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What Drives Satisfaction and Continuance Intention to Use E-Learning? : A Case of Dance Academy Students in Chengdu, China

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Abstract

This study aims to explore the factors that significantly impact the e-learning satisfaction and continuance intention of dance academy students in Chengdu, China. The Technology Acceptance Model (TAM), Expectation Confirmation Model (ECM), and Information Systems Success Model (ISSM) serve as the foundation for the conceptual framework in this study. The study explores the key constructs from previous studies to propose a conceptual framework, including service quality, perceived ease of use, perceived usefulness, confirmation, information quality, satisfaction, and continuance intention. The quantitative questionnaire was distributed to 476 undergraduate students in Dance Academy at Sichuan University. The sampling methods include judgmental, quota and convenience sampling. Additionally, this study used confirmatory factor analysis and structural equation modeling as statistical analysis methods. The analysis showed that all six hypotheses were supported. Students will be more likely to use e-learning in the future if they are very satisfied with their online learning experience. The usefulness of e-learning is also significantly impacted by perceived ease of use, information quality and service quality.

Keywords : e-learning, service quality, information quality, satisfaction, continuance intention

Introduction

An e-learning ecosystem can provide learners and educators with a robust framework and simple access to information, course materials, resources, and services (Liaw et al., 2007). E-learning can expand educational perspectives without time, place, or space boundaries, overcoming the limitations of formal instruction (Baylari & Montazer, 2009; Lee et al., 2009). This is in contrast to typical classroom settings. In addition, e-learning may promote instructors' and students' ability to access online resources and motivate their Internet research (Paudel, 2021).

The third stage of the evolution of remote education is e-learning. E-learning is the term for distance education that uses computer and Internet technologies to enable learning anytime and anywhere. It is also currently the most popular type of distance education. In addition to the ongoing development and use of computer and internet technology, remote education has advanced more quickly (Crawford & McKenzie, 2011). Nowadays, many universities and educational organizations offer synchronous or asynchronous e-learning

courses, and e-learning has grown in Chinese education. E-learning is based on the Internet and has become omnipresent. The development of the e-learning industry has advanced by three to five years overall. In addition, the degree to which the online education industry has also increased significantly, so e-learning has now become the core proposition. Real-time interactive technology and the needs of various teaching situations continue to grind, strengthening the user experience and flexibility of e-learning (iResearch, 2020). The rapid growth of online learning in China and the seriousness with which the Chinese government treats it are further evidenced by the influx of appropriate regulations and improvements, particularly since the outbreak's inception (Ifenxi, 2020). At the same time, government initiatives have been the primary driving force in the education information market for public schools.

In order to investigate factors that significantly affect undergraduate students' intention to utilize e-learning consistently in Chengdu, China, this study draws on earlier surveys. The investigation, which emphasized the variables determining satisfaction with e-learning, looked at how undergraduates at two target colleges rated their perceptions of six important aspects related to their desire to use e-learning frequently. Therefore, this study objective is to explore the factors that significantly impact the e-learning satisfaction and continuance intention of dance academy students in Chengdu, China.

The Advantages of E-learning in The Field of Education

The quality that distinguishes e-learning from other learning methods is its many advantages over other learning techniques. Students participating in online learning can schedule their learning time and pace following their unique needs. This allows them to determine their own learning pace independently. Additionally, e-learning focuses on each student's needs—an approach that puts students first, not teachers. E-learning can also drastically lower the cost of education while enhancing educational institutions' efficacy. E-Learning can accommodate individual learners because it offers more options and allows students to learn uniquely. At the same time, it fully accounts for the distinctions between each learner. In conclusion, e-learning

Literature Review

Technology Acceptance Model (TAM)

