Factors Influencing Junior College Students' Continuance Intention with Mobile Learning at Chengdu College of Arts and Sciences, China

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Abstract

Purpose: This study intends to assess the key variables significantly affecting junior college student's continued interest in mobile learning across four majors at Chengdu College of Arts and Sciences in Sichuan, China. The researcher examined perceived usefulness, confirmation, service quality, system quality, and information quality to determine whether their effects on student satisfaction and continuance intention with mobile learning. **Research design, data, and methodology:** The researchers applied quantitative exploration methods to 489 samples and distributed quantitative questionnaires to junior college students majoring in English, Chinese language and Literature, Preschool Education, Broadcasting, and Hosting at Chengdu College of Arts and Sciences. The sampling techniques were conducted using purposive, quota and convenience sampling. Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) are used to determine the relationships between the variables under study. **Results:** The findings provide evidence that perceived usefulness, confirmation, service quality, system quality, and information quality are antecedents of satisfaction towards continuance intention. **Conclusions:** University administrators and teaching staff should pay sufficient attention to the factors which have generated significant influence on the satisfaction of the instruction and consider the correlated teaching adjustment or reform in the future according to the findings of this research.

Keywords : Mobile Learning, System Quality, Information Quality, Satisfaction, Continuance Intention

JEL Classification Code: E44, F31, F37, G15

1. Introduction

The phrase "mobile learning" refers to a method of instruction or self-study that successfully combines mobile computer technology with personal communication terminals. It is based on digital learning. It is considered a crucial educational approach for the present and the future.

One of the researchers' concerns is how learners interact with mobile technology and devices because the original concept of mobile learning focused on learning utilizing personal mobile devices as aids. Focus. In 1989, Davis recommended using a technology model widely employed in this area of research and analysis. Morris, Venkatesh's thorough theory of technology acceptance and usage, and

other ideas are frequently mentioned in studies on mobile learning.

Since 2013, there has been considerable growth in academic study on mobile learning, which is directly tied to the use and uptake of mobile terminals like smartphones. Academic research on mobile learning has trended lower since the beginning of 2019, strongly tied to the new crown pandemic and China's "double reduction" education strategy. However, given the ongoing development of information technology and the revision of educational models and conceptions, more academic study on mobile learning is required, both on a technological and theoretical level.

In the framework of building a learning society and providing an institutional system to support the lifelong

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learning of the entire people, mobile learning has emerged as a crucial addition to formal education and cutting-edge support for non-formal education. Additionally, it provides fantastic prospects for growth. The question of whether a learner's mobile learning behavior under the influence of its influencing factors results in actual obstacles and if the behavior can complete the practical transformation from the real to the supposed has, however, become one that needs to be investigated and resolved. As a result, this study's goals are to provide a theoretical framework for related quantitative research and to aid in solving existing problems with mobile learning.

A considerable correlation exists between productivity and instructional efficacy, as evidenced by junior college students' willingness to continue their mobile learning in four majors (Luo & Li, 2022). This study examines the factors that junior college students' mobile learning experience most strongly influences. Based on the antecedents, a questionnaire that accurately captures the state of mobile learning at Chengdu University of Arts and Sciences was created. The components above show the need for a quantitative study of mobile learning, with two intermediate variables for research satisfaction and continuation intention and four independent variables for research satisfaction, corresponding to the four major junior college students at Chengdu College of Arts and Sciences.

2. Literature Review

2.1 Mobile Learning of China

Mobile learning has developed since the turn of the twenty-first century from the distribution of single media material to multimedia interactive software, technology, and mode alterations based on virtual reality learning. Thus, the network, modern technology, and various applications have emerged as essential elements of mobile learning. China has 1.051 billion Internet users and a 74.4% network penetration rate as of June 2022, according to the China Internet Network Information Center's (CNNIC) 50th "Statistical Report on the Development of China's Internet Network" report. The development of 5G applications in China has yielded excellent results, and Gigabit optical fiber used in business, healthcare, education, and other fields has expanded.

