

## Continuance Intention to Study Using the Online Distance Learning System in the Context of Online Distance Learners: Malaysian Context

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To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v14-i1/20571>

DOI:10.6007/IJARBSS/v14-i1/20571

**Published Date:** 26 January 2024

### Abstract

**Purpose:** This study explores the transformative impact of COVID-19 on the educational landscape in Malaysia, highlighting online distance learning as the prevailing mode. The focus is on sustaining this shift through high retention and low attrition rates. The research aims to investigate how system quality, sociability quality, and self-managed learning influence student satisfaction with open and distance learning systems. Furthermore, it delves into their impact on the continuance intention to study in such environments, examining satisfaction as a mediating factor.

**Research Methodology:** Conducted quantitatively, data were collected from 371 respondents across three prominent open and distance learning universities in Malaysia: Open University Malaysia, Wawasan University, and Asia E-University. Screening using SPSS 18 eliminated 28 respondents, leaving 363 for analysis through PLS-SEM software version 4.0.

**Findings:** Results reveal positive influences of sociability quality, system quality, and self-managed learning on student satisfaction. Additionally, these factors positively contribute to the continuance intention to study in open and distance learning systems. Satisfaction emerges as a crucial mediating factor in this relationship.

**Limitation:** Confined to three Malaysian open and distance learning universities, the study incorporates a model with five latent variables and 25 observed variables. Each construct comprises five measurement items, including three independent variables (sociability quality, system quality, and self-management learning), one mediator (satisfaction), and one dependent variable (intention).

**Implication:** The findings emphasize the pivotal role of satisfaction in shaping the continuance intention to study. Facilitators and tutors should prioritize aspects like social interaction, learning system quality, and self-managed learning to enhance the learning experience and tackle high attrition and retention rates.

**Value:** The study contributes insights into variables influencing attrition and retention rates among open and distance learning learners. Drawing data from major Malaysian ODL universities, it provides valuable perspectives for institutions aiming to understand and improve the learning experience for ODL students.

**Keywords:** Online Learning, Open and Distance Learning, Continuance Intention, Satisfaction, Sociability Quality, System Quality, Self-Managed Learning

## **Introduction**

With the rapid development of digital infrastructure and the widespread diffusion of internet connectivity globally, a large number of online technologies have been introduced over the last decade, allowing users to access information and communicate over the Internet (Dwivedi et al., 2020; Koochanget al., 2023). Moreover, with the growing popularity of the Internet, a digital revolution has brought along many new platforms and conveniences such as email, e-shopping, e-working, and e-education (Kumar, Shankar & Kumar, 2019). One of the e-education technologies that is transforming the education landscape is the online and distance learning system. Online and distance education universities are yet to explore new learning opportunities for new learners that would fundamentally transform learning delivery and the competitive environment. In Malaysia, the customer or learner's enrolment in higher education is estimated to increase from 1.3 million in 2018 to 1.6 million in 2023. This incoming trend suggests that higher education institutes need to adopt distance learning tools to accommodate the rise in demand.

However, the adoption of technology does not always guarantee its full utilization. With the rapid development of online education, the issues of high attrition rates and low retention of online learners have become increasingly prominent. The attrition rate at the Open University, a renowned online educational institution in the UK, was up to 78% according to statistics in 2010 as stated by (Simpson, 2011). Similarly, a study by Tsai et al (2018) revealed that the results gathered by MOOC College in China showed that the attrition rate of Massive Online Open Courses is roughly equal to other countries. According to the same research, though the user database has increased from 130,000 to 650,000, the attrition rate is still high.

## **Literature Review**

In this study, a few studies were examined on continuance intention, satisfaction, system quality, sociability quality, and self-managed learning.

### *Continuance Intention*

Intention is interpreted as an individual's views or ideas on things, resulting in subjective thinking. There is no unified definition of this concept in relevant research on continuance intention. Continuous use behavior depends on users' continuance intentions (CIs). Bhattacharjee (2001) defined Information System (IS) continuance intention as 'an individual's intention to continue using an information system (in contrast to initial use or acceptance)'. He was among the first scholars to distinguish between technology acceptance and continuance behavior. Bhattacharjee argued that the existing studies inappropriately use the same constructs/items to measure acceptance and CI when the reasons explaining technology acceptance are different from those describing CI. Since 2001, CI has been studied in a variety of digital technology settings including mobile apps (Amoroso & Lim, 2017; Chui et al., 2019; Wang, Ou & Chen, 2019; Lim et al., 2022), e-learning (Roca & Gagné,

