Original Research Article

Students' Satisfaction and Continuance Intention Using Online Learning in Jordan: An Integrated Model of UTAUT2 and ISS.

Abstract

This research investigates factors affecting online learning satisfaction and continuance intention by Jordan school students. To this end, an integrated model of Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) and Information System Success (ISS) model has been used. A questionnaire was handed out to students from five Jordanian schools to collect data from 346 students, and the Structural Equation Modeling (SEM) technique was utilized to evaluate the proposed model. The findings indicated that the students' satisfaction is directly influenced by performance expectancy, effort expectancy, facilitating conditions, system quality. Besides, the empirical results showed that the continuance intention is directly influenced by students' satisfaction, performance expectancy, habit, effort expectancy, hedonic motivation, and facilitating conditions. The findings of this study will serve as a valuable resource for educational institutions, decision-makers, developers, and academics looking to enhance online learning systems by identifying the most important factors influencing student students' satisfaction and continuance intention.

Keywords: online learning; students' satisfaction; continuance intention; UTAUT2; ISS

1. Introduction

The COVID-19 disease that emerged in Wuhan City started spreading across China around the end of 2019 [1]. The World Health Organization declared the COVID-19 a pandemic that cannot control in Mar 2020 [2]. The best way was to keep people apart socially to stop the disease proliferation until therapy or vaccine is developed. Many governments worldwide decided to lock down schools and universities where crowds couldn't be avoided as a reaction to the outbreak. As a result, thousands of schools and universities have shifted traditional teaching to online teaching to cope with the pandemic and maintain social distances.

Since the proliferation of COVID-19 necessitates an uninterrupted education in a setting that prioritizes solitude over sociability, online learning has emerged as the only realistic choice around the world [3]. In Jordan, online learning was mandated for 18 months, from March 2020 to August 2021, for school students. Toward the end of August 2021, the COVID-19 crisis seemed to be under control, and schools have begun serious preparations for returning students in September 2020. A month later, there was an unexpected increase in positive infections cases in schools. As a result, many schools have been closed, and their students have once again turned to online education. Thus, there is no denying that online learning has become the most effective means of ensuring continuity in learning.

Yet, many questions regarding students' satisfaction, learning process quality, and students' intention to continue usage have arisen as a result of shifting towards online learning [4]. Despite the existence of several prominent examples of online learning, predicting and evaluating its impact on user satisfaction and continuance intention remains a challenge [5]. Online learning has been investigated

by researchers worldwide using a variety of ways to assess user satisfaction with online learning [6]. For instance, an empirical study conducted by Jebril [6] to analyze the influence of online learning on students' satisfaction utilizing the Information System Success (ISS) model and Unified Theory of Acceptance and Use of Technology (UTAUT). The result revealed that students' satisfaction was influenced by facilitating condition, system quality, performance expectancy, information quality, effort expectancy, and quality of interaction. A study was conducted by Koceska and Koceski [7] to investigate online learning's impact on student's outcomes and satisfaction utilizing the ISS model and Technology Acceptance Model (TAM). The result indicated that perceived ease-of-use, system quality, information quality, and usefulness significantly influenced students' satisfaction. Another example is Al Mulhem [8] study using the ISS model to analyze factors influencing students satisfaction with online learning. The findings revealed that organizational and quality factors significantly impacted students' satisfaction. Even though students' satisfaction is a significant priority for most educational organizations, few studies have been conducted on students' satisfaction with online learning and continuance intention utilizing online learning during the outbreak of COVID-19. Thus, this research study investigates factors influencing students' satisfaction and continuance intention using online learning utilizing an integrated model of ISS and Unified Theory of Acceptance and Use of Technology 2 (UTAUT2).

2. Overview

2.1 Online learning satisfaction

Studies have demonstrated that online education offers several advantages, including time flexibility, cost-saving, promoting self-learning, and providing knowledge effectively [9]. Online learning successful application depends on several technical and individual factors. Students' satisfaction and their intention to continue usage are important factors in determining if an online learning program is a success or not [10]. According to studies, satisfied students are more interested, focused, and responsive; they contribute to a positive learning environment, and they do better. On the other hand, unsatisfied students cause an unsuccessful online learning implementation [11]. Since the COVID-19 outbreak has spurred a massive increase in online learning adoption, educational organizations need to find out how satisfied students are with online learning and continuance intention to use it. Many researchers have utilized several methods throughout the years to measure these two concepts. Jebril [6] used interaction quality, system quality, information quality, and the factors of the Unified Theory of Acceptance and Use of Technology (UTAUT) model to measure the online education students' satisfaction. Jung et al. [12] used final grades, attitudes, and course completion. According to Mahmood and Malik [13] students' attendance has a significant impact on how they judge online learning. Ke and Kwak [14] determined five factors that contribute to students' satisfaction: student autonomy, student relevance, authentic education, active education, and technical competence.

