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Determinants of Satisfaction and Behavioral Intention to Use E-Learning of Senior High Liberal Arts Students in Panzhihua, China

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Abstract

Purpose: This quantitative study examined the satisfaction and behavioral intention of liberal arts students at a senior high school in China's Panzhihua region to use e-learning via the Huidao Education System and the vital determining components that had a significant consequence. The conceptual framework incorporated system quality, information quality, service quality, effort expectancy, social influence, satisfaction, and behavioral intention. **Research design, data, and methodology:** The investigator provided quantitative surveys to 481 liberal arts students. Validity and reliability are assessed through Item-Objective Congruence (IOC) and Cronbach's Alpha. IOC demonstrates that each item on the scale attained a rating of 0.6 or higher, while the Cronbach alpha coefficient confirms reliability with values equal to or exceeding 0.7. The sampling techniques employed include judgmental, stratified random, and convenience sampling. Data analysis encompassed the utilization of Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM). **Results:** The statistical evaluation demonstrated that all hypotheses were supported, with social influence has the strongest influence on behavioral intention. **Conclusions:** Each premise has been validated to achieve the research objectives. As an explanation, senior high school education department managers are advised to analyze the key contributions of the current online learning execution approach to improve liberal arts students' learning satisfaction and behavioral intention.

Keywords : E-Learning, Effort Expectancy, Social Influence, Satisfaction, Behavioral Intention

JEL Classification Code: E44, F31, F37, G15

1. Introduction

According to Tîrziu and Vrabie (2015), e-learning is a technique for instructional methodology conducted predominantly online and through technical instruments. In the most current report by the Canadian Council on Education, e-learning has been characterized as "the advancement of specialization and capabilities through the application of revelations associated with information and communication technologies, particularly promoting interaction for learning - associations with material, educational resources and equipment, and additional participants." E-learning is instruction delivered in an entirely collaborative and electronic circumstance. At the most fundamental structure, e-learning is characterized as electronically interactive instruction (Mulyanengsih & Wibowo, 2019).

The Web's primary comparison was the digital accessibility of educational information. In this direct-transfer methodology, the instructor is the provider of instructional information, and they make students utilize an assortment of interaction techniques. This period has been identified as e-Learning 1.0 (Hussain, 2012). Downes (2005) used the term "e-Learning 2.0" to define the use of Web 2.0 developments for educational objectives. Wikipedias, blogs, multimedia podcasts, and multiple interpersonal networking

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resources, for example, have revolutionized instructional surroundings due to how they are constructed professionally and jointly. Researchers also advocate leveraging artificial intelligence and information processing to build e-Learning 3.0 technologies that could process and evaluate large amounts of information, providing students with a more extensive and in-depth comprehension of the instructional experience (Rubens et al., 2011).

Huidao Education System is an innovative online educational platform centered on the e-learning 3.0 technique extensively implemented in Sichuan senior secondary schools (Liu et al., 2018). Creative activate of educational materials, knowledgeable monitoring of the educational procedure (Tang et al., 2015), knowledgeable information for instructing decision-making processes, collaborative multidimensional instructional design, and immediate time assessment of teaching outcomes are all attributes of the Huidao Education System, which fully examines the qualities of student's customized education. The primary technology investigated in this quantitative research is the Huidao Education System.

According to Attuquayefio and Addo (2014), behavioral intention indicates a confident attempt and framework for performance, and the anticipated potential for an individual using distant instruction motivated the decision to implement the e-learning system. Based on the above, it is apparent that a quantitative examination has been scheduled to investigate the methodology for behavioral intention with six essential latent variables associated with e-learning via the Huidao Education system for liberal arts students at Panzhihua No.7 Senior High School in China.

2. Literature Review

2.1 Information Systems Success Model (ISSM)

The DeLone and McLean's information system success framework, also known as the ISSM accomplishment theory, is an elementary connectivity structures conduct that aims to demonstrate the interdependence of the six most vital accomplishment indicators that are typically believed to be regarded when assessment information constructions to guarantee a thorough understanding of IS success (DeLone & McLean, 2003). Following assessments such as DeLone and McLean's assumptions, the subject's six corresponding characteristics are system quality, service quality, information quality, behavioral intention, satisfaction, and net system benefit.