2008; Dağhan & Akkoyunlu, 2016; Yuan et al., 2021), online banking (Bhattacharjee, 2001; Amoroso & Lim, 2017), eCommerce (Cheung & Zheng, 2018; Lee, Yoon & Lee, 2009), sharing economy platforms (Wang et al., 2020); social networking (Chang et al., 2017; Ahmad & Sun, 2018; Gan & Li, 2018) and online services (Lin & Filieri, 2015). There are not many CI studies that focus on Malaysian online distance learners and a survey carried out by a private higher education reported that only 72% of new learners at the undergraduate and postgraduate level would like to continue their studies for the following semester; the remaining 28% decided to defer, not register and quit their studies (Intan et al., 2022).

### *Satisfaction*

Expectation Confirmation or Disconfirmation Theory (EDT) from consumer behavior literature is a cognitive theory that argues that satisfaction with adopting a particular technology is the function of our expectations, perceived performance, and disconfirmation beliefs (Oliver, 1980). In most EDT studies, satisfaction has been proposed as the most immediate impetus of our intentions. Satisfaction is also an important determinant of intention to repurchase from a website (Chiu et al., 2012; Nguyen et al., 2023). The satisfaction construct is adopted from the Expectation Confirmation or Disconfirmation Theory in the research model. The EDT framework emphasizes the role of user satisfaction in the long-term adoption of these systems. It suggests that when users are more satisfied with a particular system, their intention to use it over an extended period is proportionately enhanced (DeLone and McLean, 2004; Salam, 2020). It plays a pivotal role in determining the net benefits of an information system (Balaban et al., 2013; Martins et al., 2018). As such, the impact of satisfaction on overall system use and net benefits necessitates further research. This is particularly pertinent in the context of modern academic information systems, and more specifically, concerning EDT (Mellikeche et al., 2020; Salam, 2020; Xu and Du, 2019). EDT's focus on disconfirmation helps us understand how experiences can either positively or negatively influence satisfaction (Al-Samarraie et al., 2017; Balaban et al., 2013; Martins et al., 2018). User satisfaction with these systems is not only linked to their usefulness and effectiveness in achieving educational objectives but also to the extent of contentment among various stakeholders, including teachers and students (Aparicio et al., 2017; Cidral et al., 2018; Hassanzadeh et al., 2012; Wang and Liao, 2008). Studies have shown that user satisfaction is not merely a reflection of immediate gratification but is also a strong determinant of the overall net benefits of an information system (Balaban et al. 2013; Martins et al. 2018). This underscores the holistic impact of satisfaction in the context of academic information systems.

### *The Information System (IS) Success Model (Information Quality and System Quality)*

One of the most widely cited research done by DeLone and McLean (2002) was the Information System (IS) Success Model. IS success model was derived from the Classic Communication Theory by Shannon and Weaver in 1949 Al-Fedaghi (2012), later adopted by Mason (1978) in the Information System field. This model consists of six constructs information quality, system quality, use, user satisfaction, individual impact, and organizational impact. The IS Success Model is one of the most heavily cited IS Models in the literature (Chen et al., 2013; Tan et al., 2012). The IS success model tends to emphasize the significance of technology in dealing with learners' behavioral intentions, and many prior studies have constructed hypotheses on online learning behavior, based on the IS success model. Dağhan & Akkoyunlu (2016) combined the technology continuance theory, the IS

success model, the cognitive model, and the IS ECM to construct their integrated model (Li et al., 2021). They argued that online learning environment usage could be confirmed by system quality, service quality, and information quality variables. In this research model, information quality and system quality are selected to measure the continued intention to use the open and distance learning system.

