



E-PROCEEDING HOTWEC 6.0

THE GAME ON 2022:

THE FUTURE IS  
BRIGHT

FHPK, UMK

# **E-PROCEEDING HoTWeC 6.0**

**THE GAME ON 2022:  
THE FUTURE IS BRIGHT**

**FACUTLY OF HOSPIATLITY, TOURISM AND WELLNESS,  
UNIVERSITI MALAYSIA KELANTAN**

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H21	The Effect of Online Restaurant Menus on Consumers' Purchase Intentions In Klang Valley Malaysia	582
H22	Individual Perceived Security and Privacy of Mobile Application in Hospitality Industry	594
H25	Factors Influencing Students' Satisfaction in Using E-Learning for Hospitality and Tourism Practical-Based Courses	606
H26	Perception of Health and Safety Precautions for Post-Pandemic Malaysia Domestic Travelling Decision	617
H27	The Influence of Motivation Factors Towards Post-Pandemic Screen Tourism	628
H28	Examine the Factors of Satisfaction in Mobile Food Delivery Applications Among Generation Z in Malaysia	639
H29	The Acceptance Towards the Use Of E-Wallet in Restaurants from Gen Z Perspectives	650
H30	Customer Awareness towards Muslim Friendly Hotel in Malaysia	661
H31	Customer Satisfaction Towards Usage of Food Delivery Applications During Covid-19: Malaysia Outlook	671
H32	Customer Perception Towards Artificial Intelligence in Malaysia Hospitality Industry	682
H33	Factors Influencing Unemployment Rate Among Hospitality Industry Graduates in Malaysia	697
H34	The Impact of Service Quality on Customer Satisfaction Towards Shell-Out Restaurant in Malaysia	709
H35	The Importance of English Language Proficiency among Employee in Hospitality Industry	720
H36	Measuring the Satisfaction of Tourists Visiting Malacca During Holiday	732
H37	Malaysian Consumers Intention of Using E-Commerce in Fast Food Industry	741
H39	The Impact of Leadership Styles in Organizational Performance on Employee Job Satisfaction in the Hotel Industry	750
T2	The Factors Influence Consumer Purchase Intention Using Food Delivery Application	759
T3	The Factors Influence Intention to Use Smart Travel Itinerary Among Local Tourists In Malaysia	771
T4	The Development of Pantai Melawi As A Family-Friendly Tourism Destination (FFTD) In Kelantan	781

# Factors Influencing Students' Satisfaction in Using E-Learning for Hospitality and Tourism Practical-Based Courses

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## ABSTRACT

E-learning has evolved into an educational tool, much like technology has evolved and improved over time. Major changes in their environments have presented significant challenges to higher education institutions, including hospitality and tourism programmes. Students face some problems or technical difficulties when using these systems, and this causes dissatisfaction among the students. This study aims to examine the factors influencing student's satisfaction in using e-learning. The researchers used a quantitative technique and questionnaires by Google Forms to conduct this survey. Statistical Package Social Science (SPSS) version 26.0 are used as a tool for analysing the data. The findings showed the strongest correlation would be the online interaction factor, followed by the system quality factor, and the lowest correlation will be the system quality factor. In this regard, the learning management system should be enhanced to boost online interaction. Collaboration between students and instructors should be the foundation for improved interaction.

**Keywords: E-learning, Information Quality, System Quality, Online Interaction, Students' Satisfaction**

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## INTRODUCTION

The government began privatising higher education in the 1980s in order to increase public access to higher education while reducing reliance on the public sector. As a result, Malaysia's private higher education sector is seeing exceptional and unprecedented expansion (Chai & Mei, 2009). In response to the wave of privatisation of higher education, a growing number of educational institutions are beginning to offer tourism and hospitality courses at the diploma, bachelor's degree, and even learning experience levels to meet the demand for skilled employment in the tourism and hospitality sector. By converting theory into practical learning, hospitality management education seeks to enrich students with technically oriented learning.