For this quantitative research, four latent variables from the ISSM matrix were chosen to construct the conceptual framework, which includes system quality, information quality, service quality, and satisfaction.

2.2 System Quality

The system quality is the determinant of the digital network, specifying the individual engagement with communication system acquisition and concepts for the communication system (Chang, 2012). System quality is the degree to which a platform's qualifications empower instructors to effectively carry out their tasks satisfactorily and promote knowledge and comprehension (Rughoobur-Seetah & Zuberia, 2021). Assessments of an e-learning application's content distribution and retrieving capabilities by students are a vital element of system quality (Haslina et al., 2014). The system quality demonstrates the selected learning system by the educational institution for online learning should be of excellent artistry to provide simplified use, availability, and dependability (Lin, 2007). Several academics consider system quality as the level to which individuals evaluate an environment's simplicity in management, comprehension, involvement, and satisfaction (Alzahrani et al., 2017). Therefore, this study hypothesizes that:

H1: System quality has a significant influence on satisfaction.

2.3 Information Quality

Chang (2012) characterizes information quality as a requirement for the quality and arrangement of technological statements. Information quality can be described as the proportion of participants who suggest that a repository regarding knowledge is currently dependable and comprehensive (Rughoobur-Seetah & Zuberia, 2021). Participants' opinions regarding satisfaction with the collection of documents obtainable on websites are markers of information quality (Zaied, 2012). Information quality measures how much people believe their communication is identical, real, and interconnected (Almarashdeh, 2016). Numerous scholars and investigators have acknowledged the significance of information quality in determining the long-term viability of an innovative technological infrastructure (Haslina et al., 2014). Typically, information quality is the indicator for an investigation into information quality that has concentrated on overall rated effectiveness or methodology (DeLone & McLean, 2003). Therefore, this study hypothesizes that:

H2: Information quality has a significant influence on satisfaction.

2.4 Service Quality

Service quality is characterized as how successful an e-learning system is in obtaining and transferring information as perceived by learners (Chang, 2012). Service quality is

predominantly associated with how frequently firms provide particular services. Service quality was identified as a significant organizational trait by DeLone and McLean (2003), and it was associated with qualities such as up-to-date elements and software development, as well as interaction with information system organizational personnel. This latent variable may additionally refer to the reliability, uniformity, accessibility, and informational efficiency of the technological system (Rughoobur-Seetah & Zuberia, 2021). Service quality by providing unique characteristics or assistance for participants is a vital strategy for improving service participation, operation of services, and competitiveness effectiveness (Chang, 2012). Numerous preliminary studies correlated service quality to user satisfaction and operational implementation but not to participants' intentions (Zaied, 2012). Therefore, this study hypothesizes that:

H3: Service quality has a significant influence on satisfaction.

2.5 Satisfaction

Satisfaction is how individuals observe and understand a commodity or professional overall. In contrast, pleasure is a specific view impacted by various aspects such as service quality, things worth, and surroundings (Chang, 2012). It is the indicators, such as frequent assessments and participant reviews, as methods to measure satisfaction (DeLone & McLean, 2003; Munadi et al., 2022). Satisfaction indicates the individual perceived the respondents' proportion of enjoyment with materials, websites, and support activities. Satisfaction is one of the most frequently employed metrics for evaluating the effectiveness of online educational settings (Hussein et al., 2020). Satisfaction is a strong determinant of the efficacy of an e-learning technology (Nagy, 2018). One of the most challenging components of individual satisfaction determines how to determine it (Zaied, 2012). Therefore, this study hypothesizes that:

H4: Satisfaction has a significant influence on behavioral intention.

2.6 Unified Theory of Acceptance and Use of Technology (UTAUT)

The Unified Theory of Acceptance and Use of Technology (UTAUT) originated by Venkatesh et al. (2003). The UTAUT matrix was a synthesized and extensive method for implementing technology study that was constructed using serval critical latent factors that corresponded to behavioral intention. Multiple studies have demonstrated that social influence substantially impacts how individuals choose to utilize technologies. Irrespective of whether individuals had become familiar with the breakthrough technology system (Taylor & Todd, 1995). The structure considered critical aspects affecting the shift from intentions to execution in practice, such as performance expectancy, effort expectancy, social influence, and facilitating conditions. It was frequently employed in multiple studies that examined how to take advantage of innovative technology systems. For this quantitative research, three latent variables from the UTAUT matrix were chosen to construct the conceptual framework, which included effort expectancy, social influence, and behavioral intention.