### *Sociability Quality*

A study by Kreijns et al (2007), explained that the sociability of a CSCL system means how well a CSCL system can help create a friendly and trusting social space where people feel like they belong, have a strong community, and work well together. Junglas et al (2013) conducted a study to examine how the social component of a mobile social network system influenced the system use and technology acceptance of its users. They defined the social component as the degree to which the system enabled users to interact with others, share information, and build social relationships. The social component had a positive effect on both system use and technology acceptance. This finding is consistent with other studies investigating sociability's role in collaborative technologies. Gao et al (2010) studied how the sociability of social software affected users' attitudes and intentions to use the software for a long time. Similarly, Kreijns et al (2007) explored how the sociability of a computer-supported collaborative learning (CSCL) system influenced the learning outcomes and experiences of its users. They defined sociability as the extent to which the CSCL system supported the emergence of a sound social space with attributes such as trust, belonging, sense of community, and good working relationships. Other studies (e.g. Kreijns & Kirschner, 2004; Oksanen & Hamalainen, 2013) have also acknowledged the significance of sociability in enhancing the usage and effectiveness of collaborative technologies. However, despite these studies exploring the concept of sociability and its impact on system use, there is still a lack of a comprehensive framework for assessing the sociability of WBCLIS in the IS literature (Salam et al., 2019b).

### *Self-Managed Learning*

The social cognitive theory presumes that people have a measure of agency over important aspects of their lives and that they productively exercise this agency in the pursuit of important goals. In self-efficacy theory, people evaluate their skills and abilities and convert their beliefs about their capabilities into purposive action (Bandura, 2006). Self-efficacy, popularly known as confidence, refers to beliefs in the capabilities to carry out the courses of action needed for desired goals; while self-managed learning refers to the ability to regulate cognition, motivation, affect, and behaviour in a learning context. On a different note, to be successful in the academic setting, students must exercise control over their learning by activating and regulating behaviors, thoughts, and emotions, and they must learn to manage their learning environment plan fully (Zimmerman, 2000). A student's confidence in managing his or her learning environment is a key factor that influences the academic success of children, adolescents, and adults (e.g., Caprara et al., 2008; Pajares & Valiante, 2002).

In this paper has discussed how the Information System Success Model is heavily influenced by information quality, system quality, use, user satisfaction, individual impact, and organizational impact. User satisfaction is seen as a mediating factor that influences the continuance intention to further study based on the independent variables (information

quality, system quality, and self-managed learning). The conceptual framework for the study is in Figure 1 below:

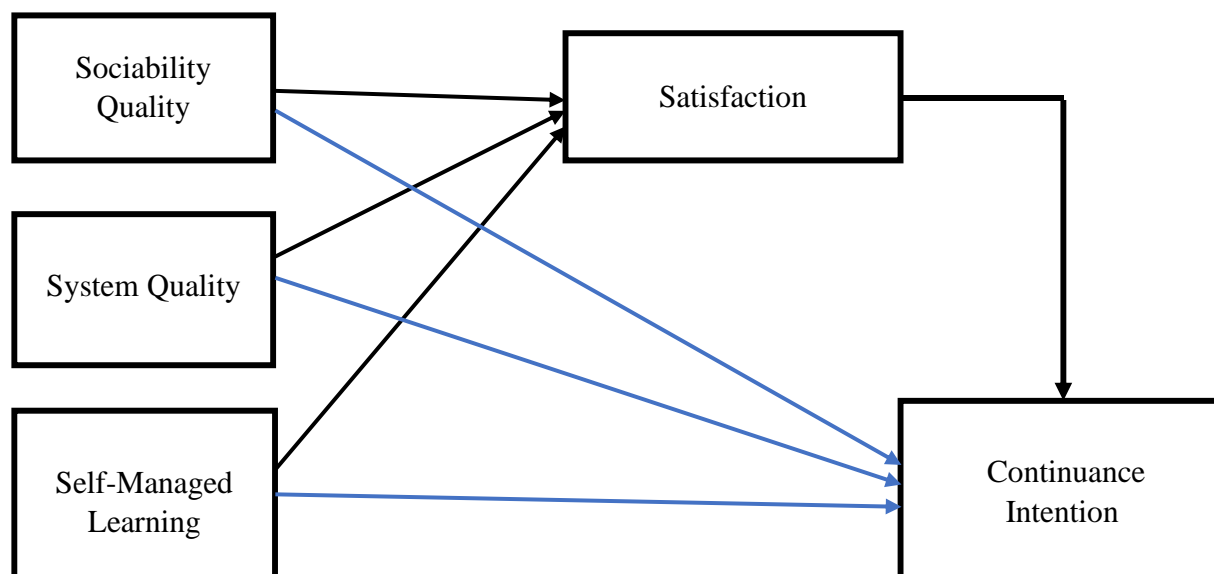


Figure 1: Conceptual Framework

Source: Constructed for this study

### Research Method

The general purpose of this study is to examine the influence of satisfaction on continued intention to further study in the open and distance learning context. This study used a variance-based approach in which the data screening techniques were used to eliminate outliers in the data collection. This approach allowed for a deeper understanding of the relationships between the various factors in the study and provided valuable insights into the experiences and perspectives of ODL students in Malaysia. This quantitative study explores the relationship between the dependent variable (continuance intention to further study), mediating variable (satisfaction), and independent variables (sociability quality, service quality, and self-managed learning). A set of questionnaires was distributed to the targeted respondents from three major open and distance-learning universities.

