 2012). The role of dialogue within E-learning courses has also been highlighted, influencing the overall learning experience positively. Learner-learner and learner-instructor interactions promote a shared sense of community and facilitate feedback exchange (Garrison, Anderson & Archer, 2001). Lastly, the role of reliable, user-friendly technology is undeniable in providing a holistic and seamless e-learning experience (Sun, Tsai, Finger, Chen & Yeh, 2008). E-learning, jeopardizing traditional brick-and-mortar educational models, pairs technology with education, presenting a unique blend of accessibility and quality. Course structure, autonomy, dialogue, and technology have been identified as critical determinants of E-learning efficacy, underpinning its acceptance among learners and educators alike.

Technology Acceptance Model

The Technology Acceptance Model (TAM), as postulated by Davis (1989), suggests that the aspects of perceived usefulness and perceived ease of use shape user attitudes towards technology (see Figure 1). These attitudes, in turn, influence the behavioral intention to either utilize or reject technology. TAM represents a theoretical model that provides an insightful framework for understanding attitudes toward novel technology applications (Charness & Boot, 2016). Critical determinants of the acceptance or rejection of new technology, according to the model, are perceived usefulness and ease of use, although other variable factors can also exert influence. Numerous studies have utilized TAM as the underlying framework, exploring attitudes towards emergent technologies. For instance, investigated student attitudes towards E-learning technology. Their findings indicated that student acceptance of this technology was significantly influenced by factors such as perceived usefulness, efficiency, and effectiveness (Masrom, 2007).

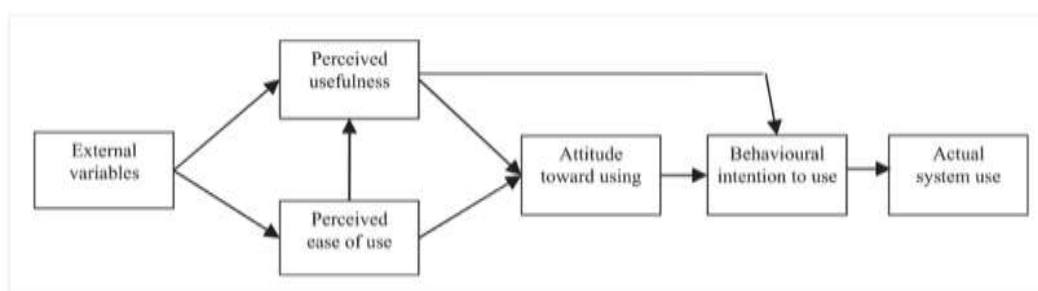


Figure 1. Technology acceptance model (Davis, 1989).

Transactional Distance Theory

Dr. Michael Moore's Transactional Distance Theory (TDT) offers a pedagogical foundation for distance education. TDT emphasizes that "distance education transcends geographical separation to revolve chiefly around pedagogical considerations" (Moore, 1993). The theory proposes that geographical separation induces a "transactional distance", a cognitive and communication gap, potentially causing misunderstanding between teachers and students. Moore (1993) avers that transactional distance is influenced by three constituents: structure, dialogue, and learner autonomy. Structure signifies the rigidity or flexibility of a course concerning its objectives, activities, assessments, planned interactions, and adaptiveness to individual learners' needs. Dialogue encompasses purposeful interactions that facilitate the learning procedure. Learner

autonomy alludes to the learners' capability of self-directed learning control and management. The theory posits that these three elements interact to determine the transactional distance. An increased dialogue coupled with a decreased structure tends to reduce transactional distance. However, a scenario of restricted dialogue and rigid structure engenders a larger transactional distance. In this case, learners must demonstrate increased responsibility in their learning journey for favourable outcomes.

Hypothesis Development

The hypothesis development of this study was constructed based on the combination of the different aspects of the theories mentioned above.

H1: Structure has positive impact on the Perceived Usefulness of an E-learning Platform.

H2: Structure has positive impact on the Perceived Ease of Use of an E-learning Platform.

H3: Dialogue has positive impact on the Perceived Usefulness of an E-learning Platform.

H4: Dialogue has positive impact on the Perceived Ease of Use of an E-learning Platform.

H5: Learners' Autonomy has positive impact on the Perceived Usefulness of an E-learning Platform.

H6: Learners' Autonomy has positive impact on the Perceived Ease of Use of an E-learning Platform.

H7: Perceived Ease of Use has a positive impact on the Perceived Usefulness of an E-learning Platform.