The technology acceptability model, created by Davis et al. (1989), is commonly used in IS/IT acceptance studies and has the highest scientific support. TAM has been empirically demonstrated to have strong availability, making it one of the best and most well-liked models for employment in studies on technology uptake (Silva, 2015). TAM, over time, developed and became a leading scientific concept to investigate how different stakeholders, such as teachers and students, adopt new technologies in education (Granic & Marangunic, 2019). Research has assessed TAM's applicability for instructional techniques like LMW Blackboard or LMSs (Alharbi & Drew, 2014; Ibrahim et al., 2017). Most studies have examined the aspects that contribute to e-learning systems' success or failure individually, omitting to consider the relationship between the success factors and their comprehensive and combinatorial impacts (Eom & Ashill, 2018). The model states that two foundational (PU and PEOU) beliefs provide the basis for people's intent to utilize these innovations (Venkatesh & Bala, 2008). The model was developed to forecast the adoption and use of information technologies. The model's various influences make it easier to comprehend the factors that affect perceived usefulness and perceived ease of use and offer suggestions for making action plans that will increase usage (Legris et al., 2003). According to Davis et al. (1989), the major goal of TAM is to develop a framework for observing how environmental influences influence beliefs, attitudes, and behavior.

Expectation Confirmation Model (ECM)

According to Hong et al. (2006), ECM has a significant predictive validity for the information system (IS) and information technology (IT) ongoing purpose and has been determined to be a trustworthy model, especially from the perspective of major incentives. The inherent motivation factors could be added to the ECM to understand better users' intentions to keep using IS/IT. The ECM is not very helpful in capturing users' expectations of their intrinsically motivated IS/IT usage, which could also be a key user perception that affects the intention of the user to keep using the product (Thong et al., 2006). Various studies on e-learning environments have been acquired and verified from the ECM using varied sampling of samples. First, the learners' confirmation of more system-related preconceptions may impact how useful they think the e-learning system is (Lin & Wang, 2012). This could be used as a salient perception of users that influences users' want to continue using IS/IT and can be added into the ECM, given that the ECM is not very effective in documenting users' inner drive for their desire to continue using IS/IT (Lin et al., 2005; Thong et al., 2006). In essence, however, despite the model being dependable and having greater prognostic genuineness for the continuation of IS/IT usage in a wide range of IS/IT contexts, it is not very helpful in attempting to capture the anticipation of users intrinsically motivated for using IS/IT, that could be a crucial user perception that influences users' desire to continue using IS/IT (Cheng, 2014a).

Information System Success Model (ISSM)

The DeLone and McLean model of information system success model (ISSM) has been routinely utilized as a framework for multiple research projects for approximately 20 years and has received up to 3,164 citations, according to Marjanovic et al. (2016). According to numerous studies, higher education institutions have a substantial impact on the quality attributes of the D&M ISS Model in encouraging success in e-learning (Mahmoodi et al., 2017; Ojo, 2017). Numerous studies have supported the multi-dependent measurement application of the D&M IS Success Model. In order to evaluate online learning platforms at the system level that enable instruction, Internet-based activity, and communication, other researchers have revised the D&M ISS Model (Chuo et al., 2015). When the research on technology acceptance is examined, it is evident that the Technology Acceptance Model (Davis, 1989) and the Spread of the Theory of Innovation (Rogers, 1983) are used together frequently in articles about the success of information systems. On the other hand, DeLone and McLean (1992) Information Systems Success Model is in use.

Service Quality

Service quality is defined as the ability of a participant to resolve issues with information systems and information technology as quickly as possible based on certain criteria (such as guarantee, appearance, empathy, serviceability, personalization, and ability to respond) (Cheng, 2022). The term "service quality" refers to a person's evaluation of the

overall service quality for quickly assisting users in fixing issues with information systems and information technology (Cheng, 2020a). According to Daud et al. (2020), service quality is determined by participant evaluation of a sequence of the kind that participant equivalence believed would result in service provision. The quality of the service is represented in the level of help that a learner receives when using an online learning platform, such as tech support assistance with system deployment and management or training to simplify system usage (Prodanova et al., 2021). The researcher reached the following findings about the connection between perceived usability and perceived utility based on several earlier academic studies (Fan et al., 2021). Service quality is a helpful indication of perceived utility in using IS and directly affects perceived usefulness (Ahn et al., 2004; Lin, 2007). Hence, a hypothesis is developed:

Hypothesis 1: Service quality has a significant impact on perceived usefulness.