### *Instrument Development*

The questionnaire set was developed based on the constructs of several studies as shown in Table 1 below:

Table 1  
*Sources of Items Used*

Construct	Authors
System Quality (5 Items)	Cho, Cheng & Lai (2009)
Sociability Quality (5 items)	Magableh, Obeidat & Obeida (2021)
Self-Management Learning (5 items)	Huang & Yu (2019)
Satisfaction (5 items)	Joo, Park, & Shin (2017)
Continuance Intention (5 items)	Bhattacharjee (2001)

Source: Constructed for this study

The study used a close-ended questionnaire with a five-point Likert scale comprising the independent, mediating, and dependent variables for data collection. The questionnaire has two major sections - Section A covers the demographic information with items: gender, age, marital status, race, employment status, prior experience with online learning, and the time of the current course. Section B is divided into five subsections - (B1) system quality, (B2) sociability quality, (B3) self-management learning, (B4) satisfaction, and (B5) continuance intention. The researchers sent out e-mail questionnaires to 475 students and received a response rate of 82.3%, with 391 students returning the survey questionnaires. Since this study utilized a variance-based approach for data analysis and there is no specific standard for the minimum acceptable response rate for online surveys, the sample obtained was deemed sufficient for data analysis. The researchers then used SPSS 18 to perform data screening techniques suggested by Field (2013) to ensure that there were no outliers in the data. This led to the detection and elimination of 28 outliers before running the main data analysis. Therefore, the partial least squares-structural equation modeling (PLS-SEM) algorithm was performed on a sample of 363 respondents in the context of ODL higher institutions. This approach allowed for a deeper understanding of the relationships between the various factors in the study and provided valuable insights into the experiences and perspectives of ODL students in Malaysia. To address the common method bias in the present study, the researchers utilized Harman's single-factor test method to check the reliability of the variables. The finding, which is less than 50%, is in line with the recommendation of Podsakoff and Organ (1986), who suggest that when the principal component fraction accounts for less than 50% of the variance, there is no significant concern regarding common method bias. The PLS-SEM algorithm was utilized to establish the validity and reliability of the constructs in the study. According to Hair et al. (2023), the reliability and validity of the outer goodness model are two essential aspects of PLS-SEM.

#### *Respondent Demographic Profile*

A total of 363 online distance learning (ODL) respondents from three institutions in Malaysia were analyzed in this study. The majority of the respondents were female (57.3%) and aged between 26 and 35 years old (50.4%). A significant proportion of the respondents were

married (48.5%) and employed full-time (44.2%). The highest level of education achieved by the respondents was a Bachelor's degree (52.8%). The majority of the respondents reported having prior experience with online learning (89.8%), and most had been enrolled in their current program for more than a year (69.3%). In terms of ethnicity, the majority of the respondents identified as Malay (69.3%), followed by Chinese (19.6%) and Indian (5.5%). Overall, the demographic characteristics of the respondents indicate a diverse sample of ODL students in Malaysia with varying backgrounds, experiences, and educational levels.

#### *Assessment of Measurement Model*

The PLS-SEM algorithm was utilized to establish the validity and reliability of the constructs in the study. According to Hair et al (2021), the reliability and validity of the outer goodness model are two essential aspects of PLS-SEM. The specified model was established, and one item of sociability quality, two items from system quality, two items of satisfaction, and one item of intention constructs were eliminated because they had a loading of less than 0.7. The AVE was below the threshold of 0.5, indicating inadequate construct validity. The Heterotrait-Monotrait (HTMT) ratios also did not meet the requirements due to low item loadings. After removing the lower loading items and creating the re-specified model (Figure 1), all constructs achieved an AVE of at least 0.5, with a minimum of 0.729 and a maximum of 0.849 (Table 2). This showed that all constructs had established convergent validity.

Furthermore, all constructs' composite reliability ranged from 0.864 to 0.893, exceeding the recommended threshold of 0.7 (Hair et al., 2017).