H8: Perceived Ease of Use has a positive impact on the Intention to Use an E-learning Platform.

H9: Perceived Usefulness has a positive impact the Intention to Use an E-learning Platform.

LITERATURE REVIEW

Structure

Moore (1973) defined 'structure' as the capability of a learning experience to adapt to each student's needs. Moore (1997) detailed it a bit further by mentioning that structure relates to how flexible a program's methods, goals, and evaluation techniques can be, as well as to what extent a program can meet individual students' needs. In simpler terms, the more a learning environment can personalize a student's experience and offer flexible ways to learn, the more the student tends to feel part of the learning process (Moore, 1997). Environments that are too rigid can feel restrictive to students (Lee & Rha, 2009). Moore posits that the pedagogical constructs of structure and dialogue hold paramount importance in alleviating students' perception of transactional distance within online education courses (Garrison, 2000; Shannon, 2002; Falloon, 2011; Moore, 2012). Structure signifies the configuration of the course, encompassing objectives, pedagogical strategies, instructional content, materials, and evaluation methods (Garrison, 2000; Moore, 2012; Huang et al., 2015). The structure of a course can oscillate between rigidity and flexibility, contingent upon the content, learner interactions, and learner necessities (Huang et al., 2015; Moore, 2012; Shannon, 2002). A more accommodating structure is necessary in pursuit of diversity and individualization that optimally supports each learner (Huang et al., 2015). In highly formalized learning environments, an educator's assessment of learning objectives is made from the beginning of the learning process. Hence, the following hypotheses are proposed:

H1: Structure has positive impact on the Perceived Usefulness of an E-learning Platform.

H2: Structure has positive impact on the Perceived Ease of Use of an E-learning Platform.

Dialogue

Dialogue in this research involves communication and collaboration between students and instructors to enhance learner understanding and engagement. Besides structure, Moore's theory accentuates the role of dialogue, referring to potent, constructive interpersonal exchanges that aid the learner in consolidating their comprehension of the educational content (Gorsky and Caspi, 2005; Moore, 2012). The concept of dialogue is not fixed but flexible, especially with the advent and continual expansion of online communication tools for teachers and students. It is crucial to ensure these interactive opportunities bolster student understanding (Garrison, 2000; Gorsky and Caspi, 2005; Moore, 2012). The degree of student-teacher interaction inherently dictates the level of learner autonomy (Garrison, 2000). Ultimately, efficacious dialogue inhabits the learning spaces amidst conversations between learners, and those shared between students and teachers (Gorsky and Caspi, 2005; Moore, 2012). Further, several studies have looked into different aspects of dialogue, such as preparation of learners and usage of digital tools for communication (Falloon, 2011). Other researchers like Mathieson (2012) focused on the role of dialogue in online sessions, showing the positive impact of audio-visual feedback through digital tools. Furthermore, Moore (2007) evaluated the impact of dialogue and structure on autonomous learners' experiences. Lastly, several researchers highlighted the critical role teachers play in fostering effective communication and interaction between learners. Based on these studies, the hypotheses are proposed:

H3: Dialogue has positive impact on the Perceived Usefulness of an E-learning Platform.

H4: Dialogue has positive impact on the Perceived Ease of Use of an E-learning Platform.

Learners' Autonomy

Learners' autonomy refers to a student's independent motivation to learn. It centralizes the student's needs and expectations, a concept particularly vital in online education, which offers the flexibility of choice and fosters independent learning (Massimo, 2014). Learners' autonomy is intrinsically linked to various aspects of the learning process. Madjar et al. (2013) point out that autonomy-supportive environments can bolster online learning acceptability among students, ensuing in enhanced academic achievement. Hence, the need for autonomy in online spaces to kindle student growth and improve university performance.

Researchers advocate that an autonomy-driven approach boosts outcomes regarding objectives and directs teaching methodologies towards goal attainment. It emphasizes designing learning environments with a focus on emotional aspects. Moore further articulates that the interplay between structure, dialogue, and transactional distance is mediated by the student's ability to manifest learning autonomy (Garrison, 2000; Moore, 2012; Huang et al., 2015). Garrison (2000, p.8) suggests, "The greater the transactional distance, the greater responsibility is placed on the learner." This requires instructors to consider learners' capability to regulate their learning, determine if the current format aligns with the students' needs, and make significant modifications to encourage student learning (Garrison, 2000; Shannon, 2002; Moore, 2012). While one extreme of the spectrum might find the student piloting their learning, the opposite end may see the teacher exercising full control over content delivery (Garrison, 2000; Moore, 2012). The Transactional Distance Theory influenced our pedagogical approach, prompting the adoption of novel strategies to balance the imposed distance constraints. Based on previous research, the following hypotheses are proposed:

H5: Learners' Autonomy has positive impact on the Perceived Usefulness of an E-learning Platform.