The epidemic has restricted offline learning activities in 2020. In this context, internet education has become a vital learning tool for students and has substantially complemented conventional education since it can cross geographical and temporal barriers. The online delivery of offline courses by major elementary and secondary schools, colleges, universities, and online training and certification providers has sparked a phenomenal development of the

sector. The market for online learning reached 485.8 billion RMB in 2020, reflecting a growth rate of 55%, and 342 million Chinese students utilized it, representing a growth rate of 27.1%.

Following the initial growth, the online education market gradually started to experience problems. The "double reduction" policy also negatively impacted the online education business, slowing growth. China's online education program market is anticipated to increase by 5.6% in 2021 to reach 513.03 billion yuan.

2.2 Technology Acceptance Model (TAM)

Due to its strength and simplicity, TAM is a popular choice among academics when examining the adoption of any new technology. TAM was the theoretical foundation for several studies on college students' adoption of mobile learning (Shakeel & Zeeshan, 2015). Numerous studies have shown that user perceptions affect learner attitudes regarding a particular technology. Additionally, they found that the students' personalities greatly impacted how they perceived technology, especially e-learning platforms (Huang & Liaw, 2018).

Several research studies have employed TAM to forecast users' intentions when utilizing various information systems. The empirical findings of the study by Tsai et al. (2020) examine the link between "learning engagement," "perceived usefulness," "perceived use," "willingness to use," and "self-efficacy" when it comes to the usage of online education further support TAM theory. They discovered that the hypothesis most used in e-learning research is the "technology acceptance model (TAM)." According to several studies, employing digital resources directly affects students' motivation to use them and their "perceived utility" and "reported simplicity of use."

2.3 Expectation Confirmation Model (ECM)

In 1980，Oliver first put forward the idea of expectation confirmation. The essential idea is to compare pre-purchase expectations with post-purchase results (perceived performances) and confirmation (confirmation) in order to determine whether there is satisfaction and use it as a benchmark signal for subsequent purchases (Oliver, 1980). The ECM, therefore, presupposes that perceived usefulness and contentment are among the primary characteristics influencing the intention to continue.

Numerous research in online education uses field surveys with various samples to confirm the efficacy of ECM. On the one hand, users' expectations and confirmations of the system impact the PU receptor of the learning system (Larsen et al., 2009). Users' pleasure and readiness to use the system again in the future are closely correlated with the PU

of the studying program (Lin & Wang, 2012). While student enjoyment during the online study will interfere with their willingness to continue online learning, the degree to which students agree with the system's aims also impacts how satisfied they are with the general pattern (Lin & Wang, 2012).

2.4 Information System Success Model (ISSM)

A well-known ISSM created by DeLone and McLean (2003) states that Information quality, Service quality, and System quality all have a favorable short-term impact on users' satisfaction and ability to use the system. The AU of the system benefits from the final two. User happiness is influenced by these three quality indicators, influencing organizational gains. They developed an information system success model that has been highly effective and used in various fields, such as e-learning assessment models. The effective Dillon and McLean model (ISSM) is now the theoretical model that is used the most frequently.

According to DeLone and McLean (2003), the ISSM assumes that users use the system out of a spontaneous desire. The ISSM focuses more on the personal element while emphasizing discrepancies at the organizational level. Therefore, if the ISSM is applied at the organizational level, the managerial choices will benefit the organization. Information, service, and system quality are highly valued by ISSM (Liu et al., 2012).

2.5 Perceived Usefulness

While perceived ease of use examines how much users believe a technology requires little effort, perceived usefulness examines how much users believe a technology may improve a result (Teoh & Tan, 2020). Perceived usefulness in e-learning refers to the extent to which a user believes e-learning may help them accomplish their educational objectives (Mailizar & Burg, 2021). The perception of usefulness is defined as the extent to which a person believes the employment of a certain technology will be able to maximize its efficacy (Marzal et al., 2011). Fauzi et al. (2021), PU measures how strongly somebody thinks employing a particular system will work and improve the need to perform a job. (Ünal & Güngör, 2021) also refers to Davis's definition of PU, the extent to which using a specific system will improve work performance. Rughoobur-Seetah and Hosanoo (2021) also has the same understanding of perceived usefulness as Davis's definition of PU. Hence, below hypotheses are set:

H1: Perceived usefulness has a significant impact on satisfaction.