2.2 Students' Intention to continue usage online learning

Students' intention to utilize online learning has been studied by several models, including the UTAUT model and TAM model. The UTAUT identified four independent variables that influence behavioral intention (facilitating conditions, performance expectancy, social influence, and performance expectancy), while the TAM identified only two variables (ease-of-use and usefulness). Smart et al. [15] showed that students' behavioral intention to use online learning was influenced by the four original factors of the UTAUT model. Notably, none of the aforementioned theories is employed in this research. Indeed, continuance intention utilizing online learning is assessed using several variables from the ISS model and UTAUT2 model, which are explained in detail in the proposed model section.

2.3 Information System Success model (ISS)

ISS is one of the significant information system (IS) models for predicting and explaining the actual usage and satisfaction of system users [16]. The relationships among satisfaction, user behavior, and system usage results are supported by using this mode [17]. Six factors shape the original ISS model, including personal effect, information quality, system quality, actual use, satisfaction, and organization effect [18]. In response to advances in IS applications, DeLone and McLean [19] refined

their first model and provided an updated release in 2003. As shown in Figure (1), the new model includes service quality, and the organizational and individual effects have been combined into a single factor termed net benefits.

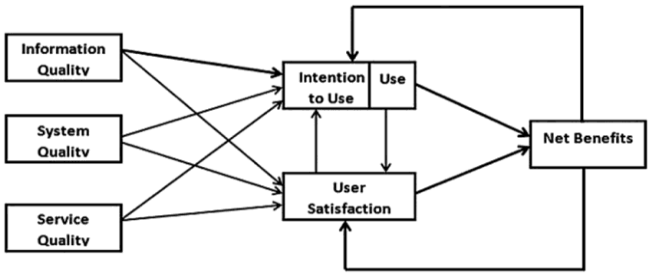

Figure 1: Updated ISS model

In the area of online learning, this model was widely used. For example, Jebril [6] studied the impact of online learning on students' satisfaction using an incorporated model of UTAUT and ISS. The findings indicated that performance expectancy, facilitating conditions, effort expectancy, system quality, and information quality significantly influenced students' satisfaction. An incorporated model of TAM and ISS was used by Al-Adwan et al. [20] to study the factors influencing online learning systems success. The result showed that the proposed model's factors significantly influenced the students' satisfaction and actual usage.

2.4 Unified Theory of Acceptance and Use of Technology 2 (UTAUT2)

The UTAUT2 model is an updated version of the UTAUT presented by Venkatesh et al. [21] in 2012. Three additional factors were added to the first version to form the UTAUT2, including habit, price value and hedonic motivation. The UTAUT2 contains seven exogenous variables, two endogenous variables, and three moderating variables. Figure (2) shows the UTAUT2.

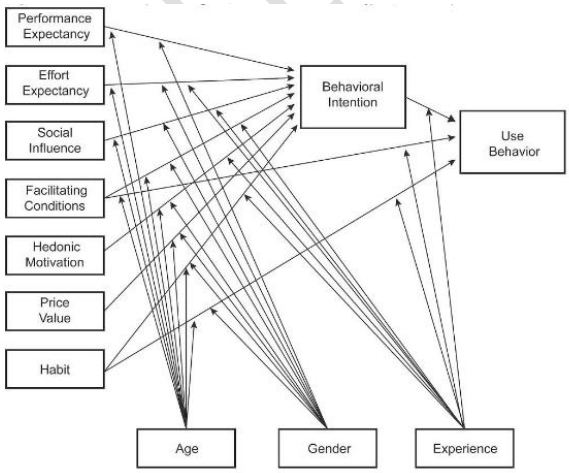

Figure 2: UTAUT2 model

The UTAUT model has been utilized by several researchers in the field of education. For instance, Dwiyanto et al. [22] investigated factors influencing Indonesian students to use an online learning system using the UTAUT2 model. El-Masri and Tarhini [23] examined the factors affecting university students' adoption of online learning in Qatar using extended UTAUT2 with the trust factor. The findings showed that trust, social influence, effort expectancy, habit, and hedonic motivation affected students' behavioral intention. Many research studies have shown that the UTAUT2 is a valuable model for understanding and predicting consumers' adoption of technology in various fields [24]. Besides, the UTAUT2 has received a lot of attention in the literature as compared