H6: Learners' Autonomy has positive impact on the Perceived Ease of Use of an E-learning Platform.

Perceived Usefulness and Perceived Ease of Use

The influences of Perceived Usefulness and Perceived Ease of Use are potentially shaped by several external factors (Almaiah & Alismaiel, 2018; Venkatesh & Bala, 2008). A spectrum of probable motivating constituents impacting learners' technology acceptance has been evaluated in education, encompassing Computer Self-Efficacy (Al-Azawei et al., 2017; Cakır & Solak, 2015; Cheung & Vogel, 2013; Yeou, 2016), Learner Experience (Liu et al., 2010; Ros et al., 2015), Learning Styles (Al-Azawei et al., 2017), Technical Support (Cheung & Vogel, 2013; Sánchez & Hueros, 2010), Perceived Convenience (Chang et al., 2012), Subjective Norm (Song et al., 2017), and cultural elements (Sang et al., 2010).

Existing literature corroborates that both Perceived Usefulness and Perceived Ease of Use exert a positive influence on the acceptance of technologically-inclined learning (Granić & Marangunić, 2019; Persico et al., 2014). For instance, Al-Azawei et al. (2017), in their examination of learner perceptions towards a blended e-learning system, inferred that Perceived Usefulness and Perceived Ease of Use were indicative of the Intention to Use, consequently boosting learner satisfaction. Analogously, these two factors have been determined to exist as precedent influences on college students' adoption tendencies of English mobile learning, with Perceived Usefulness showing a long-term positive impact on Intention to Use (Chang et al., 2012). A noteworthy connectivity between Perceived Ease of Use and Perceived Usefulness has also been unraveled (Nagy, 2018; Song et al., 2017). For example, Chow et al. (2012) who analyzed medical students' Intention to Use virtual reality technology, identified Perceived Ease of Use as an influential determinant of Perceived Usefulness and behavioral intention. Similarly, Yeou (2016) discovered a direct influence of Perceived Ease of Use on the Perceived Usefulness of Moodle among university students. In the wake of these revelations, the ensuing hypotheses are proposed:

H7: Perceived Ease of Use has a positive impact on the Perceived Usefulness of an E-learning Platform.

H8: Perceived Ease of Use has a positive impact on the Intention to Use an E-learning Platform.

H9: Perceived Usefulness has a positive impact on the Intention to Use an E-learning Platform.

In light of the aforementioned theoretical variables and hypothesized relationships, we construct a research model to investigate the interrelationships among factors potentially influencing students' intention to utilize an E-learning Platform. The proposed model, explicated in Figure 2, forms the basis of the exploration.