H7: Perceived usefulness has a significant impact on continuance intention.

2.6 Confirmation

In their study on massive open online courses (MOOC), Daneji et al. (2019) found that confirmation refers to the extent to which a student's initial beliefs about the value of using blogs to learn are confirmed after using such resources. According to Rahardja et al. (2019), confirmation (CON) refers to the degree to which users' expectations of information system utilization are met during actual use. Confirmation is the reality of the predicted benefits of using IS. It is based on the logical process of comparing initial hypotheses to experience. (Shiue et al., 2010). By Ünal and Güngör (2021), confirmation was also defined as the degree to which user expectations of information system users are satisfied. Thus, two proposed hypotheses are developed:

H2: Confirmation has a significant impact on satisfaction.

H8: Confirmation has a significant impact on perceived usefulness.

2.7 Service Quality

The quality of the e-learning service has a positive impact on users' perceptions and whether they intend to continue using the e-learning system because it enables the technology to offer users effective course administration, appropriate explanations, and learning materials, or the chance to exchange ideas and insights with other e-learning system users (Fan et al., 2021; Jana et al., 2021). Service quality is mostly related to how consistently businesses serve their clients. The construct also has implications for the system's functionality, reliability, usability, and information quality (Rughoobur-Seetah & Hosanoo, 2021). When examining the discrepancy between students' expectations and perceptions, "responsiveness," a metric that measures how well the technical assistant responds to their needs and supports them with empathy, is commonly brought up (Jana et al., 2021). Service quality is a metric to assess a company's ability to provide clients with the promised services. Timeliness, reliability, certainty, and empathy are the primary characteristics affecting service quality (Mona, 2022). Accordingly, this study can put forward a hypothesis:

H3: Service quality has a significant impact on satisfaction.

2.8 System Quality

The system's effectiveness supports long-term usage of the e-learning platform, which is essential (Jana et al., 2021). User-friendliness, appropriateness of access, usefulness of system features, the complexity of the organization, system characteristics, and information system reaction time are all signs of excellent system quality (Rughoobur-Seetah & Hosanoo, 2021). System quality refers to the system's dependability regarding online response time, usability, and

accuracy. This term has been closely linked to trust since prior research has indicated that different technical aspects of the system may alter customers' propensity to trust the products and services (Gorla et al., 2010). According to a study by Rughoobur-Seetah and Hosanoo (2021), the system quality of the e-learning platform comprises several components, such as flexible interaction or necessary features, which foster overall satisfaction and a sense of usefulness. According to Mona (2022), a system's usability, functionality, dependability, adaptability, data quality, portability, integration, and relevance are all examined. It has to do with the e-learning system's technological elements. Consequently, a hypothesis is stated:

H4: System quality has a significant impact on satisfaction.

2.9 Information Quality

The ability of a system to provide a wealth of accurate and educationally pertinent information is referred to as information quality. It addresses concerns including a system's information output's timeliness, security, comprehensibility, accuracy, completeness, and usability (Lin et al., 2018). According to Sharidatul et al. (2019), information quality relates to the caliber of instruction provided by the LMS. The quantity of information provided throughout the teaching and learning process indicates the system's capacity to deliver relevant and trustworthy material that is delivered systematically, emphasizing the completeness and flow of the information (Jana et al., 2021). According to Lima et al. (2014), information quality is the level of output produced by a computer system in terms of accuracy, applicability, speed, flexibility, and usefulness. The criteria EFL students define for the materials posted to the LMS are information quality. According to Marvel et al. (2021), the best features are timeliness, accessibility, readability, relevance, and content requirements. The two key components of information quality are the quantity of information that is genuine, accurate, and comprehensive, as well as the amount that the user can comprehend. Both systems should function authentically, quickly, thoroughly, accurately, uniformly, and dependably, according to Mona (2022). Subsequently, this study can indicate that:

H5: Information quality has a significant impact on satisfaction.