An e-learning system is now an essential tool for students to improve their learning processes. It's one of the systems that has significantly contributed to the IT industry (Mokhtar, Omar & Yuki, 2020). Learning is now regarded from a more significant viewpoint in general, with the use of technology, particularly the internet, in learning becoming increasingly popular at all levels of education, including schools and higher education institutions. Students today have grown up with access to the internet and digital devices.

Higher education institutions, especially hospitality and tourism programmes, have faced substantial problems as a result of huge changes in their respective settings. When students use these systems, they encounter issues or technological challenges, leading to discontent. Students behave differently than prior generations. As a result, educational practitioners and designers must recognise these distinctions and construct educational offers that are tailored to individual learning patterns, features, and behaviours (Song, 2010).

Quality instructor information is critical for students to comprehend each subject they study (Alom et al., 2019). This study aimed to investigate the influence of students' satisfaction in using e-learning for hospitality and tourism practical-based courses. Educators and academics are interested in students' perspectives and satisfaction with online learning courses. The dominating power result predicting student satisfaction with online courses is interaction-

driven quality rather than information-and-system-driven quality (Mokhtar et al., 2020). There were objectives of this research:

1. To identify the relationship between information quality and students' satisfaction in using e-learning.
2. To determine the relationship between technology and system quality and students' satisfaction in using e-learning.
3. To examine the relationship between online interaction and student's satisfaction in using e-learning.

### **Significance of the Study**

The study looked into the elements influencing student satisfaction with e-learning for practical-based hospitality and tourism courses. According to Cox (2012), as e-learning resources have become more widely available to educators, researchers have focused their efforts on an increasing number of points of view, with many assumptions and limitations surrounding research methodologies used and the subsequent interpretation of findings. Future researchers who want to perform a similar experimental study or any other study involving student satisfaction with e-learning can use the findings as a guide and reference. This requires researchers to thoroughly understand past evidence, theories, and practises to establish what they should be assessing.

Furthermore, the study's findings will benefit students, professors, lecturers, and the general public. Students appear to benefit from and appreciate online courses that are detailed, logical, and user-friendly (Eom et al., 2006). When the course learning objectives are more specified, students have a better knowledge of the expectations for success and learning in the course. Student research e-learning course benefits show that interactive qualities appear to be crucial in influencing course quality as judged by student performance, grades, and course satisfaction. According to Roblyer and Ekhaml (2001), students do far better in online courses due to the flexibility and reactivity of e-learning.

## **LITERATURE REVIEW**

### **Overview of E-learning**

E-learning is introduced to students enrolled in open and distance learning (ODL) programmes. (Ali, 2004). It's critical to define exactly what e-learning means here. Learning providers can use e-learning applications to help them organise, deliver, and track the overall learning and teaching process. An e-learning system is a substantial reservoir of information because of its accessibility (accessible everywhere at any time), low cost, ease of use, and interactive nature. This emphasises the importance of being clear about what the term "e-learning" means anymore (Almaiah, Al-Khasawneh & Althunibat, 2020). Students can download instructional information onto mobile devices, connecting to mobile networks or local wireless networks. This definition emphasises that e-learning has evolved into a teaching tool, similar to how technology has evolved and developed over time. Surprisingly, there is currently a greater emphasis on technical innovation than on understanding the needs and cognitive strategies of different students and course design. The internet and online learning have advanced dramatically (Tham & Werner, 2005).

E-learning should always offer current and relevant content. Learners need access to available professionals, the best sources, promptly responding instructors, and quick solution providers through e-learning. In addition, good learning requires effective and engaging learning content (Nagy, 2005). Intensive collaboration is required to exchange critical knowledge and information among partners, specialists, and professional colleagues (Nagy, 2005). As a result, e-learning must move away from a teaching-centred paradigm that encourages great knowledge dissemination by academics and toward a continuing-to-learn strategy. Students are becoming knowledge creators and builders. Aside from that, universities have traditionally had a wide range of instructional methods to choose from. However, given the scope and diversity of having to invent e-learning within universities, which usually

necessitates a strategic and academy methodology for its deployment, they may begin to exert more control over their education. (Knight & Trowler, 2001).