to other models. Consequently, the UTAUT2 model was used as a starting point to create a conceptual model for the research that could adequately explain the students' satisfaction with online learning and their desire to continue using it.

3. Research Model and Hypotheses

Figure (3) depicts the proposed theoretical model, and the relations among the independent and dependent variables are described in the subsections below. It should be highlighted that the effects of moderating variables were not considered in this research. Since our target population are the high school students who are of the same age and experience. Thus, the proposed model was modified to fit with this. Many research studies have neglected the effect of the moderating variables in their validation test [25], [6], [26].

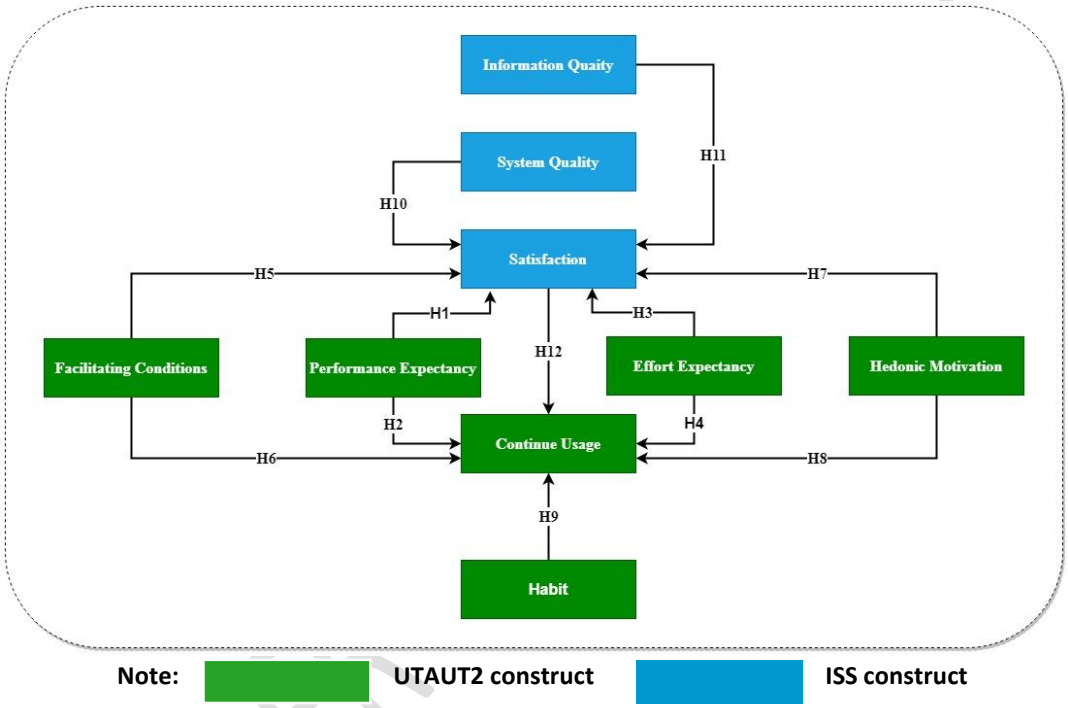

Figure 3: The proposed model

3.1 Performance Expectancy

It is defined as "The degree to which a person feels that employing a new system or technology aids in the execution of a certain activity" [27]. Our study argues that performance expectancy refers to students' perceptions of their performance enhancement as a result of online learning usage. Performance expectancy has been shown as a significant predictor of students' satisfaction and continuance intention in many research studies. For instance, Jebril [6] showed that online learning students' satisfaction was significantly influenced by performance expectancy. Al-Rahmi et al. [28] in their empirical study, showed that perceived usefulness (performance expectancy) significantly impacted the students' continuance intention utilizing online learning. Thus, in light of the literature, we propose the following hypotheses:

H1*: Performance expectancy significantly influences the students' satisfaction*.