Perceived Ease of Use

According to a proposal, perceived applicability assessed how simple a user believed a novel technique would be to comprehend and use (Baki et al., 2018). According to Karkar et al. (2020), perceived ease of use was used to gauge how straightforward and easy students thought it was. Student's behavioral intentions and attitudes toward the learning system are influenced by perceived ease of use, a crucial assessment variable that can improve system adoption. Perceived ease and employment in connection to e refers to how much a person thinks utilizing e-learning will be straightforward. (Mailizar et al., 2021). According to Hang (2021), perceived ease of use refers to how conscious a guy is of whether or not a correct mechanism is easy to use. Perceived utility and perceived ease of use in TAM are the two key attitudes that describe and predict the adoption and usage of a certain type of technology, and there is a positive association between them (Davis et al., 1989). Therefore, it can be hypothesized that:

Hypothesis 2: Perceived ease of use has a significant impact on perceived usefulness.

Perceived Usefulness

Users' confirmation of expectations toward the e-learning system is predicted to help improve their quality of life and evaluations of the program's efficacy. If the utilization of the program exceeds the institution's efficiency targets, the benefits of using e-learning will be seen as worthwhile (Cheng, 2020a). Perceived usefulness and perceived simplicity of use are the major elements determining whether a user will accept a specific type of technology (Cheng, 2014a). A system's perceived utility measures how much a person believes it will improve how well they do their duties. As a result, it might impact someone's desire to employ creative methods (Cheng, 2022).

Additionally, users' feelings or emotional states may be affected after completing their tasks using an information system; this can be measured as satisfaction regarding the degree of perceived usefulness (Bhattacherjee, 2001). When users recommend that information technology be made more useful, it makes them happier. Prior studies have found a strong correlation between perceived usefulness and satisfaction when using e-learning platforms (Joo, 2010). Thus, a below hypothesis is constructed:

Hypothesis 3: Perceived usefulness has a significant impact on satisfaction.

Confirmation

It is anticipated that users' reinforcement of preconceptions about the system will be favorable if real-world usage of the e-learning platform serves as their platform standard (Cheng, 2020a). When a blended e-learning system can meet and surpass a user's expectations, that system will be considered successful (Cheng, 2014a). Furthermore, it was found that the best predictor of students' happiness was confirmation (Daneji et al., 2019). As a result, how satisfied people are will ultimately depend on whether a fact is demonstrated in a favorable or negative aspect (Rahardja et al., 2019). Bhattacherjee (2001) asserts that confirmation positively affects perceived satisfaction because it implies that the anticipated benefits of information system use have come to pass. Confirmation evaluates how well users' goals for using IS/IT and their actual behavior align. Additionally, it affects user satisfaction with usage, which has a good relationship with confirmation (Bhattacherjee, 2001). Accordingly, this study can propose a hypothesis:

Hypothesis 4: Confirmation has a significant impact on satisfaction.

Information Quality

The most frequently used information quality measures in e-learning are the content and design quality of the courses (Hsiao et al., 2019). System quality is the system's functionality, while information quality is the standard of facts or knowledge acquired through systems (Chen et al., 2015). Metrics for information quality, system quality, and service quality are components of information system measurement (Tam et al., 2020). By increasing their satisfaction with the online learning system, superior material can motivate students to continue using it (Cheng, 2014a). Information quality refers to how users judge the value of the information provided by a computer. Excellent information quality also significantly impacts user happiness (Ranganathan & Ganapathy, 2002). Given that correct information that is sufficient and rapidly updated is rarely provided, customers' happiness and their view of the value of using mobile services would be negatively impacted (Gao et al., 2015). Consequently, a hypothesis is suggested:

Hypothesis 5: Information quality has a significant impact on satisfaction.

Satisfaction

A successful e-learning platform will have satisfied users. Inversely proportional to how valuable they view the system as being (Cheng, 2020a). The degree of intrinsic rewards users receives from using the e-learning system can directly influence how satisfied they are with it and if they intend to continue using it (Cheng, 2014a). The psychological or affective state known as satisfaction is brought on by a cognitive evaluation of the appraising of the anticipated relationship cognitive gap (Cheng, 2022). The degree to which users are content with their surroundings can also be positively influenced by their capacity to focus when learning in virtual e-learning environments (Cheng, 2022). In online learning, Cheng (2020a) also claims that users' satisfaction with an e-learning system's services might be influenced by how useful they perceive those services to be. According to a prior study, Contentment significantly impacts whether you desire to continue. Customer satisfaction is a key sign of the effectiveness of e-learning and its potential for future application (Baturay, 2010). The ECT states that user happiness, which can be formed from prior usage interaction, is associated with continuing to use an information platform (Bhattacherjee, 2001). Based on previous literatures, a hypothesis is concluded:

Hypothesis 6: Satisfaction has a significant impact on continuance intention.