### **Information Quality**

Information quality is defined as how customers perceive and use information, which can be described as useful outputs for business users (Gorla, Somers & Wong, 2010; Miller, 1996). There have been several definitions of information quality offered. Information quality is defined by Cheng (2012) as the accuracy, completeness, currency, efficiency, relevance, scope, and timeliness of information generated by an information system, with aspects such as information accuracy, completeness, currency, efficiency, relevance, scope, and timeliness being assessed.

Students will use the same interactive notes provided by this university because information quality is crucial for receiving accurate and correct information about the course (Adeela, Diana, Fadilah, Huda, Ismail, Jaafar Mokhtar, Rashidah, Sukiman Tahar, Zamani & Zuriati, 2013). The notes are also written by the appointed professors, making them more reliable to be used by students throughout the system (Adeela et al., 2013). Information quality positively impacts use and user satisfaction, which is consistent with findings on the success of e-learning systems (Aparicio, Cidral, Felice & Oliveira, 2017).

Information quality is vital in e-learning systems since the system course comprises the students' learning grounds, and content positively impacts learner satisfaction (Aparicio et al., 2017). The study's participants were all enrolled in university programmes. In contrast, the other study sample included students from various levels of education, and the findings support predictions that information quality has a positive impact on the use and user happiness, which is consistent with similar findings on the success of e-learning systems (Aparicio et al., 2017).

### **Technology Related and System Quality**

System quality is a term used in the automobile industry to describe how far an industry has identified a set of desirable attributes that should be applied to a system in order to improve the product's overall lifecycle performance (Dubey, 2012). In this context, it is critical to specify exactly what system accessibility means. Accessibility, adaptability, simplicity of access, reliability, and response time are all aspects that can be used to assess system quality. (Bayraktaroglu et al., 2014). The success of technology designed to expand organisational knowledge and effectively execute technologies that assist organisational learning is dependent on the success of the technology.

Two critical drivers that promote technology usage are an applicant of information technology in task completion and finds turned into information, as well as perceived simplicity of use (Lee & Lee, 2008; Parka, Roman, Leec, & Chungd, 2009; Roca et al., 2006). Individuals are also motivated to use e-learning when they receive high-quality e-learning services to assist them in overcoming barriers. The quality of an e-learning system's service has been linked to a beneficial impact on technology adoption (Wang & Wu, 2007). End-users become more interested in learning and, as a result, happier when an e-learning system provides useful valuable knowledge for their job duties (Roca et al., 2006).

Furthermore, previous research has demonstrated the effects of perceived quality on learning satisfaction in three different areas of study, as previously indicated in the literature. Each of these has been examined further. User happiness, service support and quality, and the existing system are all considered (Baharudin, Hoon & Tajuddin, 2013). In e-learning contexts, perceived efficacy and anticipation have been proven to be critical. Assume the user had fewer opportunities and achieved greater success with the e-learning system, resulting in increased total user satisfaction. In e-learning, being satisfied with the system's operation leads to higher learning satisfaction, which may help to preserve the system (McKinney et al., 2002).

## **Online Interaction**

Barnes (2000) examines online interactions in terms of affordances and opportunities for action, as well as the appropriate medium for boosting learning, and warns against their drawbacks. A communication-based framework defines the sender and receiver of three types of interactions in online education: learner-content, learner-instructor, and learner-learner (Reeves & Woo, 2007). Online contact is a new type of communication that is neither written nor spoken (Sher, 2009). Like face-to-face communication, computer-mediated communication (CMC) is a real-time interaction in which individuals negotiate meaning by modifying their input and output (Lee & Lina, 2001).

Allowances are a component of online interaction. The term "affordance" was coined by Day and Lloyd (2007) to describe how various technologies support learning by providing structures and opportunities for involvement. Lloyd (2010), for example, discussed how forums and wikis facilitate teacher-student collaboration in the generation of new information and reflective learning, because the capacity to record online exchanges allows for revisiting the experience, which encourages reflection.