2.7 Effort Expectancy

Effort expectancy is an essential element of expectation theories that deal with the quantity of effort an individual anticipates dedicating to complete an activity (Joo et al., 2014). The simplicity with which technological advances could be developed, acknowledged, and employed was represented in the effort expectancy (Venkatesh et al., 2003). An individual's familiarity with creating, implementing, and utilizing innovations promotes effort expectancy and the ease with which technology might be used influences effort expectancy (Mtebe & Raisamo, 2014). Several previous research studies identified effort expectancy as the most significant consideration for utilizing a given methodology or technology (Ssekakubo et al., 2011). According to educational investigators, effort expectancy is the underlying incentive for spontaneous student adoption of ubiquitous instruction (Attuquayefio & Addo, 2014). Therefore, this study hypothesizes that:

H5: Effort expectancy has a significant influence on behavioral intention.

2.8 Social Influence

Social influence can be defined as a condition from the surroundings to change an individual's behavior, emotions, popularity, or activity as the outcome of interacting with another individual (Marchewka & Kostiwa, 2007). Following the technological approval framework, the contribution between society and an individual's personal standpoint or behavior is commonly called social influence (Bardakcı, 2019). Social influence is an individual's ability to comprehend social impact (Venkatesh et al., 2003). According to the previous investigation, the effects of social influence are greater when someone involved accepts an unavoidable obligation (Wu et al., 2008). Additional research at an American university discovered a greater relationship between generations than between individuals, such as social influence (Ssekakubo et al., 2011). Despite a substantial corpus of investigation, understanding social influences is essential for education research (Venkatesh et

al., 2003). Therefore, this study hypothesizes that:
H6: Social influence has a significant influence on behavioral intention.

2.9 Behavioral Intention

The behavioral intention was the willingness to undertake a specific activity (Davis, 1989). According to Attuquayefio and Addo (2014), behavioral intention corresponds to a particular aim and organization of acts. The projected possibility of usage of a person the behavioral objective of employing remote instruction contributed to the decision to deploy the e-learning technology. It is regulated by societal, technological, and organizational factors (Davis, 1993). Research demonstrated that regional variety might cause people's differing views and behaviors toward specific things, implying that behavioral intention may vary according to conventions and contextual variations (Munadi et al., 2022). Like studies, interaction centrists the effects of activity expectations and interpersonal indicators on behavioral intentions, as effectively as the benefits of accessibility on utilization behavior (Attuquayefio & Addo, 2014; Venkatesh et al., 2003). According to previous research, interactivity focuses on the impact of engagement anticipation and psychosocial indications on behavioral intentions and the advantages of availability on utilization behavior (Attuquayefio & Addo, 2014; Venkatesh et al., 2003).

3. Research Methods and Materials

3.1 Research Framework

The conceptual framework of the present investigation was constructed by combining the ISSM and UTAUT assumptions, as well as three theoretical frameworks from previous studies. Chang (2012) identified the relationship between system quality, information quality, service quality, and satisfaction. Furthermore, Attuquayefio and Addo (2014) demonstrated an association between effort expectancy, social influence, and behavioral intention. Subsequently, Munadi et al. (2022) showed the linkage between satisfaction and behavioral sense. Figure 1 illustrates the conceptual framework for this research.

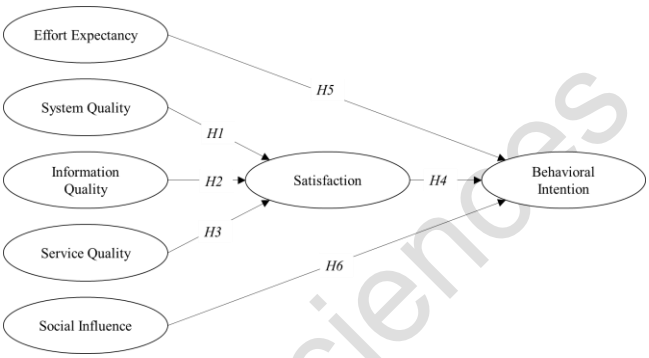

Figure 1: Conceptual Framework

H1: System quality has a significant influence on satisfaction.
H2: Information quality has a significant influence on satisfaction.
H3: Service quality has a significant influence on satisfaction.
H4: Satisfaction has a significant influence on behavioral intention.
H5: Effort expectancy has a significant influence on behavioral intention.
H6: Social influence has a significant influence on behavioral intention.