2.10 Satisfaction

According to Cheng (2020), satisfaction is a psychological or subjective state connected to and arises from a cognitive assessment of the expectation-performance gap. Students are more satisfied with the e-learning system as their skills and knowledge advance (Rughoobur-Seetah & Hosanoo, 2021). A cognitive assessment of the expectation-

performance gap is connected to the psychological or illogical state of satisfaction (Cheng, 2021). When examining artificial intelligence of things (AIOT) in research relevant to AIOT, Tsai et al. (2020) note that learning pleasure refers to satisfaction and enjoyment obtained by learners in all parts of teaching services. "satisfaction" refers to user satisfaction with reports, websites, and support services—the significance of contentment in assessing a system's performance (Mona et al., 2022). Ultimately, a hypothesis is formulated:

H6: Satisfaction has a significant impact on continuance intention.

2.11 Continuance Intention

If users honestly believe that doing so will boost their confidence in their capacity to complete their tasks, they are more likely to continue using cloud computing technology (Cheng, 2019). The ECM approach aims to achieve continuous intention. The intention to keep utilizing an information system is referred to as such (Daneji et al., 2019). To use an online learning system indefinitely, one must have continual intentions (Cheng, 2020). The continuation purpose is the tendency of a customer to continue using a service within a week of discovering it (Cheng, 2020). The user's action is their decision to use a service in the future after agreeing to do so (Cheng, 2021).

3. Research Methods and Materials

3.1 Research Framework

Science cannot function without theories. It is possible to build knowledge networks that can perfectly predict the future and explain the past with the help of theory (Salkind, 2017). The expectation confirmation model (ECM), technology acceptance model (TAM), and information system success model (ISSM) is the main theoretical frameworks for this study. These theories were applied to develop the conceptual framework and explore the factors affecting junior college students' satisfaction and long-term objectives at Chengdu College of Arts and Sciences. Because he thinks the system and information quality are the major factors affecting happiness, the author uses the ongoing intention model as his conceptual framework and combines it with the information system success model to develop a hybrid framework structure.
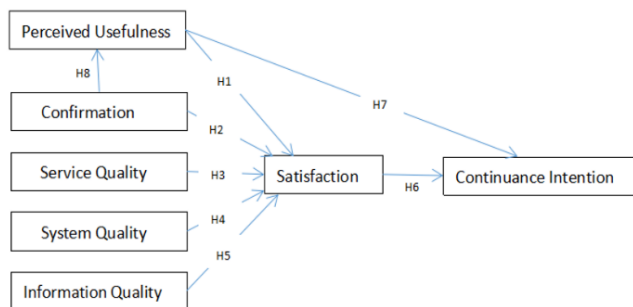
Figure 1: Conceptual Framework

H1: Perceived usefulness has a significant impact on satisfaction.
H2: Confirmation has a significant impact on satisfaction.
H3: Service quality has a significant impact on satisfaction.
H4: System quality has a significant impact on satisfaction.
H5: Information quality has a significant impact on satisfaction.
H6: Satisfaction has a significant impact on continuance intention.
H7: Perceived usefulness has a significant impact on continuance intention.
H8: Confirmation has a significant impact on perceived usefulness.

3.2 Research Methodology

The quantitative questionnaire used in this study consists of three parts: a screening question, demographic data, and scale items for all observed variables. In order to obtain the same types of information from a large number of individuals in the same way and to enable data to be statistically and methodically reviewed, well-designed questionnaires are highly structured. The best way to use questionnaires is to gather accurate data, and good questionnaire design is crucial to guaranteeing that we get reliable answers to our inquiries (Leung, 2001). The quality of the questionnaire's design will impact all of the analyses, conclusions, and recommendations for future research. Therefore, the most important phase in the research and other information-gathering activities is creating the questionnaires. In the sense that quantifiable data is obtained and analyzed, survey questions are occasionally described as being organized (Bidhan, 2010).