Table 2

#### *Construct reliability & Validity*

Items	CA	CR	AVE
INT	0.874	0.864	0.726
SAT	0.911	0.893	0.849
SCQ	0.894	0.876	0.847
SML	0.882	0.872	0.832
SQ	0.813	0.889	0.728

Source: Constructed for this study

To ensure the presence of discriminant validity, the study assessed the cross-loading measurement items. The assessment results indicated that all item loadings were higher than their respective cross-loadings (Table 3).

Table 3

*Cross Loading*

Items	INT	SAT	SCQ	SML	SQ
INT1	<b>0.847</b>	0.278	0.174	0.245	0.459
INT2	<b>0.850</b>	0.195	0.089	0.141	0.450
INT3	<b>0.871</b>	0.342	0.232	0.286	0.529
INT5	<b>0.839</b>	0.316	0.164	0.212	0.464
SAT1	0.336	<b>0.924</b>	0.688	0.790	0.498
SAT2	0.295	<b>0.909</b>	0.651	0.714	0.498
SAT3	0.294	<b>0.932</b>	0.704	0.814	0.547
SCQ1	0.143	0.645	<b>0.919</b>	0.691	0.421
SCQ2	0.187	0.664	<b>0.927</b>	0.694	0.436
SCQ3	0.204	0.711	<b>0.929</b>	0.714	0.457
SCQ4	0.183	0.700	<b>0.907</b>	0.719	0.431
SML1	0.270	0.815	0.719	<b>0.921</b>	0.542
SML2	0.216	0.769	0.709	<b>0.925</b>	0.473
SML3	0.225	0.758	0.709	<b>0.934</b>	0.492
SML4	0.231	0.762	0.707	<b>0.911</b>	0.506
SML5	0.251	0.723	0.646	<b>0.869</b>	0.470
SQ1	0.535	0.414	0.361	0.401	<b>0.864</b>
SQ2	0.474	0.449	0.321	0.458	<b>0.860</b>
SQ3	0.426	0.562	0.524	0.532	<b>0.835</b>

Source: Constructed for this study

The discriminant validity was further assessed by examining the Hetrotrait-Monotrait (HTMT) ratios, indicating that all four constructs' ratios were less than 0.9 (Table 4), as suggested by Henseler et al. (2014). Therefore, the study demonstrated the reliability and validity of all latent constructs, as recommended by Hair et al. (2021).

Table 4

*Hetrotrait-Monotrait (HTMT) Ratio*

Items	INT	SAT	SCQ	SML
SAT	0.372			
SCQ	0.212	0.797		
SML	0.284	0.878	0.810	
SQ	0.663	0.646	0.538	0.618

Source: Constructed for this study



*Assessment of Structural Model*

The Partial Least Squares (PLS) method was used to evaluate the structural model by computing the path coefficient ( $\beta$ ) and coefficient of determination ( $R^2$ ) value. The analysis was conducted on 5,000 sub-samples to determine the significance of the path coefficient. Table 5 summarizes the hypotheses testing results.

Table 5  
*Hypotheses Testing Results*

Hypotheses	Beta	T statistics	P values	P		Decision
				2.50%	97.50%	
H1: SCQ -> INT	-0.147	2.174	0.030	-0.276	-0.012	<i>Supported</i>
H2: SCQ -> SAT	0.216	3.158	0.002	0.086	0.353	<i>Supported</i>
H3: SQ -> INT	0.571	10.973	0.000	0.464	0.668	<i>Supported</i>
H4: SQ -> SAT	0.126	3.260	0.001	0.051	0.205	<i>Supported</i>
H5: SML -> INT	-0.141	1.786	0.074	-0.293	0.019	<i>Not Supported</i>
H6: SML -> SAT	0.606	8.790	0.000	0.462	0.733	<i>Supported</i>
H7: SAT -> INT	0.243	2.841	0.005	0.078	0.415	<i>Supported</i>
H8: SCQ -> SAT -> INT	0.053	2.284	0.022	0.018	0.113	<i>Supported</i>
H9: SQ -> SAT -> INT	0.031	2.097	0.036	0.009	0.069	<i>Supported</i>
H10: SML -> SAT -> INT	0.148	2.552	0.011	0.046	0.277	<i>Supported</i>

Source: Constructed for this study

All the VIFs, which measure the impact of correlated predictors, were under 5, with the highest being 4.104 (shown in Table 6). This indicates a low level of collinearity, which means that interpreting the coefficients of the structural model was accurate. The  $R^2$  value of the intention construct was 0.335, indicating that there was a moderate level of variance explained. The satisfaction construct, which was mediating, had an  $R^2$  value of 0.739. This means that the model was able to explain 73.9% of the variance in satisfaction.