3.2 Research Methodology

The researcher used the quota sampling approach and presented the quantitative in-person questionnaire to liberal arts students at Panzhihua No.7 senior high school who participated in e-learning according to the Huidao Education System for this academic research. And the interpretation of the information was combined and investigated to determine the critical factors that substantially impacted participants' behavioral intention for e-learning—the investigation evaluation of each observed characteristic employing the five-level Likert scale.

Three specialists with a Ph.D. education background and sufficient competence in e-learning were tasked to execute the item-objective congruence (IOC) for content validity to examine the appropriate grading by the research instrument developers for this research. Once accomplished, the content validity evaluation arrived at 30 students for the pilot examination. Cronbach's Alpha grading was used to assess the internal consistency reliability of the scale items.

To ascertain the questionnaire's reliability, an initial examination was carried out involving 30 participants, accompanied by an assessment using the Index of Item-Objective Congruence (IOC). The IOC was evaluated by three experts, uncovering that each item on the scale received a rating of 0.6 or higher, signifying a satisfactory degree of congruence. Additionally, the pilot test utilized the Cronbach alpha coefficient reliability analysis, confirming a strong internal consistency across all items, with values equal to or surpassing 0.7, as observed in the study by Sarmento and Costa in 2016.

The questionnaires were distributed to 500 liberal art students from the target high school after completing the research instrument's validity and reliability assessments. The data were evaluated by the researcher using statistical techniques. Furthermore, confirmatory factor analysis (CFA) was used to examine constructed validity, followed by the structural equation model (SEM) for evaluating the hypotheses and the direct, indirect, and total influence of the interactions among the interrelated variables.

3.3 Population and Sample Size

The liberal arts students at Panzhihua No.7 Senior High School in China were the target population of this investigation. According to the total amount of latent and observed variables, 425 samples were recommended as the minimum size for the advanced investigation framework in the structural equation model. After screening, filtration, and non-probability selection, 500 specimens were chosen as the final sample from the 845 respondents in the quantitative research conducted at Panzhihua No.7 Senior High School.

3.4 Sampling Technique

The sampling techniques employed include judgmental, quota, and convenience sampling. In the case of judgmental sampling, the researcher utilized quota sampling to select 500 liberal srts students from Panzhihua No. 7 upper secondary school who had already engaged in one semester of online education through the Huidao education system. Details about the units of selection and their respective proportional sub-sample sizes were outlined in Table 1. Data were gathered through convenience sampling, utilizing an online questionnaire as the data collection tool. Following data screening, a total of 481 valid responses were obtained.

Table 1: Sample Units and Sample Size

Target Group	Grade	Population	Proportional Sample Size
Liberal Arts Students	**2nd Year of the Senior**	362	214
	3rd Year of the Senior	483	286
Total		**845**	**500**

Source: Constructed by author

4. Results and Discussion

4.1 Demographic Information

481 valid data were gathered after filtering the non-valid information after the data collecting. Table 3 summarizes the information on the 481 respondents' overall demographic data. Males represented 34.92% of all participants, while females comprised 65.08%. According to the individuals' academic years, 42.62% were second-year students, and 57.38% were third-year students.

Table 2: Demographic Profile

Demographic and General Data (N=481)		Frequency	Percentage
Gender	Male	168	34.92%
	Female	313	65.08%
Grade	2nd Years	205	42.62%
	3rd Years	276	57.38%

Source: Constructed by author

4.2 Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis (CFA) was conducted to examine whether the components and loading quantities of the scale items matched predictions determined by theories or assumptions. The outcomes of the factor loading and acceptable values for each observed variable demonstrated the study matrix's goodness of fit (Tenenhaus et al., 2004). Table 3 illustrated that Cronbach alpha coefficient reliability analysis confirms a strong internal consistency across all items, with values equal to or surpassing 0.7, the factor loading numbers were all higher than 0.50 (Hulland, 1999), the composite reliability (CR) was above 0.70 (Nunnally & Bernstein, 1994), and the average extracted variance (AVE) values were all higher than 0.50 (Fornell & Larcker, 1981).