Continuance intention

The effectiveness of the e-learning system will frequently be an advantageous scenario for the system continuation intention rather than relying on the user's behavior of the system. When users find the e-learning system useful for their learning effectiveness after using it, they will be willing to maintain utilizing the e-learning system (Cheng, 2019). However, how valuable users perceive the integrated e-learning system to be has a substantial impact on their satisfaction and intention to continue with the system (Cheng, 2014a). Because learners are willing to continue using the e-learning program because they believe it will improve their educational progress and effectiveness, perceived utility is a predicate of continuance intention (Cheng, 2019). Users will likely desire to keep using specific services if they feel that the e-learning system's offerings are appropriate. Contentment is a favorable predictor of continuing intention in the setting of e-learning systems (Cheng, 2020a).

Conceptual Framework

This conceptual framework was created by identifying formerly academic research techniques. Additionally, it is supported by TAM, ECM, and ISSM, and all possible variables for this study were listed in the conceptual framework. Cheng (2022) first proposed the relationship between service quality, perceived usefulness, and satisfaction. A second framework showing the relationship between two important variables of TAM was presented by Cheng (2014a) and successfully showed a link between confirmation, contentment, and readiness to keep using, according to Cheng (2014a). Following Rughoobur-Seetah and Hosanoo (2021), it has been established that satisfaction and information quality are related. The survey's final conceptual framework is shown in Figure 1.

Figure 1

Conceptual Framework



Note: Constructed by author

Research Methodology

Research Design

A quantitative study was conducted using a probability sampling method, and a questionnaire was administered to students in the target academies with the assistance of teachers from the target academies. The target academy was the Academy of Dance at Sichuan University of Media and Communications. After the questionnaires were collected, the data were aggregated and surveyed to determine the basic characteristics that significantly impacted the participants' satisfaction and willingness to continue e-learning. The questionnaire was divided into three components. The first part consists of screening questions; the screening questions developed by McDowell (1987) are most frequently employed in questionnaires to avoid selecting ineligible respondents and the subsequent negative impact on the study results that could result in misclassification. Next, demographic data, a subcategory of questionnaire content design that primarily contains respondents' age, gender, background, habits, and economic position, is crucial for gathering evidence in quantitative research (Pirolli & Card, 1999). Furthermore, Chang (1994) A Likert scale was used to rate the responses on a range of 1 to 5, with 1 denoting severe departure from the item and 5 denoting strong agreement with the item.

The sampling methods include judgmental, quota and convenience sampling. For judgmental technique, undergraduates from undergraduates from the Academy of Dance at Sichuan University were selected. Subsequently, a quota selection was used to proportionate the sample. For convenience sampling, the questionnaire for this research paper was hand-delivered to the target academy by the researcher, and the online distribution was completed with the assistance of the staff of the target academy.

Four experts from the Sichuan University of Media and Communications were invited to examine all the scales to score the item objective congruence (IOC) for content validity. The four experts were at least associate professors with PhDs in Music Educations and many years of teaching experience. Pre-testing is frequently conducted on a small scale using a pilot test, and if the results are valid, a final version of the questionnaire is developed to start the actual research (Long, 1983). In order to verify the instrument's validity, 40 dance school students participated in a pilot study. Cronbach's Alpha was then used to evaluate the questionnaire's internal consistency reliability. The results showed that IOC values were above 0.60. The pilot test results show the strong internal consistency of 0.70 or above (Nunnally & Bernstein, 1994), including service quality (α =0.744), perceived ease of use (α =0.881), perceived usefulness (α =0.912), confirmation (α =0.895), information quality (α =0.741), satisfaction (α =0.936), and continuance intention (α =0.833).