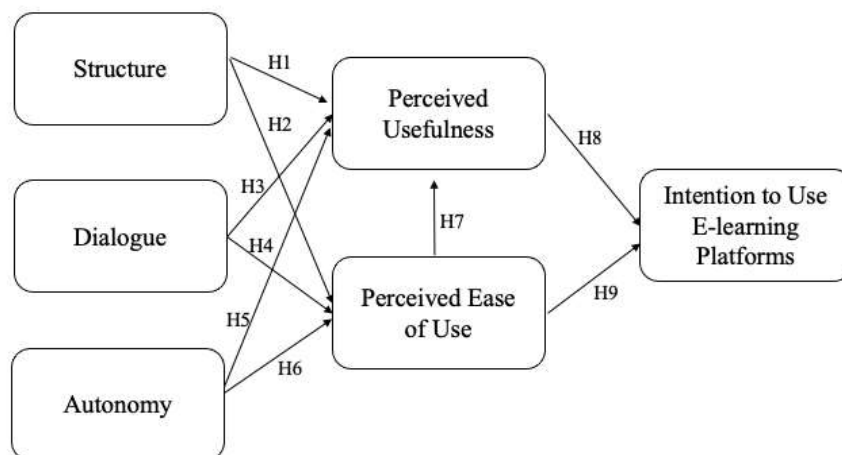


Figure 2. Research model and Hypotheses

DATA COLLECTION AND ANALYSIS

Scale Design

This research employed a survey method via a well-structured questionnaire to test the study's hypothesis, drawing from two relevant theories. The survey was divided into two sections - one focused on demographics like age, gender, educational level, and the other concentrated on 24 items adapted from past studies. They cover Structure, 4 items, adapted from Akaslan and Law(2011), Dialogue, 4 items, adapted from Bolliger and Inan (2012), Learners' autonomy, 4 items, adapted from Barnard (2009) and Pintrich et al., (1991), Perceived ease of use, 4 items, Perceived usefulness, 4 items, and Intention to use, 4 items, adapted from Pekrun et al., (2005).

Before data collection began, the research obtained necessary permissions from Wuhan Business University. It targeted undergraduate E-learning users. Participants completed the survey in Chinese after their E-learning course. Students who received the online survey were asked to provide their details and evaluate their E-learning platform experiences. A preliminary survey was conducted on 50 E-learning students from Wuhan Business University. The statistical software SPSSAU was used to analyse and cleanse the data extracted from this survey, ensuring its accuracy and completeness. The reliability and validity of the questionnaire were tested using methods like Cronbach's Alpha coefficient and split-half reliability. The validity test checked whether the study objectives were accurately reflected in the questionnaire's variables. Based on analysis and test results, the questionnaire was refined for a more accurate reflection of the research aim. This robust process led to the development of an official survey questionnaire.

Data Collection

The questionnaire is divided into two parts. The first part is of basic personal information, and the second part is the factors affecting students intention of using E-learning platforms. To ensure the rationality and validity of the questionnaire, the questionnaire is distributed in pre-survey stage and formal investigation stage. At the pre-survey, 50 questionnaires were distributed, and the data were used to modify the questionnaire. The collected data are analyzed by SPSSAU for the reliability and validity of the questionnaire. According to the corresponding feedback, the content and structure of the questionnaire are enriched and improved to ensure the scientific and validity of the final questionnaire. During the formal survey period, 300 questionnaires were distributed and total of 255 valid questionnaires were obtained after eliminating the invalid questionnaires. Regarding the respondent's demographic details: 79 (31%) were males, and 176 (69%) were females. 114 (50.6%) were in the age range of 18 to 20 years old, 89 (34.9%) were in the age range of 21 to 22 years old, and 52 (14.5%) were in the age range of 23 to 24 years old. Regarding level of study: 69 (26.9%) were first-year college students, 77 (30.2%) were from the second year, 60(23.4%) were from the third year, and 49 (19.5%) were from the fourth year.

Test of Reliability and Validity

The reliability and validity test results of the questionnaire on factors influencing E-Learning acceptance are shown in Table 1. AVE and CR were used for convergent validity analysis; usually an AVE greater than 0.5 and a CR greater than 0.7 indicated high convergent validity. Composite AVE ranging from 0.628 to 0.730 means the validity of the analysis is adequate. CR indices of measurement items in this study are higher than 0.7, suggesting good internal consistency and reliable analysis results. Cronbach's α stands for the extent of the close relationship of items in a group, and is used to measure the scale reliability of the items. When Cronbach's α is higher than 0.8, it implies that the items have a relatively high internal consistency.

Table 1: Test of reliability

Construct	AVE	CR	Cronbach's α
Structure	0.662	0.896	0.882
Dialogue	0.633	0.794	0.819
Autonomy	0.712	0.890	0.879
PU	0.629	0.806	0.824
PEoU	0.603	0.829	0.818
IU	0.670	0.868	0.860

The validity analysis of all the measures shown in Table 2 suggests that the KMO value of the overall scale was greater than 0.8, and the significance of Bartlett's spherical test value was less than 0.001, indicating that the study data had good validity and reached a significant level.

Table 2: Test of KMO and Bartlett

	KMO	0.849
	Chi-square	361.345
Bartlett's Test	<i>df</i>	21
	<i>p</i>	0.000

Test of Model Fitness

Table 3: Model fitness

Indicator	χ^2/df	GFI	RMSEA	AGFI	CFI	NFI	NNFI
Std. value	<3	>0.9	<0.10	>0.9	>0.9	>0.9	>0.9
Value	2.037	0.903	0.080	0.942	0.907	0.913	0.911

The model fitness value in Table 3, $\chi^2/df=2.037 < 3$, GFI= 0.903, RMSEA=0.080, AGFI=0.942, CFI=0.907, NFI=0.913, NNFI=0.911, implying that the model is statistically significant and worth being further analyzed.