H2*: Performance expectancy significantly influences the students' intention to continue usage.*

3.2 Effort Expectancy

"It is defined as users' perspective of how easy it is to use a system" [27]. When students perceive that online learning is easy to use and effortless to attain the needed performance, they are more likely to be satisfied. Thus, their willingness to continue usage increases. Besides, many research studies

provided empirical evidence proving this argument [6], [28]. Based on this, the following hypotheses are proposed:

H3*: Effort expectancy significantly influences the students' satisfaction.*

H4*: Effort expectancy significantly influences the students' intention to continue usage.*

3.3 Facilitating conditions

"It denotes the existence of an infrastructure to facilitate the usage of a system" [27]. The ability to utilize smartphones, computers and the internet is necessary for online learning. Besides, if the system is supported by sufficient infrastructure, students will be more likely satisfied [29], [30]. Thus, their willingness to continue usage increases. In light of this, our study investigates the influence of facilitating conditions on students' satisfaction and their willingness to continue usage. Therefore, we propose the following hypotheses:

H5*: Facilitating conditions significantly influence the students' satisfaction.*

H6*: Facilitating conditions significantly influence the students' intention to continue usage.*

3.4 Hedonic motivation

"It is defined as an internal form of motivation, which may include enjoyment or pleasure derived from using a new system or technology" [21]. In this research, students' feeling of pleasure as a consequence of their usage of online learning that enhances their educational experiences is termed hedonic motivation. Students will be more likely satisfied if they feel pleasure from using online learning, boosting their willingness to continue usage. In light of this, our study investigates the impact of hedonic motivation on students' satisfaction and their willingness to continue usage. Thus, we propose the following hypotheses:

H7*: Hedonic motivation significantly influences the students' satisfaction.*

H8*: Hedonic motivation significantly influences the students' intention to continue usage*.

3.5 Habit

"It is defined as the degree to which individuals tend to do a behavior automatically due to their experience with a specific system" [21]. In e-learning systems, habit is perceived as a significant predictor of system usage [31], [32]. In this research, students who have utilized the online system all along the COVID-19 pandemic period is expected to have the willingness to continue usage. Thus, we propose the following hypothesis:

H9*: Habit significantly influences the students' intention to continue usage.*

3.6 System quality

It is defined as "The degree to which a system performs in comparison to expectations" [19]. Response speed, easiness, and compatibility are all important factors in assessing the overall system quality of an online learning system [7]. In the ISS model, students' satisfaction is directly affected by system quality. It has also been shown that system quality has a significant impact on student satisfaction in the online learning domain [8], [33], [6]. In light of this, our study investigates the impact of system quality on students' satisfaction. Thus, we propose the following hypothesis:

H10: *System quality significantly influences the students' satisfaction.*

3.7 Information quality

"The term information quality is described as the quality of content generated by a system" [19]. It is important to use online learning systems in a way that ensures accuracy, completeness, relevance, content requirements, and timeliness [7]. In the ISS model, students' satisfaction is directly affected by information quality. It has also been shown that information quality has a significant influence on student satisfaction in the online learning domain [8], [33], [6]. Based on the literature, our study investigates the influence of information quality on students' satisfaction in the context of Jordan online learning. Thus, we propose the following hypothesis:

H11*: Information quality significantly influences the students' satisfaction.*

3.8 Students Satisfaction

Students' satisfaction and continuance intention using the system are critical to successfully implementing the online learning paradigm [34]. This study argues that students who are satisfied with the system will desire to continue using it. Many research studies show that students' satisfaction significantly impacts the desire to continue use [34], [35]. Thus, in light of the above, we propose the following hypothesis:

H12: Students' satisfaction significantly influences the willingness to continue usage.

4. Research methodology

4.1 Participants and procedure

Students from five schools in Jordan who have been using online learning for more than a year were included in this research to answer the survey questions. Thus, they can aid us to answer questions related to the study's matter, helping to have a thorough grasp of the factors that affect their satisfaction and desire to continue utilizing online learning.