A previous study demonstrated a beneficial association between online interaction and student satisfaction with e-learning. Richardson and Swan (2003) found that student satisfaction was influenced by online contact between learner and learner, learner and content, and peer interaction. They feel that emphasising the link between students and educators is vital. Weinert's (2001) research also found that whether or not students engage in meaningful engagement influences the quality of an online encounter. As a result, it is envisaged that peer interaction would influence learning results and satisfaction.

## **Student's Satisfaction**

A person's state of mind after receiving a performance or outcome that satisfies his or her expectations is referred to as "satisfaction." Satisfaction is determined by the relative degree of expectations and how performance is viewed (Ilias, Rahman & Razak, 2008). Student satisfaction with an e-learning system was described by Mokhtar et al. (2020) as "success in the prescribed assignment."

Student satisfaction plays an essential role when teachers, their course programmes, and the overall quality of educational programmes are evaluated (Fernandez et al., 2015). In the context of the e-learning system, students' satisfaction with the quality of the e-learning system is crucial. As a result, various studies have highlighted the relevance of user satisfaction in determining the success of an e-learning system (Samarasinghe, 2012). Satisfaction increases students' motivation as a key "intermediate outcome," and motivation has long been considered one of the most important psychological aspects of academic performance (Babar, Gondal, Qadri & Zaheer, 2015). Peer engagement, student-faculty connection, and a sense of academic inspiration among both the student and the student's peers all have a significant influence on student satisfaction, according to Powers and Rossman (1985). Students' perceptions of online courses can be influenced by a positive attitude and expectations about curricular goals and activities to be achieved (Fernandez et al., 2015).

## **Research Hypothesis**

The hypothesis for this research is to see if there are any significant differences between the independent variable and dependent variable:

- H<sub>1</sub>**        There is a significant relationship between information quality and students' satisfaction in using e-learning.
- H<sub>2</sub>**        There is a significant relationship between technology and system quality and students' satisfaction in using e-learning
- H<sub>3</sub>**        There is a significant relationship between online interaction and student's satisfaction in using e-learning.



## Research Framework

Figure 1 below shows the research framework used for this study

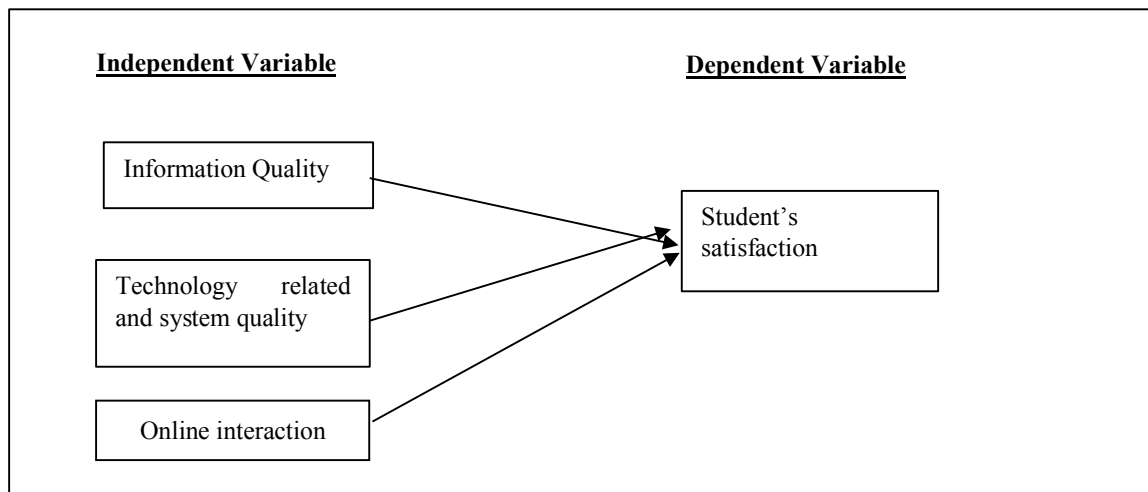


Figure 1: Research Framework

## METHODOLOGY

### Research Design

This research used a quantitative method, with questionnaires delivered to 309 students at the University Malaysia Kelantan. This research's target population comprises UMK students majoring in tourism, hospitality, and wellness practical courses. According to the Faculty of Hospitality, Tourism, and Wellness, there are 1,191 students enrolled in practical courses related to hospitality, tourism, and wellness.