Table 4: Path coefficients

X	→	Y	Unstd. Coef	SE	z (CR)	p	Std. Coef	Conclusion
S	→	PU	0.306	0.077	3.966	0.000	0.277	Support
D	→	PU	0.432	0.063	2.784	0.027	0.498	Support
A	→	PU	0.145	0.057	2.535	0.011	0.174	Support
S	→	PEoU	0.455	0.096	4.827	0.000	0.397	Support
D	→	PEoU	0.283	0.091	3.116	0.002	0.259	Support
A	→	PEoU	0.188	0.074	2.514	0.012	0.178	Support
PEoU	→	PU	0.420	0.059	6.130	0.000	0.455	Support
PU	→	IU	0.377	0.092	4.063	0.000	0.335	Support
PEoU	→	IU	0.525	0.086	5.127	0.000	0.511	Support

Table 4 shows the path coefficients and the structural relationships of the model, which include the unstandardized path coefficient (Unstd. Coef.), standard error (SE), z values (CR), the corresponding significance of the effects (p values), standardized path coefficient (Std. coef) and conclusions of support for each hypothesis.

Specifically, Structure has a standardized path coefficient value of 0.277>0 for PU influence and this path shows a significance at 0.01 level ($z=3.966$, $p=0.000<0.01$), thus indicating that Structure has significant positive influence relationship on PU; Dialogue has a standardized path coefficient value of 0.498>0 for PU influence and this path shows a significance at 0.05 level ($z=2.784$, $p=0.027<0.05$), thus indicating that Dialogue has significant positive influence relationship on PU; Autonomy has a standardized path coefficient value of 0.174>0 for PU influence and this path shows a significance at 0.05 level ($z=2.535$, $p=0.011<0.05$), thus indicating that Autonomy has significant positive influence relationship on PU. Structure has a standardized path coefficient value of 0.397>0 for PEoU influence and this path shows a significance at 0.01 level ($z=4.827$, $p=0.000<0.01$), thus indicating that Structure has significant positive influence relationship on PEoU; Dialogue has a standardized path coefficient value of 0.259>0 for PEoU influence and this path shows a significance at 0.01 level ($z=3.116$, $p=0.002<0.01$), thus indicating that Dialogue has significant positive influence relationship on PEoU; Autonomy has a standardized path coefficient value of 0.178>0 for PEoU influence and this path shows a significance at 0.05 level ($z=2.514$, $p=0.012<0.05$), thus indicating that Autonomy has significant positive influence relationship on PEoU. As a result, hypotheses H1, H2, H3, H4, H5, and H6 were supported.

PEoU has a standardized path coefficient value of 0.455>0 for PU influence and this path shows a significance at 0.01 level ($z=6.130$, $p=0.000<0.01$), thus indicating that PEoU has significant positive influence relationship on PU; PU has a standardized path coefficient value of 0.335>0 for IU influence and this path shows a significance at 0.01 level ($z=4.063$, $p=0.000<0.01$), thus indicating that PU has significant positive influence relationship on IU; PEoU has a standardized path coefficient value of 0.511>0 for IU influence and this path shows a significance at 0.01 level ($z=5.127$, $p=0.000<0.01$), thus indicating that PEoU has significant positive influence relationship on IU; As a result, hypotheses H7, H8 and H9 were supported.

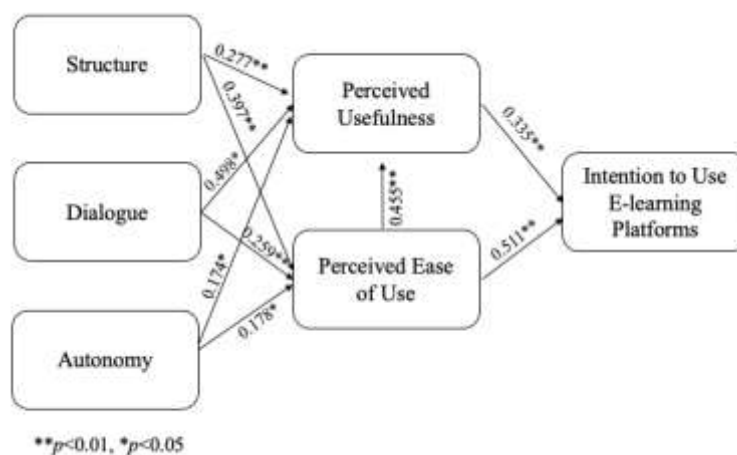


Figure 3. Test result of research model

Based on the test result of research model in Figure 3, it is apparent that all the hypotheses are verified. In the context of E-learning, structure, dialogue and learners' autonomy have positive influence on perceived usefulness and perceived ease of use; while perceived ease of use has positive influence on perceived usefulness; perceived usefulness and perceived ease of use have positive influence on learners' intention to use E-learning platforms.