After determining the validity and reliability of the instrument, the researchers sent paper questionnaires to 500 undergraduate students at the Dance Academy. After data recovery, the researchers analyzed this data information quantitatively using programs such as IBM SPSS, Jamovi, and Amos. Validated factor analysis (CFA) was also used to assess factor loadings, t-values, composite reliability (CR), average variance extraction (AVE), and discriminant validity structural equation modeling (SEM) to test hypotheses and direct and indirect effects of associations of potential variables.

Research Population and Sample

The target population of this study is all undergraduate students in the Academy of Dance at Sichuan University of Media and Communications. Furthermore, according to researchers, 500 samples are the bare minimum needed for a complicated research model (Singh & Masuku, 2012). The original respondents in the study were 1,157, and after screening, selection, and quota selection, 500 students were identified as the final sample. After the data screening, 476 responses were qualified and 24 were not, made up on 95% valid responses.

Data Analysis

The paper research questionnaire for this dissertation was hand-delivered to the targeting academy by the researcher and distributed with the help of the staff at the targeting academy. The researcher used a multi-stage sampling method that can be divided into two parts. First, the researchers used judgmental sampling to identify key students with e-learning experience from the target population of the dance academy. Then a quota selection was used, from which 500 respondents were selected as the final sample, as shown in Table 1.

Table 1

Academy	Grade	Population Size Total = 1157	Proportional Sample Size Total = 500
Academy of Dance	First year of university	301	130
	Second year of university	337	145
	Third year of university	250	109
	Fourth year of university	269	116

Sample Units and Sample Size

Source: Constructed by Author.

Demographics of Participants

Table 2 summarizes the complete demographics of the 476 respondents from the Academy of Dance. Of the participants, 28.6% were male students, and 71.4% were female students. First-year college students accounted for 26.7%, second-year college students accounted for 29.4%, and third-year college students accounted for 21.6%. Fourth-year university students accounted for 22.3%. By frequency of use, 44.3% used 0-1 times a week, 43.1% used 2-3 times a week, 12.2% used 4-7 times a week, and 0.4% used more than 7 times a week.

Table 2

The demographic data

Demographic and General Data (n=476)	Category	Frequency	Percentage
Gender	Male	136	28.6%
Gender	Female	340	71.4%
	First year of university	127	26.7%
Grade	Second year of university	140	29.4%
Grade	Third year of university	103	21.6%
	Fourth year of university	106	22.3%

Demographic and General Data (n=476)	Category	Frequency	Percentage
	0-1	211	44.3%
Number of uses	2-3	205	43.1%
	4-7	58	12.2%
	>7	2	0.4%

Source: Constructed by Author.

Result and Discussion

Scale development and concept validation are the areas where CFA has been used most frequently. It is typically used as an analytical tool for measurement instrument design and improvement, concept validity assessment, method effects identification, and choice evaluation for factor invariance across time and groups (Russell, 2002). As can be seen in Table 3, Cronbach's Alpha vales had the strong internal consistency of 0.70 or above (Nunnally & Bernstein, 1994), all factor loading values were higher than 0.50, the average variance extracted (AVE) was higher than 0.50, and the composite reliability (CR) was higher than 0,70 (Armstrong et al., 2013; Hair et al., 2006).

Table 3

Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire	No. of Item	СА	Factors Loading	CR	AVE
Confirmation (CON)	(Bhattacherjee, 2001a)	4	0.833	0.670-0.818	0.812	0.521
Information Quality (IQ)	(DeLone & McLean, 1992)	6	0.828	0.697-0.774	0.878	0.545
Service Quality (SQ)	(Roca et al., 2006)	4	0.832	0.708-0.752	0.817	0.528
Perceived Ease of Use (PEOU)	(Ngai et al., 2007)	3	0.775	0.756-0.774	0.808	0.584
Perceived Usefulness (PU)	(Lin & Wang, 2012)	4	0.824	0.715-0.774	0.841	0.569
Satisfaction (SAT)	(Bhattacherjee, 2001a)	4	0.790	0.720-0.771	0.837	0.561
Continuance Intention (CI)	(Bhattacherjee, 2001a)	4	0.890	0.677-0.778	0.821	0.534

Source: Constructed by Author.