This research aims at the link between information quality, technology and system quality, online interaction as independent variables, and student satisfaction with e-learning as a dependent variable. A survey questionnaire will be used to collect data for this study. Each research subject will be given a personality questionnaire. For the study, the questionnaire will be divided into five sections: A, B, and C. Section A contains demographic data about the respondent, such as gender, age, year, and registered programmes at UMK. Section B will cover the independent variables that influence the student. Meanwhile, section D will concentrate on dependent variables, such as student satisfaction with e-learning for hospitality and tourism.

### Data Collection

The data collection was conducted using questionnaires. The researcher addressed the class leader to seek for help passing the questionnaire in the WhatsApp group, which was offered through various platforms such as a WhatsApp group. The online form will be created using Google Forms. Will give the questionnaire to any hospitality, tourism, or wellness faculty member. The researcher would request assistance in disseminating to members of the same faculty or students currently enrolled in hospitality and tourism programmes at the University Malaysia Kelantan (UMK).

### Sampling

In this research, the non-probability sampling approach was applied. Non-probability sampling is a method of selecting samples dependent on the researcher's variable instead of random selection. The Snowball sampling technique was employed as a basic sample method by the researchers. Inside this research, researchers will focus on respondents who have used e-learning and are UMK students. To identify the appropriate number of study participants.

## Data Analysis

The Statistical Package for the Social Sciences (SPSS) researchers collected and analysed data from the questionnaire form distributed to the respondents. Data analysis may also be divided into descriptive statistics, reliability testing analysis, and correlation analysis.

## FINDINGS

### Result of Reliability Analysis

Table 1 below shows the result of the reliability analysis

*Table 1: Reliability Analysis*

Variable	Number of Items	Cronbach Alpha
Information Quality	5	0.805
Technology Related and System Quality	5	0.836
Online Interaction	6	0.866
Student's Satisfaction	5	0.824

The Cronbach's Alpha values for the questionnaire were very good (0.8) to excellent (0.9) in Table 4.2. (0.9). The first independent variable, information quality, was determined to be very good and dependable in terms of the degree of correlation (5 items:  $\alpha = 0.8$ ), as were the technology-related and system quality variables. The last independent variable, online interaction, was similarly determined to be very good and dependable in terms of Correlation strength (6 items:  $\alpha = 0.8$ ). The dependent variable, student satisfaction, was determined to be very good and trustworthy in terms of correlation strength (5 items:  $\alpha = 0.8$ ). The overall variables have remained with twenty-one (21) items as the current Cronbach's Alpha result is already above the excellent level. Therefore, the data were considered suitable for further analysis.

### Result of Frequency Analysis

The distribution of the respondents in terms of their background characteristics was analysed using descriptive statistics involving frequency and percentage. Table 2 shows the result of the frequency analysis:

*Table 2: Frequency Analysis*

Characteristics	Frequency	Percentage
Gender		
Male	97	31.4
Female	212	68.6
Age		
17 -19	19	6.1
20-22	111	35.9
23-25	179	57.9
Program		
Hospitality	123	39.8
Tourism	112	36.2
Wellness	74	23.9
Year		

1	41	13.3
2	48	15.5
3	178	57.6
4	42	13.6

Table 2 shows the gender distributions of of 309 respondents collected from data collection. Table 2 shows that female respondents made up 68.9 percent (n=212) of the total, while male respondents made up 31.4 percent (n=97). Because university students are more feminine than males, female respondents outnumber male respondents. The total number of responders by age was shown. Ranging in age from 17 to 19, 20 to 22, and 23 to 25 years old. According to the table, the age group with the biggest number of respondents is 23-25 years old, with 179 respondents and 57 percent. Second, responders aged 20-22 made up 111 people, accounting for 35.9 percent of the total. Finally, the lowest age group of respondents was 17-19 years old, with 19 respondents and a value of 6.1 percent.