Additionally, the researcher completed three tasks to ascertain the student's demographic data, including their gender, educational background, and academic years. In addition, 26 scale items adopted from the previous literature were utilized to evaluate the latent variables, which included 4 items for confirmation, 3 items correlated to service quality, 4 items connected to system quality, 4 items associated with information quality, 3 items regarded to perceived usefulness, 4 items regarded to satisfaction, and last 4 items connected

with continuance intention. The full scale was estimated using a five-point Likert scale, with a score of 5 denoting strong approval for the positive items and a score of 1 denoting strong disapproval for the negative ones (Salkind, 2017).

Prior to the data collection, the validity and reliability tests were accounted. The item-objective congruence (IOC) index results were scored by three experts and approved at a score of 0.60 or higher. Afterward, a pilot test of 50 respondents was conducted through Cronbach's Alpha coefficient values, which were approved at a score equal or exceed 0.7 (Nunnally, 1978).

3.3 Population and Sample Size

A renowned private university in Chengdu, Chengdu College of Arts and Sciences targets junior college students from four majors. These include English, Chinese language and literature, early childhood education, broadcasting, and hosting. According to Hair et al. (2010), 200–500 participants should be the minimum sample size for the challenging methodological approach used in structural equation models. So, after screening and quota selection, 500 students were chosen as the final sample size from a population of 529 students.

3.4 Sampling Technique

The sampling techniques were conducted using purposive, quota and convenience sampling. The purposive is to select purposely junior college student's continued interest in mobile learning across four majors at Chengdu College of Arts and Sciences in Sichuan, China. The quota sampling was to proportionate the sample unit and sample size per Table 1. Convenience sampling was conducted by online questionnaire distribution. The samples consisted of 529 students from Chengdu College of Arts and Sciences in China majoring in four fields. Then, 500 respondents from each of the four majors were picked, and the samples for the final stage were selected based on a quota system. After the surveys were gathered, 489 valid and 11 invalid data were discovered.

Table 1: Sample Units and Sample Size

Target Population	Subjects	Population	Proportional Sample Size
Undergraduate Student at Chengdu college of Arts and Sciences	English	91	86
	Chinese language and Literature	171	162
	Preschool Education	187	177
	Broadcasting and Hosting	80	75
Total		**529**	**500**

Source: Constructed by author

4. Results and Discussion

4.1 Demographic Information

Table 2 summarizes the complete demographic information of the 489 respondents. Among the respondents, 40.3% were male and 59.7% female, of whom 17.4% were enrolled in the English major, 32.9% in the Chinese language and Literature major, 35.0% in the Preschool Education major and 14.7% in the Broadcasting and Hosting major. By school year, first-year students were 16.2%, sophomores 58.7%, and juniors 25.2%.

Table 2: Demographic Profile

Demographic and General Data (N=489)		Frequency	Percentage
Gender	Male	197	40.3%
	Female	292	59.7%
College Belong	English	85	17.4%
	Chinese language and Literature	161	32.9%
	Preschool Education	171	35.0%
	Broadcasting and	72	14.7%

Demographic and General Data (N=489)		Frequency	Percentage
	Hosting		
Academic Year	Freshman	79	16.2%
	Sophomore	287	58.6%
	Junior	123	25.2%

Source: Constructed by author

4.2 Confirmatory Factor Analysis (CFA)

The component and loading counts of the observed variables were compared to predictions based on theories or hypotheses using confirmatory factor analysis (CFA). The degree of fit of the study matrix was demonstrated by the factor loading and permissible values for each observed variable (Hair et al., 2006). Table 3 demonstrates that Cronbach's Alpha coefficient values were approved at a score equal to 0.7 or higher (Nunnally, 1978), the average extracted variance (AVE) values were all greater than 0.50, the factor loading values were all above 0.50, and the composite reliability (CR) was over 0.70 (Bagozzi & Yi, 1988; Hulland, 1999).