According to the results of the discriminant validity investigation conducted following Table 4, the number of diagonals provided is equal to the square root of the AVE of the variables, and all coefficients connecting any two possible variables are less than 0.80 (Hair et al., 2006). Thus, discriminant validity was determined based on these quantitative measures.

Table 4

CON	IQ	SQ	PEOU	PU	SAT	CI
0.722						
0.251	0.738					
0.211	0.244	0.727				
0.202	0.220	0.324	0.764			
0.249	0.230	0.412	0.416	0.754		
0.517	0.445	0.370	0.394	0.337	0.749	
0.508	0.448	0.495	0.496	0.429	0.546	0.731
	0.722 0.251 0.211 0.202 0.249 0.517	0.722 0.251 0.738 0.211 0.244 0.202 0.220 0.249 0.230 0.517 0.445	0.722 0.738 0.251 0.738 0.211 0.244 0.727 0.202 0.220 0.324 0.249 0.230 0.412 0.517 0.445 0.370	0.722 0.251 0.738 0.211 0.244 0.727 0.202 0.220 0.324 0.764 0.249 0.230 0.412 0.416 0.517 0.445 0.370 0.394	0.722 0.738 0.251 0.251 0.738 0.202 0.211 0.244 0.727 0.202 0.220 0.324 0.764 0.249 0.230 0.412 0.416 0.754 0.517 0.445 0.370 0.394 0.337	0.722 0.738 0.251 0.251 0.738 0.202 0.211 0.244 0.727 0.202 0.220 0.324 0.764 0.249 0.230 0.412 0.416 0.754 0.517 0.445 0.370 0.394 0.337 0.749

Square roots of AVEs and correlation matrix

Note: The diagonally listed value is the AVE square roots of the variable

In addition, as shown in Table 5, all applicable thresholds for absolute fit metrics, such as CMIN/DF, GFI, AGFI, and RMSEA, as well as incremental fit measures for CFI, NFI, and TLI, were met. Therefore, all these measures of goodness-of-fit used in the CFA check are acceptable.

Table 5

Goodness of Fit for Measurement Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	<3.00 (Hair et al., 2010)	1.217
GFI	≥0.90 (Bagozzi & Yi, 1988)	0.943
AGFI	<u>>0.90 (Filippini et al., 1998)</u>	0.930
RMSEA	<0.05 (Hu & Bentler, 1999)	0.021
CFI	<u>>0.90 (Hair et al., 2010)</u>	0.987
NFI	<u>>0.90 (Hair et al., 2010)</u>	0.933
TLI	<u>></u> 0.90 (Hair et al., 2010)	0.985
Model Summary		In harmony with empirical data

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = Goodness-of-fit index, AGFI = Adjusted goodness-of-fit index, RMSEA = Root mean square error of approximation, CFI = Comparative fit index, NFI = Normed fit index, and TLI = Tucker–Lewis index.

Structural Equation Modeling (SEM)

As anticipated in this work, structural equation modeling (SEM) confirmation was carried out right after the CFA evaluation. Even though SEM frequently relies on correlational data, researchers can better grasp causality by using linear regression to models representing causal assumptions and comparing fits between models representing various mechanistic hypotheses (Shipley, 2002). The researcher adopted the SEM method to assess linear coefficients to determine the suitability of the assumed causality model. As shown in Table 6, the total values of CMIN/DF, GFI, AGFI, CFI, NFI, TLI, and RMSEA were higher than the qualified parameters after correction by AMOS version 24. The results show that the goodness of fit of the SEM is verified.

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	<3.00 (Hair et al., 2010)	1.605
GFI	≥0.90 (Bagozzi & Yi, 1988)	0.927
AGFI	<u>></u> 0.90 (Filippini et al., 1998)	0.912
RMSEA	<0.05 (Hu & Bentler, 1999)	0.036
CFI	≥0.90 (Hair et al., 2010)	0.963
NFI	≥0.90 (Hair et al., 2010)	0.909
TLI	≥0.90 (Hair et al., 2010)	0.959
Model Summary		In harmony with empirical data

Goodness of Fit for Structural Model

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = Goodness-of-fit index, AGFI = Adjusted goodness-of-fit index, RMSEA = Root mean square error of approximation, CFI = Comparative fit index, NFI = Normed fit index, and TLI = Tucker–Lewis index.