Other than that, based on the table shows the total respondents by the program at University Malaysia Kelantan (UMK) in Faculty Hospitality, Tourism and Wellness (FHPK). According to the table, Hospitality received the most responses, with 123 people responding for 39.8 percent. Tourism came in second with 112 respondents and a 36.2 percent response rate. Then came Wellness, which had 74 responses and a value of 23.9 percent.

For the years, the table above clearly reveals that year 3 respondents accounted for the biggest number of respondents, with 178 totalling 57.6 percent. The second year had 48 responses and a value of 15.5 percent. Meanwhile, the number of respondents in year 4 is 42, with a value of 13.6 percent. Year 1 had the lowest number of respondents, with 41 people responding for a value of 13.3 percent.

### Result of Descriptive Analysis

Table 3: Descriptive Analysis

Variable	Items	Mean Score	Standard Deviation
Information quality	I agree the information provided by UMK e-learning system is useful.	4.28	0.705
	I agree the information provided by UMK e-learning system is understandable.	4.29	0.738
	I agree the information provided by UMK e-learning system is interesting.	4.25	0.784
	I agree that the information at my university online course website is relevant.	4.27	0.745
	I believe the online course website at my university is always willing to help students get information.	4.23	0.824
Technology related and system quality	I believe the e-learning system provided by UMK has an attractive appearance.	4.19	0.843
	I agree that the e-learning system provided by UMK has a stability.	4.17	0.853
	I agree that the e-learning system provided by UMK is easy to access.	4.09	0.847
	I believe the e-learning system provided by UMK is easy to find the content of user needed.	4.18	0.849

	I agree that the e-learning system provided by UMK is up to date.	4.23	0.798
Online interaction	I agree that my instructor responded promptly when students ask questions.	4.33	0.785
	I believe that I contributed to the learning environment by responding to my peers.	4.29	0.743
	I agree that my instructor encourages students to ask questions.	4.40	0.717
	I agree my instructor provided me feedback on my work through comments.	4.29	0.742
	I believe that I regularly communicated with my instructor of the course.	4.12	0.840
	I agree that increased contact with fellow students helped me more out of this course.	4.39	0.734
Student's satisfaction	I believe using an online learning service can help me learn more effectively.	4.30	0.758
	I believe online learning in our faculty is better than another faculty.	4.16	0.818
	I am generally satisfied with the online class arrangement.	4.21	0.818
	I am satisfied with the faculty members' alternative assessment plans.	4.23	0.792
	I agree that online learning service have a beneficial for me.	4.33	0.747

Table 3 shows the mean and standard deviation of information quality, which could determine students' satisfaction with e-learning. The respondents agreed (mean= 4.23, standard deviation= 0.824) that students believe the online course website at their university is always willing to help students get information. Meanwhile, the respondents also agreed (mean= 4.29, standard deviation= 0.738) that the information provided by the UMK e-learning system is understandable.

Regarding technology-related and system quality, the respondents agreed (mean= 4.09, standard deviation= 0.847) that the e-learning system provided by UMK is easy to access. While the respondents agreed (mean= 4.23, standard deviation= 0.798) that the e-learning system provided by UMK is up to date.

The lowest mean that respondents agree that they regularly communicated with their instructor of the course (mean= 4.12, standard deviation= 0.840). Meanwhile, the highest mean that the respondents totally agree is that their instructor encourages students to ask questions (mean= 4.40, standard deviation= 0.717). Other than that, online interaction might be the factor influencing student's satisfaction in using e-learning.