Table 3: Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach's Alpha	Factors Loading	CR	AVE
Confirmation (CON)	Masrek and Gaskin (2016)	4	0.915	0.715-0.782	0.835	0.558
Service Quality (SEQ)	Masrek and Gaskin (2016)	3	0.843	0.735-0.789	0.813	0.592
System Quality (SYQ)	Masrek and Gaskin (2016)	4	0.843	0.715-0.790	0.843	0.573
Information Quality (IQ)	Dubey et al., (2022)	4	0.810	0.723-0.813	0.840	0.568
Perceived Usefulness (PU)	Vululleh (2018)	3	0.897	0.737-0.766	0.798	0.568
Satisfaction (SAT)	Cheng (2018)	4	0.850	0.715-0.761	0.827	0.545
Continuance Intention (CI)	Cheng (2018)	4	0.901	0.713-0.809	0.842	0.571

As shown in Table 4, the characteristic was compared using the entire chi-square value to the degree of freedom (CMIN/DF), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), comparative fit index (CFI), normalized fit index (NFI), Tucker Lewis index (TLI), and root mean square error of approximation (RMSEA). This goodness of fit measures was thus suitable for this academic study to use in the CFA testing.

Table 4: Goodness of Fit for Measurement Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2010)	1.585
GFI	≥ 0.90 (Hair et al., 2010)	0.939
AGFI	>0.85 (Schermelleh-Engel et al., 2003)	0.919
RMSEA	<0.05 (Pedroso et al., 2016)	0.035
CFI	≥ 0.90 (Hair et al., 2010)	0.972
NFI	≥ 0.90 (Hair et al., 2010)	0.930
TLI	≥ 0.90 (Hair et al., 2010)	0.966
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.

The findings of the investigation and presentation of the discriminant validity are shown in Table 5. According to Schmitt and Stults (1985), no correlation between any two latent variables was more than 0.80. The number diagonally indicated is the AVE square root of the AVE. Thus, these quantitative indicators were used to demonstrate the discriminant validity.

Table 5: Discriminant Validity

	CON	SEQ	SYQ	IQ	PU	SAT	CI
CON	0.747						
SEQ	0.165	0.769					
SYQ	0.168	0.208	0.757				
IQ	0.277	0.205	0.103	0.754			
PU	0.151	0.122	0.156	0.282	0.754		

	CON	SEQ	SYQ	IQ	PU	SAT	CI
SAT	0.354	0.270	0.272	0.461	0.324	**0.738**	
CI	0.377	0.236	0.356	0.414	0.342	0.444	**0.756**

Note: The diagonally listed value is the AVE square roots of the variables
Source: Created by the author.

4.3 Structural Equation Model (SEM)

Structural equation models consist of measurement and structural models (Teo et al., 2013). Scientific research increasingly uses structural equation modelling (SEM), a potent multivariate tool, to analyse and assess multivariate causal relationships. In contrast to earlier modelling techniques, SEMs look at the direct and indirect impacts on presumed causal linkages (Yi et al., 2016). AMOS and LISREL are today's two most widely used structural equation modelling (SEM) software packages (Ramayah & Lee, 2012). Table 6 demonstrates that even after being rectified with AMOS version 24, the combined values of CMIN/DF, GFI, AGFI, CFI, NFI, TLI, and RMSEA were all over the permissible limits. The outcomes demonstrate that the SEM's goodness of fit was established.

Table 6: Goodness of Fit for Structural Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2010)	2.192
GFI	≥ 0.90 (Hair et al., 2010)	0.915
AGFI	>0.85 (Schermelleh-Engel et al., 2003)	0.888
RMSEA	<0.05 (Pedroso et al., 2016)	0.049
CFI	≥ 0.90 (Hair et al., 2010)	0.943
NFI	≥ 0.90 (Hair et al., 2010)	0.901
TLI	≥ 0.90 (Hair et al., 2010)	0.931
Model Summary		**In harmony with empirical data**

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 and NFI = Normed fit index, TLI = Tucker–Lewis index.

4.4 Research Hypothesis Testing Result

According to the findings in Table 7, satisfaction had a significant and direct influence on continuance intention, with the biggest impact effects in this quantitative technique being a standardized path coefficient () of 0.518 (t-value = 7.885***). Information quality has the second-strongest significant interaction influence on satisfaction, with a t-value of 7.374*** at 0.460.