Table 6  
*Inner VIF*

	INT	SAT
SAT	3.833	
SCQ	2.624	2.445
SML	4.104	2.696
SQ	1.499	1.438

Source: Constructed for this study

Table 7

*PLSpredict*

	Q <sup>2</sup> predict	PLS-SEM_RMSE	LM_RMSE	PLS-LM
INT1	0.198	0.857	0.871	-0.014
INT2	0.204	0.915	0.929	-0.014
INT3	0.261	0.791	0.795	-0.004
INT5	0.205	0.813	0.833	-0.020
SAT1	0.634	0.379	0.388	-0.009
SAT2	0.535	0.471	0.499	-0.028
SAT3	0.683	0.371	0.373	-0.002

Source: Constructed for this study

The model is also capable of out-of-sample prediction, and the PLS prediction procedure was used to assess the out-of-sample predictive power of the model (Shmueli et al., 2019). The Q<sup>2</sup> values indicated that the PLS-SEM predictions outperformed the naive mean predictions (Table 7). Moreover, the root-mean-square error (RMSE) of the PLS-SEM predictions was lower than that of the linear model (LM) prediction benchmark in 7 out of 7 cases, demonstrating the predictive power of the model (Table 6). The results from the finding suggested that sociability quality has a negative influence on intention ( $\beta = -0.147$ ,  $t = 2.174$ ,  $p = 0.030$ ), thus supporting H1.

The results revealed that sociability quality has a positive influence on satisfaction, which was supported by the statistical result ( $\beta = 0.216$ ,  $t = 3.158$ ,  $p = 0.002$ ). The results from the hypothesis testing indicated system quality has a positive influence on intention, which was also supported by the statistical result ( $\beta = 0.571$ ,  $t = 10.873$ ,  $p = 0.000$ ). The findings suggested that system quality has a positive influence on satisfaction, and the statistical result indicated that the influence is significant ( $\beta = 0.126$ ,  $t = 3.260$ ,  $p = 0.001$ ), thus supporting H4. The findings of the study revealed that self-management learning did not influence continuance intention, which was supported by the statistical result ( $\beta = -0.141$ ,  $t = 1.786$ ,  $p = 0.074$ ).

The results from the data collection confirmed that self-management learning has a positive influence on satisfaction and is supported by the statistical results ( $\beta = 0.606$ ,  $t = 8.790$ ,  $p = 0.000$ ). The findings confirmed that satisfaction has a positive influence on continuance intention which was supported by the statistical result ( $\beta = 0.243$ ,  $t = 2.841$ ,  $p = 0.022$ ). To assess the mediating relationship hypotheses, the researchers considered the estimated path coefficient statistically significant when the p-value is less than or equal to 0.05, or when 0 is not straddled between the lower and upper-level confidence intervals. The findings indicated that satisfaction mediates the relationship between sociability quality and intention, which was supported by the statistical result ( $\beta = 0.053$ ,  $t = 2.284$ ,  $p = 0.022$ ,  $LLCI = 0.018$   $ULCI = 0.113$ ). The results showed that satisfaction has a mediating influence on the relationship between system quality and intention, which was supported by the statistical result ( $\beta = 0.031$ ,  $t = 2.097$ ,  $p = 0.036$ ,  $LLCI = 0.009$   $ULCI = 0.069$ ). The results showed that satisfaction has a mediating influence on the relationship between self-management learning and continuance intention, which was supported by the statistical result ( $\beta = 0.148$ ,  $t = 2.552$ ,  $p = 0.011$ ,  $LLCI = 0.046$   $ULCI = 0.277$ ).

**Conclusion**

This study aims to examine the factors influencing the continuance intention to study using the online distance learning system among Malaysian students. The study investigates the impact of system quality, sociability quality, and self-managed learning on students' satisfaction with online distance learning systems. It also explores the relationship between these factors and the continuance intention to study. Additionally, the study analyses the mediating effect of satisfaction on the relationship between these variables. The research adopts a quantitative approach and analyzes data from 363 respondents enrolled in three Malaysian open and distance learning universities. The findings reveal that sociability quality, system quality, and self-managed learning positively influence students' satisfaction with online distance learning systems.