After that, as for the student's satisfaction as a dependent variable that influences respondents in using e-learning for hospitality and tourism practical-based courses, the respondents agreed (mean= 4.16, standard deviation= 0.818) that online learning in their faculty is better than other faculty. Meanwhile, the respondents agreed (mean= 4.33, standard deviation= 0.747) that online learning services are beneficial for them.

### **Result of Pearson Correlation Analysis**

Table 4 below shows the Pearson Correlation Analysis

Table 4: Pearson Correlation Analysis

Hypothesis		Correlation Coefficient (r) + Strength	P-value	Result (Supported/Not Supported)
H <sup>1</sup> : There is a significant relationship between information quality and students' satisfaction in using e-learning.	Information Quality ▼ Student's Satisfaction	0.749 + High Positive	< 0.01	H <sub>1</sub> is supported
H <sup>2</sup> : There is a significant relationship between technology and system quality and students' satisfaction in using e-learning.	System Quality ▼ Student's Satisfaction	0.717 + High Positive	< 0.01	H <sub>2</sub> is supported
H <sup>3</sup> : There is a significant relationship between online interaction and student's satisfaction in using e-learning.	Online Interaction ▼ Student's Satisfaction	0.786 + High Positive	< 0.01	H <sub>3</sub> is supported

The Pearson correlation coefficient and significant value are shown in Table 4. For each variable, the p-value was less than a significant level of 0.0. 309 respondents who have utilised e-learning for hospitality and tourism practical-based courses found a significant relationship between student satisfaction and information quality. The independent variable is information quality, while the dependent variable is student satisfaction. The correlation coefficient is 0.749, indicating that the dependent variable and the interpretation of information quality have a high positive correlation in Table 4.4.

Meanwhile, the relationship between student satisfaction and technology-related and system quality among 309 respondents who participated in the questionnaire has shown the result correlation of that indicates 0.717 and online interaction shows the result correlation of that indicates 0.786. In that case, the technology-related variable and system quality and online interaction also showed the same result as information quality, where the interpretation of it has a high positive correlation between the student's satisfaction. The index of both values shows information quality and system quality at between 0.70 and 0.90 significant levels.

Therefore, based on the results, all hypothesis is supported and became a factor in students' satisfaction with using e-learning.

#### DISCUSSION AND RECOMMENDATION

The research study's objective is to examine the relationship between information quality, technology related and system quality and online interaction towards student's satisfaction in using e-learning among student Faculty of Hospitality, Tourism and Wellness, Universiti Malaysia Kelantan. The data result shows a significant relationship between the independent variables and the dependent variable. Similarly, an earlier study has discovered a link between information quality, system quality, online interaction and student satisfaction. In addition, online interaction has the strongest correlation compared to information quality and system

quality based on the Pearson Correlation values, followed by information quality and system quality represented by the correlation ( $0.786 > 0.749 > 0.717$ ).

Based on the study's findings, the current study would provide several recommendations for future research to include new variables that have a more significant influence or lead to the student's satisfaction in using e-learning. Future research should aim to broaden the scope of the study to include more fields and levels. Researchers should consider how perceived interaction quality influences output variables such as access, teacher satisfaction, student learning, and cost-effectiveness. It will be fascinating to learn more about how learning process variables affect faculty satisfaction.

Furthermore, students' social skills, such as communication, reasoning, and practical abilities, will be diversified through interactive learning activities during the online learning process. As a result, professors should play a role in offering online learning that includes activities that can improve students' knowledge and excite and develop crucial social skills.

## CONCLUSION

In conclusion, this study has discovered the factors influencing students' satisfaction in using e-learning for practical courses in hospitality and tourism. Four independent variables, information quality, technology-related and system quality and online interaction, have been chosen to examine their relationships with the dependent variable, which is the students' satisfaction in using e-learning for hospitality and tourism practical-based courses. A total of 309 respondents aged 17 years old and above were selected from UMK students who majored in tourism, hospitality and wellness practice based courses. Overall, online interaction has the strongest correlation compared to information quality and system quality based on the Pearson Correlation values, followed by information quality and system quality represented by the correlation ( $0.786 > 0.749 > 0.717$ ).

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