Additionally, perceived usefulness significantly satisfaction with the β at 0.186 (t-value at 3.582***), confirmation significantly perceived usefulness with the β at 0.195 (t-value at 3.491***), while confirmation markedly impacted satisfaction with the β at 0.288 (t-value at 5.452***), as well as system quality which significantly influenced satisfaction with β at 0.241 (t-value at 4.780***). Moreover, perceived usefulness was also examined and determined to substantially impact continuance intention with the β of 0.214 (t-value of 4.077***). Consequently, service quality exhibited the least significant influence on satisfaction in this quantifiable investigation, with 0.167 (t-value at 3.418***).

Table 7: Hypothesis Results of the Structural Equation Modeling

Hypothesis	(β)	t-Value	Result
H1: PU→SAT	0.186	3.582***	Supported
H2: CON→SAT	0.288	5.452***	Supported
H3: SEQ→SAT	0.167	3.418***	Supported
H4: SYQ→SAT	0.241	4.780***	Supported
H5: IQ→SAT	0.460	7.374***	Supported
H6: SAT→CI	0.518	7.885***	Supported
H7: PU→CI	0.214	4.077***	Supported
H8: CON→PU	0.195	3.491***	Supported

Note: *** p<0.001
Source: Created by the author

The results in Table 7 show that perceived usefulness is a significant predictor of satisfaction, with a standardized route parameter threshold for the **H1** structural approach of 0.186. Users consistently anticipate obtaining beneficial mobile services, such as ubiquity and convenience. They will be satisfied when their expectation is met. PU influences user satisfaction with Internet Learning (Cheng, 2014; Lee, 2010; Lin & Wang, 2012; Spreng et al., 1996).

The study revealed that confirmation is one of the crucial components of satisfaction, with a normalized path coefficient of 0.288 in **H2.** It has demonstrated that the presence of confirmation is crucial for predicting students' happiness with blogs and other IT-enabled learning methods. Users need to validate their expectations of an e-learning system before they can feel satisfied with it. Users' satisfaction with cloud computing services may be gauged by confirming their preconceived notions (Chen et al., 2015; Cheng, 2020).

Ultimately, **H3** discovered a strong correlation between service quality and customer happiness, as evidenced by a statistical score of 0.167 on the standard coefficient of the active influence. The quality of service is in providing something unique or adding something extra for the benefit of the student to increase student satisfaction. To meet student expectations and satisfaction, the quality of services

can be measured by interactivity, functionality, and responsiveness (Abrego Almazán et al., 2017; Fan et al., 2018).

H4 further demonstrated that system quality significantly impacted participants' happiness, with a standard coefficient value of 0.241. The level of satisfaction with the industry is growing, attributable to the system quality. The system will, after that, continue to be used as a result. There is proof that the effectiveness of the LMS system is crucial. System quality is one of the main factors influencing how satisfied users are with their usage of technology (Al-Busaidi & Alshihi, 2012; Ghazal et al., 2018).

H5 further proved that information quality significantly impacted satisfaction in this trial, with a common coefficient value of 0.460. In order to create an IS success model that demonstrated a significant association between perceived usefulness, user satisfaction, and quality of information, learning system satisfaction, information quality, and utilization were significantly correlated. According to scientific evidence, satisfaction with internet learning is strongly correlated with information quality (Al-Fraihat et al., 2020; DeLone & McLean, 2003; Eom et al., 2006; Seddon, 1997).

Concerning **H6,** it was discovered that there was a significant relationship between satisfaction and continuance intention, with a standard coefficient value of 0.518. Numerous studies conducted in M-learning have shown that satisfaction and continuance intention are closely related. In cloud computing, explained respectively, the correlation between the two makes satisfaction a pre-test condition for continuing intentions. Numerous studies have discovered significant associations between satisfaction and willingness to use. The positive correlation of satisfaction with continuous intention has been well recognized by academia (Cheng, 2018; Hsiao et al., 2016; Stewart et al., 2015; Xu et al., 2017).