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
Information Quality (INQ)	Chang (2012)	6	0.908	0.755-0.847	0.904	0.610
System Quality (SYQ)	Cheng (2012)	5	0.906	0.655-0.861	0.888	0.615
Service Quality (SEQ)	DeLone and McLean (2003)	3	0.876	0.704-0.851	0.803	0.579
Satisfaction (SAT)	Joo and Choi (2016)	3	0.898	0.708-0.826	0.826	0.613
Behavioral Intention (BEI)	Davis (1989)	3	0.882	0.781-0.832	0.841	0.638
Effort Expectancy (EFE)	Ssekakubo et al. (2011)	4	0.871	0.688-0.923	0.895	0.683
Social Influence (SOI)	Joo et al. (2014)	4	0.794	0.810-0.858	0.902	0.697

Furthermore, all the appropriate criteria for the absolute fit indicators, such as CMIN/DF, GFI, AGFI, and RMSEA, as well as the incremental suitable evaluations, such as CFI, NFI, and TLI, all of them were matched the requirements, as demonstrated in Table 4. Consequently, all the goodness of fit indicators performed in the CFA evaluation were appropriate.

Table 4: Goodness of Fit for Measurement Model

Fit Index	Acceptable Criteria	Statistical Values Before Adjustment	Statistical Values After Adjustment
CMIN/DF	<3.00 (Al-Mamary & Shamsuddin, 2015; Awang, 2012)	2.573	2.062
GFI	>0.90 (Sica & Ghisi, 2007)	0.881	0.910
AGFI	>0.80 (Sica & Ghisi, 2007)	0.854	0.888
RMSEA	<0.05 (Pedroso et al., 2016)	0.057	0.047
CFI	>0.90 (Bentler, 1990)	0.934	0.956
NFI	>0.90 (Wu & Wang, 2006)	0.897	0.918
TLI	>0.90 (Sharma et al., 2005)	0.924	0.949
Model Summary		**Not in harmony with empirical data**	**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 = normalized fit index, and TLI = Tucker Lewis index

In addition, Table 6 presented the findings of the examination into and representation of discriminant validity. The diagonally identified quantity is the square root of the AVE, and none of the associations that crossed any two latent variables were greater than 0.80 (Schmitt & Stults, 1986). As a consequence, the discriminant validity of this research was established.

Table 5: Discriminant Validity

	EFE	SYQ	INQ	SEQ	SOI	SAT	BEI
EFE	**0.826**						
SYQ	0.013	**0.784**					
INQ	0.062	0.014	**0.781**				
SEQ	0.048	0.182	0.095	**0.761**			
SOI	0.301	0.072	0.088	0.057	**0.835**		
SAT	0.042	0.413	0.144	0.446	0.094	**0.783**	
BEI	0.338	0.030	0.012	0.081	0.392	0.140	**0.799**

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

Source: Created by the author.

4.3 Structural Equation Model (SEM)

After completing the CFA assessment, the researcher confirmed the findings utilizing the Structural Equation Model (SEM). SEM is generally considered an interpretative simulation technique (Beran & Violato, 2010). SEM investigates the causal connection between the attributes in a matrix and compensates for evaluation bias or deception in the coefficient of determination (Stein et al., 2012). When adjusted by AMOS, the overall values of CMIN/DF, GFI, AGFI, CFI, NFI, TLI, and RMSEA were all above permissible limitations. As the information was demonstrated in Table 6, the SEM's goodness of fit was established.