Since our target population are Jordanian high schools students, the study's questionnaire was translated into Arabic, the mother language of all students. Before distributing the questionnaire, a pilot study involving 32 online learning's students and three information systems professionals was performed to ensure content validity [36]. Based on the pilot study results and comments from experts, minor changes were made to the questionnaire.

The convenience sampling method was used in this study, which is a nonprobability sampling method that involves selecting a sample that is close to hand. Students who participated in this study did so voluntarily, and they had been made aware of the study's primary goal before beginning. Besides, they were made aware of their right to decline to participate or to withdraw from filling out the questionnaire at any point throughout the data gathering process. Moreover, before any data was collected, ethical approval was gained. Participants spent an average of 15 minutes completing the questionnaire.

4.2 Data collection

The questionnaire instrument was employed in this research investigation, following the quantitative method. From August 2021 to October 2021, students at five schools completed the questionnaire. In all, 400 questionnaires were distributed to students at the five schools. 346 questionnaires were included in the analysis, while 54 were neglected because of the missing data. Thus, the sample size has met the standards of Murtagh and Heck [37], where the minimum sample size must equal ten multiplied by the number of questionnaire items. In our study, the questionnaire items number = 28 and the sample size is 346.

4.3 Questionnaire development

This study's questionnaire was built based on the literature that used the UTAUT2 and ISS models in the online learning field. For example, as shown in Table (1), performance expectancy contains four items adapted from [6], [38], [27], Effort expectancy includes three items adapted from [39], [27], [6], and facilitating conditions has three items adapted from [39], [27], [6]. In addition, hedonic motivation and habit items have been adapted from [21]. Information quality and system quality items have been adapted from [6], [40], [41], [42], [7]. Finally, the items of intention to continue using have been adapted from[43].

Table 1: Constructs, Items, and resources of the questionnaire

Constructs	Items	Resources
Performance Expectancy (PE)	**PE1:** Online learning allows me to study more quickly and efficiently.	[6], [38], [27]
	PE2: For all students, online learning enhances the degree of equitable education resource access.	
	PE3: I save time by using online learning.	
	PE4: Online learning improves the learning process.	
Effort	**EE1**: The online learning systems are easy to use.	[39], [27], [6]

Expectancy (EE)	**EE2:** It's simple for me to master using online learning systems.	
	EE3: Online learning systems allow me effortlessly access educational resources.	
Facilitating Conditions (FC)	**FC1:** I am well-equipped with suitable materials to make use of online learning.	[39], [27], [6]
	FC2: I am qualified to use online learning systems.	
	FC3: If I run into any technological challenges, someone is there to assist me.	
Hedonic Motivation (HM)	**HM1:** Online learning is fun.	[21]
	HM2: Online learning gives me pleasure.	
	HM3: Online learning is exciting.	
Habit (HB)	**HB1:** For me, online learning has become a habit	[21]
	HB2: I'm addicted to utilizing online learning.	
	HB3: I have become used to online learning.	
Information Quality (IQ)	**IQ1**: Online learning provides clear information.	[6], [40], [41]
	IQ2: Online learning provides vital information for my studies.	
	IQ3: Online learning provides well-formed information.	
System Quality (SQ)	**SQ1**: I have no issues uploading tasks.	[42], [7], [6]
	SQ2: I have no problems responding to discussions.	
	SQ3: When I study online, I have no difficulties with the learning systems.	
Student Satisfaction (SS)	**SS1:** I like online learning efficacy.	[44], [45], [6]
	SS2: I am quite pleased with my online learning experience.	
	SS3: Generally, I am satisfied with my online learning experience	
Intention to continue using (ICU)	**ICU1:** I aim to continue utilizing online education rather than stop using it.	[43]
	ICU2: It is my intention to continue utilizing online learning instead of the traditional classroom.	
	ICU3: If it is possible, I would want to use online learning as often as possible.	

The questionnaire was translated into Arabic, the mother language of all respondents. Before distributing the questionnaire, a pilot study involving 32 online learning's students and three information systems professionals was performed to ensure content validity [36]. All items in the questionnaire have been measured using a five-point Likert scale, which ranges from 1(strongly disagree) to 5 (strongly agree).

5. Data Analysis and Discussion

5.1 Reliability and Validity Test

Before the primary analysis, a reliability test was performed to assess the questionnaire. Cronbach's Alpha, a reliability test, was used in this research to verify the consistency of construct items. Cronbach Alpha value should be greater than or equal to 0.7 to consider the questionnaire as reliable. Table (2) shows that Cronbach's alpha values exceeded 0.7 in this study.