Moreover, system quality, self-managed learning, and satisfaction positively impact the continuance intention to study in the online distance learning environment. Satisfaction is identified as a mediating factor that positively influences sociability quality, system quality, and self-managed learning, leading to continuance intention to study in the online distance learning context. The study's limitations include its focus on three ODL universities in Malaysia, the use of a specific measurement model, and the inclusion of only five latent variables with limited observed variables. However, the findings have practical implications for ODL institutions to enhance student satisfaction and improve attrition and retention rates. Facilitators and tutors should consider promoting social interaction, improving online distance learning systems, and supporting self-managed learning to provide a conducive and enriching learning experience.

*Implications*

The current study holds substantial implications for both future academics and practitioners, acting as a pioneering exploration into the under-researched realm of continuance intention to further study in open and distance learning (ODL). Given the limited existing studies in this specific domain, the research serves as a foundational effort, opening avenues for investigating additional dimensions in online and distance learning. The constructed research model, comprising sociability quality, system quality, and self-managed learning as independent variables, along with continuance intention to further study as the dependent variable, establishes a comprehensive framework. The introduction of satisfaction as a mediating variable enhances the model, shedding light on its correlation with independent variables and its consequential effects on the dependent variable.

The theoretical implications are, however, somewhat constrained, reflecting the novelty of open and distance learning in education. Particularly, the surge in its prevalence during the recent pandemic-induced lockdowns has accentuated the need for comprehensive frameworks. The study successfully lays the groundwork by creating a framework that evaluates the impact of sociability, system quality, and self-managed learning on continuance intention among ODL students in Malaysia, incorporating satisfaction as a pivotal mediating variable. The confirmation of satisfaction's critical role in the continuance intention underscores its significance; satisfied students exhibit a higher likelihood of pursuing further studies in the ODL context.

This study, acting as a benchmark, paves the way for future research exploring diverse dimensions affecting students' intentions to continue studying in the ODL mode. As online learning technologies reshape the educational landscape, the journey of an ODL learner is profoundly impacted by various factors, contingent on the learning environment and additional support received. Despite the structured research framework, the study

acknowledges limitations, including the scarcity of preliminary studies as a basis, predominantly conducted in more advanced countries, and the online distribution of questionnaires hindering the assessment of student readiness. The study's constraints, attributed to time and financial limitations, prompt a call for broader audience inclusion, particularly students in public universities adopting ODL modes. This expansion aims to enrich our understanding of the subject and suggests delving into additional mediating factors such as spending and the learning environment. In essence, this study lays a crucial foundation for further exploration in ODL, offering insights into satisfaction dynamics and paving the way for more inclusive and diverse investigations into the multifaceted dimensions influencing students' continuance intentions in the evolving landscape of online and distance learning.

### *Theoretical and Contextual Contribution*

This research makes significant theoretical and contextual contributions to the evolving field of open and distance learning (ODL). As the study delves into a relatively underexplored area—the continuance intention to further study among ODL students—it serves as a pioneering effort to lay the groundwork for future investigations in this domain. The development of a research model based on sociability quality, system quality, and self-managed learning, with satisfaction as a mediating variable, provides a structured framework to comprehend the multifaceted factors influencing students' decisions in the ODL context. By identifying and validating the crucial role of satisfaction as a mediator, the study contributes to the theoretical understanding of how student experiences, perceptions, and contentment play a pivotal role in shaping their intentions to persist in ODL environments.

Furthermore, the contextual significance of this research cannot be understated, particularly given the unprecedented global shift towards online learning catalysed by the COVID-19 pandemic. As the study focuses on Malaysian ODL students, it addresses a gap in the literature by acknowledging the unique socio-cultural and educational landscape of the country. In a setting where ODL is gaining prominence, the research provides valuable insights into the specific factors influencing students' satisfaction and continuance intentions. This contextualization is crucial for institutions, policymakers, and educators in Malaysia, offering a tailored understanding of the challenges and opportunities within their ODL systems.

Additionally, the study advocates for a broader scope of future research by highlighting the limitations related to a lack of preliminary studies and the need to consider diverse mediating factors. In essence, this research not only adds theoretical depth to the understanding of ODL dynamics but also contributes context-specific insights that can guide educational practitioners and policymakers in Malaysia and potentially other regions navigating the complexities of open and distance learning in the contemporary educational landscape.

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