Table 6: Goodness of Fit for Structural Model

Index	Acceptable	Statistical Values Before Adjustment	Statistical Values After Adjustment
CMIN/DF	<3.00 (Al-Mamary & Shamsuddin, 2015; Awang, 2012)	2.698	2.164
GFI	>0.90 (Sica & Ghisi, 2007)	0.872	0.904
AGFI	>0.80 (Sica & Ghisi, 2007)	0.849	0.885
RMSEA	<0.05 (Pedroso et al., 2016)	0.059	0.049
CFI	>0.90 (Bentler, 1990)	0.926	0.949

Index	Acceptable	Statistical Values Before Adjustment	Statistical Values After Adjustment
NFI	>0.90 (Wu & Wang, 2006)	0.887	0.910
TLI	>0.90 (Sharma et al., 2005)	0.918	0.944
Model Summary		**Not in harmony with empirical data**	**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 = normalized fit index, and TLI = Tucker Lewis index

4.4 Research Hypothesis Testing Result

Table 7 demonstrates the results of hypothesis testing, which reveal that service quality has a direct and significant consequence on satisfaction, resulting in the greatest effect of this quantitative approach with a standardized path coefficient of 0.497 and a t-value of 8.799***. System quality was the second-highest significant impact on satisfaction, with the β at 0.407 and the t-value at 8.344***. The social influence significantly affected satisfaction with the β at 0.371 and t-value at 7.203***.

Additionally, the significant influence threshold from behavioral intention to effect expectancy positioned the fourth of this research, with the value of the β at 0.254 and t-value at 5.135***. Likewise, the information quality is significantly related to satisfaction with the value of β at 0.123 and the t-value at 2.732**. Finally, as the weakest influencing point, happiness greatly affected behavioral intention with the value of β at 0.103 and the t-value at 2.058*.

Table 7: Hypothesis Results of the Structural Equation Modeling

Hypothesis	(β)	t-Value	Result
H1: SYQ →SAT	0.407	8.344***	Supported
H2: INQ→SAT	0.123	2.732**	Supported
H3: SEQ→SAT	0.479	8.799***	Supported
H4: SAT→BEI	0.103	2.058*	Supported
H5: EFE→BEI	0.254	5.135***	Supported
H6: SOI→BEI	0.371	7.203***	Supported

Note: *** p<0.001, ** p<0.01, * p<0.05
Source: Created by the author

Moreover, Table 7 illustrates that the structural approach recognizes that the standardized path coefficient of **H1** was 0.407, suggesting that system quality is a major determinant of satisfaction. Multiple investigations have demonstrated that system quality is an essential determinant of user satisfaction in assessing ISSM deployment situations (Durvasula et al., 2004; Laumer et al., 2017; Masrek et al., 2010).

The investigation for the **H2** revealed that information quality had already been verified to significantly influence satisfaction, with a value of β at 0.123. According to previous educational research accomplishments, there is a substantial relationship between information quality to satisfaction under the content of DeLone and McLean's ISSM matrix (Chang, 2012; Eom et al., 2012; Seddon, 1997).

H3 demonstrated that service quality significantly impacted satisfaction, which regards the value of β at 0.479, indicating that it is the essential factor in the research framework. According to the antecedent literature, service quality, in conjunction with the other two ISSM framework elements, significantly impacts satisfaction. Individuals with positive attitudes toward service quality are more expected to be satisfied than those with unfavorable attitudes (Chang, 2012; Chang & King, 2005; Grönroos, 1984).

In the term of **H4,** which was demonstrated that satisfaction had a significant influence on behavioral intention, with a standardized coefficient of 0.103. Numerous scientific investigations have found a correlation between personal happiness and behavioral meaning (Athiyaman, 1997; Machleit & Mantel, 2001; Zeithaml et al., 1996).

From the viewpoint of **H5,** it was demonstrated that there was significant effectiveness from effort expectancy to behavioral intention, with the effective point of β at 0.254. According to previous scientific documents, effort expectancy has a substantial influence on individuals' behavioral sense for the employment of educational approaches, technological advances, or digital hardware (Abu-Al-Aish & Love, 2013; Mtebe & Raisamo, 2014; Venkatesh et al., 2003).

Eventually, **H6** demonstrated a significant connection between social influence and behavioral intention, with the standardized coefficient value at 0.371. Numerous investigations have detected that social impact contributes positively and negatively to the students' behavioral sense. If learners recognize that their fellow students or powerful individuals consider they ought to implement and employ the education system, this is commonly referred to as the latent variable of social influence (Attuquayefio & Addo, 2014; Hao et al., 2017; Vermeir & Verbeke, 2006).