After measuring the reliability, the validity test was conducted to measure the convergent and discriminant validity. The average variance extracted (AVE) is utilized to evaluate the convergent validity, while the square root of AVG is utilized to evaluate the discriminant validity [46]. AVE value for each construct should be greater than or equal to 0.5 to confirm the convergent validity, and the square root of AVG for each construct should be greater than the pairwise correlations with all constructs to confirm the discriminant validity. Table (2) and Table (3) show convergent validity and discriminant validity, respectively, where our study met their thresholds.

Table 2. Reliability and Convergent Validity results.

Constructs	Cronbach Alpha	AVG

Performance Expectancy	0.823	0.719
Effort Expectancy	0.907	0.841
Facilitating Conditions	0.902	0.837
Hedonic Motivation	0.865	0.784
Habit	0.865	0.698
System Quality	0.936	0.878
Information Quality	0.89	0.809
Student Satisfaction	0.956	0.919
Intention to continue using	0.838	0.752

Table 3. Discriminant validity results.

	EE	**FC**	**HB**	**HM**	**ICU**	**IQ**	**PE**	**SQ**	**SS**
EE	**0.917**								
FC	0.295	**0.915**							
HB	0.066	0.747	**0.835**						
HM	0.441	0.594	0.341	**0.885**					
ICU	0.101	0.412	0.324	0.079	**0.867**				
IQ	0.393	0.85	0.69	0.581	0.487	**0.9**			
PE	0.518	0.219	0.112	0.367	0.02	0.254	**0.848**		
SQ	0.352	0.456	0.365	0.417	0.096	0.407	0.283	**0.937**	
SS	0.292	0.782	0.425	0.516	0.469	0.739	0.225	0.162	**0.959**

5.2 Path Analysis

Structural Equation Modeling (SEM) of SmartPLS tool was used to analyze the structural model and proposed hypotheses. The results of the testing are demonstrated in Table (4). In the proposed model, twelve hypotheses were tested, and two dependent variables were verified (students' satisfaction and intention to continue usage). The results show that ten hypotheses were accepted, and two were rejected. The result also showed that our proposed model explained 81% of the students' satisfaction variance and 78% of students' intention to continue use.

The analysis result showed that PE significantly affected SS and ICU ($\beta = 0.092$, $p<0.05$), ($\beta = 0.245$, $p<0.01$); thus, hypotheses H1 and H2 were supported. EE was identified to have a significant impact on SS and ICU ($\beta = 0.224$, $p<0.01$), ($\beta = 0.125$, $p<0.05$), which supported hypotheses H3 and H4. The analysis result also revealed FC significantly influenced SS and ICU ($\beta = 0.168$, $p<0.05$), ($\beta = 0.149$, $p<0.05$), which supported hypotheses H5 and H6. Moreover, the analysis showed that HM didn't impact SS ($p>0.05$), but it influenced the ICU ($\beta = 0.131$, $p<0.05$) and thus, hypothesis H7 was rejected, and hypothesis H8 was accepted. HB has been shown to influence ICU significantly ($\beta = 0.203$, $p<0.01$), thus H9 was supported. Furthermore, SQ significantly influenced SS ($\beta = 0.206$, $p<0.01$), which supported H10. The H11 has been rejected since IQ didn't impact SS. The analysis also revealed that SS significantly impacted ICU ($\beta = 0.139$, $p<0.01$), supporting H12. Finally, the analysis also showed that our proposed model explained 81% of the students' satisfaction variance and 78% of students' intention to continue use, indicating a high predictive power (R^2).