Hypothesis Outcomes

Referring to the findings of the measures in Table 7, satisfaction has the highest direct impact on continuance intention with a final standardized path coefficient (β) of 0.604 (t-value of 9.822***). In addition, confirmation had the second highest impact on satisfaction with 0.429 (t-value 7.957***), followed by perceived ease of use on perceived usefulness with a β of 0.331 (t-value 5.901***), followed by information quality on satisfaction with a β of 0.329 (t-value 6.646***), and then service quality on perceived usefulness with a β is 0.320 (t-value of 5.661***). Finally, the impact of perceived usefulness on satisfaction has a β value of 0.223 (t-value 4.696***), all of which are positively correlated with each other, with an increase in one of the values being accompanied by an increase in the other.

Table 7

Summary of hypothesis tests

Hypotheses	Standardized path coefficient (β)	t-value	Testing result
H1: Service Quality has a significant impact perceived usefulness.	0.320	5.661***	Supported
H2: Perceived Ease of Use has a significant impact on perceived usefulness.	0.331	5.901***	Supported
H3: Perceived Usefulness has a significant impact on satisfaction.	0.223	4.696***	Supported
H4: Confirmation has a significant impact on satisfaction.	0.429	7.957***	Supported
H5: Information Quality has a significant impact on satisfaction.	0.329	6.646***	Supported

Hypotheses	Standardized path coefficient (β)	t-value	Testing result
H6: Satisfaction has a significant impact on continuance intention.	0.604	9.822***	Supported

Note: *** p<0.001

Discussion

According to the data in Table 6, it can be verified that service quality is an important factor in determining perceived usefulness when the standardized path parameter threshold for this standardized path coefficient is 0.320, as shown by H1. Service quality has also been assessed about the level of delivery in the teaching profession based on the findings of prior academic investigations. Technology growth has caused a shift in service quality toward E-service quality. In conclusion, Gupta and Kaushik (2018) used their study to determine the association between service quality and perceived utility.

When the standardized path coefficient is 0.331, the analysis by H2 shows that perceived ease of use is one of the key components of perceived usefulness. The more direct a user's interaction with the system, the more likely it is that the User will find it helpful, signifying an inextricable link between usefulness and ease of use. Furthermore, if users believe the system is simple to use, they will assume that benefits flow from it (Jeong, 2011; Park et al., 2009; Thong et al., 2002).

The H3 hypothesis is supported as it can be derived from the standardized path coefficient value of 0.223, indicating that perceived usefulness significantly affects satisfaction. The overall PU of e-learning platforms is a crucial sign of students' contentment with the institution, and users' PU of the platform is a good sign of users' satisfaction with the platform (Cheng, 2014a, 2014c).

In addition, H4 showed that the standardized coefficient of the two factors, confirmation, and satisfaction, was 0.429, confirming a significant positive relationship. The user confirmation of the system will positively correlate with user satisfaction when the elearning platforms meet users' needs that were before while being utilized by users (Cheng, 2014b, 2014c).

According to H5, the quality of information significantly impacts the satisfaction of this survey, with a standardized path coefficient value of 0.329. According to Freeze et al. (2010) and Ramayah and Lee (2012), user input on the quality of the content has a major impact on how satisfied users are with the e-learning system. Therefore, it is asserted in IS research that information quality is a determinant of user satisfaction.

Finally, H6 found a significant positive relationship between satisfaction and continuance intention with a standardized path coefficient value of 0.604, the strongest point of influence in this academic study, identifying a significant impact of satisfaction on continuance intention. Therefore, users are more likely to use the offerings in the future when they are satisfied. That is, perceived contentment favors the inclination to use the platform going forward (Cheng, 2018, 2020a).

Conclusion

This study aimed to examine the influencing factors that affect college students' satisfaction and continuance intention toward e-learning in Chengdu, China. The researcher developed six hypotheses through a conceptual framework to demonstrate how service quality, perceived ease of use, perceived usefulness, confirmation, satisfaction, information quality, and continuance intention interact. To determine how these factors interact, 476 undergraduate students with experience in e-learning participated in this questionnaire study. Validated factor analysis (CFA) was used to determine if the data fit the theoretical measurement model. Using structural equation modeling (SEM), the relationship between potential and observable factors influencing persistence intentions was assessed, and all hypotheses were tested. According to the final results, all hypotheses were shown to be supported.