DISCUSSION

Reflecting on our research question – how we could improve students' acceptance towards E-learning courses – it seems the answer resides in a multifaceted approach. Our manifold analysis illustrates that structure, dialogue, learners' autonomy, and perceivable benefits, particularly with regard to usefulness and accessibility of course material, all play compelling roles in fostering students' acceptance of E-learning.

The influence of structure on E-learning platforms was made apparent in the study. A well-structured course that is robust yet flexible can guide students through their learning with ease, thereby improving acceptance. This result aligns with our first sub-question, “How does the structure of an E-learning course affect students' acceptance?”.

Subsequently, dialogue was also found to have a critical effect on E-learning acceptance. Facilitating open and meaningful interaction between teachers and students could foster understanding and lessen the cognitive gap that might occur in distance learning. This directly addresses our second sub-question, “How does the dialogue of an E-learning course affect students' acceptance?”.

Additionally, the study found that the element of learners' autonomy has a significant impact on their acceptance of E-learning. Autonomy empowers students to have control over their learning process, and a platform that supports this not only encourages academic growth but also teaches responsibility and self-discipline, which directly resonates with our third sub-question, “How does the learners' autonomy affect their acceptance towards the E-learning courses?”.

Lastly, the results indicated that the constructs of TAM, namely, perceived usefulness and ease of use, are crucial to students' engagement with E-learning platforms. Clearly articulated advantages and a user-friendly interface can bolster students' inclination to accept and engage with E-learning more readily.

IMPLICATION

Theoretically, this research blends Transactional Distance Theory (TDT) and the Technology Acceptance Model (TAM) to offer a unique perspective on E-learning acceptance. While the work cautiously highlights the potential significance of structure, dialogue, and learner's autonomy (from TDT) as well as perceived usefulness and ease of use (from TAM) in shaping E-learning acceptance, it also acknowledges the exploratory nature of the integrated model. This nascent fusion calls for a more thorough academic exploration to ascertain its universal applicability across different online learning ecosystems. Moreover, this study proposes an insightful groundwork for stimulating further research into the potential individual and situational elements that could shape responses towards E-learning acceptance.

Practically, these findings hold significant implications for both educators and platform providers. For educators, these insights underscore the need to devise E-learning environments that promote meaningful dialogue between instructors and learners, provide autonomy, and are well-structured, thereby fostering a sense or perception of ease and usefulness among learners. For platform providers, understanding that ease of use fuels perceived usefulness implies that continuous efforts should be emphasized on intuitive interface design and usability. This study provides a roadmap for improving learner reception and engagement by cultivating an awareness of the essential factors affecting their acceptance.

LIMITATIONS

Despite its contributions, the current study exhibits some limitations. Primarily, the investigation assesses the impact of a mere three external variables on learners' inclination to utilize an E-learning Platform, potentially overlooking other variables that may influence platform acceptance. Therefore, future research could extend this study by exploring connections between additional variables and learners' technology acceptance, notably when engaging with a new learning system initially. Secondly, this study's context is framed within the first three months following the adoption of the E-learning platform. Students' perceptions pertaining to ease of use and usefulness of technology could evolve over time with increased usage experience. Consequently, conducting longitudinal research may provide a deeper understanding of the results of the current study, accounting for the evolution in learners' perceptions and behaviors over an extended duration.

CONCLUSION

This study advances our understanding of learners' acceptance of E-learning platforms by examining the critical role played by structure, dialogue, and learner autonomy. It reveals a potent interconnection between perceived ease of use, perceived usefulness, and learner intention to use these platforms, elucidating how an intuitive, interactive, and learner-centric E-learning environment can catalyze learner engagement. While providing foundational insights, we encourage future research to delve deeper and assess other potential variables influencing learners' E-learning platform acceptance. With the digitalization of education becoming increasingly ubiquitous, such research holds transformative potential for shaping learner-centric online educational environments.

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