TABLE 4. Path analysis result

Hypothesis			**Path (β)**	**P-value**	**Result**
H1: Performance Expectancy	→	Student Satisfaction	0.092	0.049	Supported *
H2: Performance Expectancy	→	Continue Using	0.245	0.000	Supported ***
H3: Effort Expectancy	→	Student Satisfaction	0.224	0.001	Supported **
H4: Effort Expectancy	→	Continue Using	0.125	0.015	Supported *
H5: Facilitating Conditions	→	Student Satisfaction	0.168	0.023	Supported *
H6: Facilitating Conditions	→	Continue Using	0.149	0.010	Supported *
H7: Hedonic Motivation	→	Student Satisfaction	0.078	0.259	Rejected

H8: Hedonic Motivation	→	Continue Using	0.131	0.023	Supported *
H9: Habit	→	Continue Using	0.203	0.000	Supported ***
H10: System Quality	→	Student Satisfaction	0.206	0.005	Supported **
H11: Information Quality	→	Student Satisfaction	0.119	0.125	Rejected
H12: Student Satisfaction	→	Continue Using	0.139	0.000	Supported ***

Note: * P-value< 0.05; ** P-value< 0.01; *** P-value<0.001

6. Discussion

There are three main theoretical implications to this study that may be summarized. In the first place, our study makes a fundamental contribution by combining ISS with UTAUT2. Expanding UTAUT2, we used ISS constructs to determine factors that contribute to students' students' satisfaction and continuance use. Adding new factors to the proposed model has theoretically increased its predictive power in explaining satisfaction and continuation intention. Second, we extended our proposed model to the online learning context, focusing on the idea of continuing intent. To our knowledge, there has been just a little research on this topic. Our research is different in that it can be applied to various online learning systems, unlike prior studies that tend to concentrate more on specific systems. Lastly, in the context of online learning, information quality, system quality, and performance expectations are critical. However, this research shows that while studying students' satisfaction and desire to continue, additional significant factors such as facilitating conditions, effort expectancy, hedonic motivation, and habit should be considered. An in-depth discussion of the results is provided as follows:

Based on the model created for this study, we first examined the impact of the UTAUT2 constructs on students' satisfaction and students' willingness to continue using online learning. According to the research result, performance expectancy has a considerable influence on student satisfaction and students willingness to continue using online learning. Since students will be satisfied and intend to continue using online learning if they feel it is useful, this conclusion was expected. The result also indicated that effort expectancy positively impacts student satisfaction and continuance intention using online learning. This result is in line with a slew of other study findings. Since students will be satisfied and intend to continue using online learning if they feel it is effortless and time-saving, this conclusion was also expected. Facilitating conditions is shown to positively impact student satisfaction and students' willingness to continue using online learning. This conclusion is congruent with the UTAUT2 model, where the facilitating conditions are crucial for adopting a new system or technology effectively. Also, the students will be more satisfied with online learning if the needed infrastructure is available. In addition, the result revealed that hedonic motivation positively affects the students' intention to continue using online learning. This conclusion is congruent with the UTAUT2 model, where the hedonic motivation is significant for using a new system or technology. However, hedonic motivation has not significantly impacted students' satisfaction; this result can be explained as students' perception that technical factors (performance expectancy, effort expectancy, and system quality) are more important to determine their satisfaction. The result also indicated that habit impacts students' willingness to continue using online learning. This finding is in line with a slew of other study findings, and it enhanced the predictive rate of our proposed model.

Second, we examined the impact of the ISS constructs on students' satisfaction. According to the research result, system quality has a considerable influence on student satisfaction. Since students will be satisfied with online learning if they feel the system they use is speed, easy, and compatible, this conclusion was expected. The results unexpectedly showed that information quality did not impact students' satisfaction. This conclusion is not congruent with the ISS model. The result also indicated that students' satisfaction significantly predicts online learning continuance intention. This result is congruent with the existing online learning acceptance domain studies.

7. Conclusion

During the outbreak of COVID-19, students throughout the globe used online learning, which our study aims to investigate. In the literature, continuance intention and satisfaction concepts have not

been much explored regarding online learning. Thus, a theoretical framework based on the integration of ISS and UTUAT2 was presented to bridge this gap and provide a deeper understanding of what influences satisfaction and continuance intention.

The analysis indicated that the students' satisfaction is directly influenced by performance expectancy, effort expectancy, facilitating conditions, system quality. In addition, the empirical results showed that the continuance intention is directly influenced by students' satisfaction, performance expectancy, hedonic motivation, effort expectancy, habit, and facilitating conditions. Thus, it was shown that the UTUAT2 constructs are helpful in the research of satisfaction and continuation intention.

This study’s findings will serve as a valuable resource for educational institutions, decision-makers, developers, and academics looking to enhance online learning systems by identifying the most important factors influencing student students' satisfaction and continuance intention.

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