According to the results of this survey, perceived ease of use and service quality had the strongest indirect impacts on satisfaction with similar standardized path coefficients. Moreover, the direct impacts of perceived ease of use and service quality on perceived usefulness performed better, and in addition, confirmation, information quality, and perceived usefulness directly affected satisfaction. In addition, according to TAM theory, satisfaction showed a greater positive effect on continuance intention in this quantitative survey.

Recommendations

This study examines the influencing factors that affect the satisfaction and long-term intention to participate in e-learning among college students majoring in dance in Chengdu, China. Based on the quantitative survey data results, the researcher offers the following feasible suggestions for the development of online education.

In the current study, satisfaction was the most direct and largest influencing factor on students' intention to continue using online education. The student's willingness to continue using the e-learning system was based on their acceptance of the other influencing factors in the conceptual framework. Therefore, based on the findings of the study, universities or other instructional units should adequately improve the way e-learning systems operate to motivate more students to join the e-learning cohort and to be able to continue using e-learning as an instructional tool by increasing e-learning satisfaction. Students should move from passive recipients of knowledge to effective users and creators.

Secondly, there are many e-learning systems or software in China, and in the face of many choices, students' satisfaction often consists of many factors. The results of the study found that students' confirmation of e-learning, perceived usefulness of e-learning, and information quality of the electronic system significantly impact e-learning satisfaction. Hence, the quality of the information in the development of e-learning is the first to attract user's element. When students can get highly targeted and useful information in the system that can substantially help them in their profession, their satisfaction with the system will also be enhanced. The system's perceived usefulness and confirmation require the system's designers to improve all aspects, such as content, service, efficiency, etc. For example, educators or system developers should combine the characteristics of the e-learning format with classroom teaching to expand more practical and detailed knowledge. At the same time, provide clearer and more explicit practical demonstrations and simulation-type videos for practical subjects so

that students can get real help on the e-learning platform, find quick solutions to targeted problems, and maximize their knowledge without the presence of a teacher while expanding the team of professional online teachers is also an effective way to improve the usefulness of e-learning based on the profession combined with the industry, and to strengthen students' This is an effective way to increase the usefulness of e-learning based on the profession and industry, and to strengthen students' recognition of e-learning.

Third, in the face of the usefulness of e-learning, we can consider the quality of service and perceived ease of use of the e-learning system. In the face of various e-learning systems are often simple, scientific, and aesthetic page design, as well as the experience of using without spam and advertising, and the convenient and efficient operating system are the most direct and effective influencing factors to attract users and adding a team of professional consultants who are ready to solve users' confusion in the system, which includes system maintenance and knowledge answering, and managing e-learning classroom and homework correction efficiently in the classroom. In other words, when we use the e-learning system, the perceived usefulness of the system is considered high if we have a good service experience and can quickly master the system without taking too much time. For example, when engaging in elearning, students often disagree with the learning materials and even feel that some instructional materials that should be useful need to be revised. In the long run, educators and technology developers must evaluate theoretical research results more thoroughly and rationally. To get students up to speed on e-learning systems more quickly.

Finally, the development of e-learning has a long way to go. In summary, refined user experience and relevant platform content is the key to increasing satisfaction and prompting continued intention to use, not only through careful analysis of the interplay between service quality, information quality, perceived utility, perceived ease of use, confirmation, satisfaction and continued intention to use e-learning. It also requires the addition of more localized, specialized, and targeted e-learning systems.

Limitations and Further Study

Limitations of this study include the location of the study was only in Chengdu, China, the study population was sampled from two academies in the same university, the duration of the study was only about one year, and the study population was limited to art students in terms of comprehensiveness of sampling. Also, only seven potential variables were selected in the conceptual framework. Two perspectives can be explored for subsequent exploration: expanding the study to other regions, universities, and majors in China. Second, other technology acceptance theories, such as the theory of reasoned action (TRA), theory of planning behavior (TPB), and expectancy confirmation theory (ECT), could support the construction of the research framework.

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