5. Conclusion and Recommendation

5.1 Conclusion and Discussion

The present research aimed to illustrate how liberal arts students' behavioral intentions were significantly impacted at Panzhihua No. 7 Senior High School in China. To confirm the conceptual frameworks for effort expectancy, social influence, satisfaction, system quality, information quality, service quality, and behavioral intention. The six assumptions were established employing the conceptual framework. 500 target students were presented with the scale items, and 481 valid data values were gathered. To execute the quantitative calculations and assess the construct validity of the connection between the data and the conceptual framework, the CFA evaluation was effectively completed. Additionally, the SEM was used to evaluate the key influences that have a consequence on the variables related to the behavioral intention, and the overall assumptions were supported.

The present research's examination of the assumptions revealed three variables directly bearing on behavioral intention, with social influence producing the strongest effect point, followed by effect expectancy and satisfaction, respectively. Additionally, among the three factors that directly impacted happiness, service quality provided the greatest impact, followed by system quality and information quality correspondingly.

5.2 Recommendation

Through the data of this study, and the verification results based on H1, in the future, for the system quality of the teaching of liberal arts students, the corresponding teaching units should further collect the issues of system design, client operation, and data synchronization that may occur in the daily use of the learning platform by students, feedback the technical management personnel to the Huidao Education System to ensure the platform function could in a more stable state. At the same time, it should be appropriately provided to system developers based on the characteristics of the liberal arts curriculum to increase the operation options that align with the features of the liberal arts courses.

Based on the finding of H2, the corresponding teaching units should further upload more professional courses that match the liberal arts courses according to the Huidao education system, including the related electronic textbooks, practice, and theoretical materials in which the liberal arts such as politics, history, and geography should be covered. Through the powerful functions of the Huidao education system, online learning materials could far exceed the volume of traditional classroom lessons. And the corresponding information and materials of the core courses, such as Chinese, mathematics, English, and liberal arts integrated disciplines, are appropriately interconnected to the system in the future.

According to the test result of H3: the target liberal arts students suggested that service quality is the most essential influencing factor. Based on the feedback of target students who is more unfamiliar with logical thinking on network technology operations, they need to assist in interaction, operation guidelines, and auxiliary demonstrations of the human-machine interface of the Huidao teaching platform. The corresponding teaching units shall further improve the service quality of the online teaching platform. It should provide it with detailed operation guidelines and technical guidance to make it clear that the teaching platform, such as sign-in, data query, courseware download, tutorial viewing, assignment submission, examination operations, teaching evaluation, such as a series of learning behaviors.

To the examination finding for H4: the target liberal arts students are convinced that satisfaction with the Huidao education system depends on the combined influence of system quality, information quality, and service quality. Consequently, it will significantly enhance students' satisfaction with the Huidao education system and improve their behavioral intention for the platform.

As the information of H5: effect expectancy is an essential determinant affecting the liberal arts students. Teaching units should consider students' learning pressure and time planning arrangements, make ideal learning intentions for their learning goals, and study time arrangement schedules. Effectively split with the corresponding functions of the learning platform and reasonable networked teaching arrangements.

Finally, according to H6: social influence is another vital impression factor for online learning of target liberal arts students. If multiple students' feedback if classmates and friends do not recommend them, they will not pay too much attention to online learning or think that the Huidao education system is significant technology. Therefore, the teaching unit should actively promote the Huidao education system and the corresponding online learning model to create a positive atmosphere of use, especially the reduction of liberal arts students because they are not good at the information system and the resistance to online learning and learning systems.

5.3 Limitation and Further Study

While many high school or university learners did not participate in this quantitative study, the demographics and sampling were only focused on one senior high school in the Panzhihua region of China. In addition, other technological acceptance theories were not concentered, and only seven variables that fit under the ISSM and UTAUT model were

recognized in the conceptual framework.

The subsequent examination could be split into two sections: expanding the scope of the research to include more Chinese provinces. The additional variable from the other technique acceptance theories, including ECM, TRA, TPB, and TAM, could also be examined as the component of establishing the research framework.

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