The results of this quantitative analysis's observable statistics for **H7** supported the hypothesis that perceived usefulness significantly impacted continuance intention, with a common coefficient value of 0.214. Many studies and electronics departments have shown that when users find that web learning systems can effectively improve their learning efficiency and quality, their willingness to continue their use increases. PU is significantly linked to continuance intention. Tan and Kim Confirmed that this set of relationships is also positively correlated in the cloud computing space (Bhattacherjee, 2001; Cheng, 2018; Lal & Bharadwaj, 2017; Lin & Wang, 2012; Lwoga & Komba, 2015; Yang & Lin, 2016).

Eventually, **H8** determined that confirmation was significantly associated with perceived usefulness, as demonstrated by a statistical score of 0.195 on the standard coefficient of the active influence. In learning and training

through the Internet and via email, the confirmation of learners' expectations can affect how useful an activity is to them. The relevant research on cloud computing services affirmed the decisive role of expectation confirmation on the service PU and demonstrated this relationship (Cheng, 2018; Lin & Wang, 2012; Stewart et al., 2015; Xu et al., 2017).

5. Conclusion and Recommendation

5.1 Conclusion and Discussion

This study intends to assess the key variables significantly affecting junior college student's continued interest in mobile learning across four majors at Chengdu College of Arts and Sciences in Sichuan, China. The researchers surveyed perceived usefulness, confirmation, service quality, system quality, information quality, satisfaction, and continuance intention to determine whether these structures affected student satisfaction and continuance intention with mobile learning. In order to determine how these variables interacted, 489 junior college students with M-learning experience responded to questionnaires.

Confirmatory factor analysis (CFA) determines whether the data fit into a certain measurement model that was developed theoretically. Structural equation models (SEM) were used like this to evaluate the relationship between real and potential factors impacting satisfaction and continuation intention and test hypotheses. It is discovered that the most important and potent relationship exists between satisfaction and continuance intention. Moreover, satisfaction is highly influenced by perceived usefulness, confirmation, service quality, system quality, and information quality.

5.2 Recommendation

Based on the data from this body of research, the researchers have made some wise recommendations for future mobile learning. The satisfaction construct from this study impacts junior college students' propensity to continue their M-learning. Students choose M-learning because they think it is great overall. School teaching units should fully develop and execute M-learning to promote student acceptance and continued usage of this learning platform.

Second, pupils are more likely to want to continue learning if they enjoy mobile learning. The most crucial of the five factors that may affect students' satisfaction and motivation to keep studying is perceived usefulness. To ensure that students understand how much easier and clearer the various learning operations of the mobile learning platform are, teaching units should focus on improving the quality of student's perceptions of the utility of mobile learning in future teaching strategies. As a result, the online

learning platform's program design will be enhanced, and the necessary manual help and tutorial resources will be made available. Therefore, following this advice will considerably increase students' positive usage satisfaction and, consequently, their desire to continue their education.

Teachers should also make a significant amount of learning materials available on the platform from the perspective of various learning software facilities, depending on the scope of mobile learning. Depending on the professional skills of each university major, mobile learning platforms may offer extracurricular video courses and a variety of professionally advanced software operations. This may help pupils overcome learning obstacles and comprehend how mobile learning promotes effective learning. In order to provide students with access to rich and useful information in terms of confirmation, service quality, system quality, and information quality, teachers should develop appropriate lesson plans that take into account the professional traits of each school, make reasonable improvements to interface features and give students access to those resources.

Finally, based on the circumstances above, teachers that prioritize the confirmation information quality, service quality, and system quality of M-learning as well as students' sense of perceived utility, will see an improvement in their students' happiness with M-learning. As a result, they will be more likely to want to keep utilizing mobile learning.

5.3 Limitation and Further Study

The duration of the quantitative research, which was decided based on the actual study conditions, will be around one year. The conceptual framework only allows for seven possible variables, and the study's sample and geographic location are also restricted to Chengdu College of Arts and Sciences students. As a result, additional study is needed on the following two points: Include more districts and schools in the study's geographic reach. It is crucial to research several theories of technology adoption, like the theory of reasoned action (TRA), theory of planned behavior (TPB), and information systems success model (ISSM), in order to develop a conceptual framework.

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