

Online Learning Readiness, Motivation, and Satisfaction Among Students Towards the SKU10142 Food Safety and Sanitation Course

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Abstract

The COVID-19 pandemic that hit the world at the end of 2019 has had a major impact on society, including various fields such as the economy, health, and tourism, as well as the education sector. As a result, teaching methods had to be changed from face-to-face classes to online learning. Culinary Certificate students at Kolej Komuniti Kuantan were also affected by this change. Based on this situation, the researcher conducted a study of online learning readiness, motivation, and satisfaction among students' attitudes toward the SKU10142 *Food Safety and Sanitation Course*. A total of 57 respondents among 1st-semester students were involved in this quantitative study. The questionnaire that was used included four parts of questions, which are respondent demographics, online learning readiness, motivation, and satisfaction among students towards the SKU10142 *Food Safety and Sanitation Course*. The results of the study found that the level of readiness, motivation, and satisfaction of students towards online learning is moderate. However, the correlation between readiness and motivation for online learning is significant and very strong. While student satisfaction is significant and strong, an important contribution to the findings of this study is that it can improve the effectiveness of online learning and the understanding of the difficulties faced by students. This study is also important to help institutions and lecturers improve learning methods that align with the passage of time.

Keywords: Readiness; Motivation; Satisfaction; Online Learning

1.0 Introduction

Following the nationwide implementation of the Movement Control Order (MCO) in Malaysia due to the pandemic starting from MCO 1.0 in March 2020 through MCO 3.0 in June 2021, Culinary Certificate students at Kolej Komuniti Kuantan were significantly impacted, disrupting their face-to-face learning processes. This global health crisis affected the education sector and had profound implications for the tourism and hospitality industries, where these students are trained. Courses within the Hospitality Unit at the college predominantly rely on theoretical instruction, although technical courses also involve practical elements that are challenging to replicate online. This sudden shift necessitated lecturers and students to quickly adapt to the unfamiliar realm of online teaching and learning, presenting numerous challenges and difficulties.

In the context of the SKU10142 Food Safety and Sanitation course, which is essential for culinary education, the transition to online learning encountered substantial hurdles. These included time constraints, the urgent need for

high-quality instructional materials, and technical issues related to online platforms. Both lecturers and students faced additional challenges such as limited internet access, inadequate computer equipment, constrained learning environments, and varying proficiency levels with digital tools. Despite efforts by the academic management to facilitate a smooth transition, there remained a pressing need to assess students' readiness, motivation, and satisfaction with online learning, particularly within the Culinary Certificate program. This study, influenced by the work of Chew Fong Peng and Zahwah Jamaludin (2022), seeks to provide a comprehensive understanding of students' online learning experiences in this specific course.

The study's objectives encompass evaluating the readiness, motivation, and satisfaction of first-semester students enrolled in the SKU10142 Food Safety and Sanitation course regarding online learning. Additionally, it aims to explore the correlations between these factors, examining how preparedness and satisfaction impact student motivation within the framework of online education.

2.0 Literature Review

Online learning or e-learning refers to an approach to teaching and learning that utilizes information technology to enhance the quality of education. E-learning applications not only simplify the teaching and learning process but also increase students' interest in learning. In this technological era, students are required to obtain teaching materials in advance before the lecture starts rather than waiting for the lecturer to provide them with something (Nor Hidayati, 2020). This process allows students to independently access the materials through videos or multimedia recordings, providing both lecturers and students with flexibility in terms of time. The advantages of e-learning include easy access from anywhere with internet connectivity, which is particularly beneficial for introverted students. In this era of advancing technology, students are encouraged to acquire teaching materials before lectures and utilize e-learning to foster critical and creative thinking (Munirah Salleh, et al., 2021).

Various surveys have been conducted to assess students' readiness for online learning, and the results are varied. According to Shaharina et al. (2021), UNITEN students showed high motivation to use e-learning, with the self-efficacy factor being the main driver of their readiness.

The correlation between student readiness and emotional intelligence is also supported by Engin's study (2017). Although the COVID-19 pandemic caused the majority of learning to switch to online learning, a survey by Surani & Hamidah (2020) showed that the majority of Indonesian students actively participate in online learning with high enthusiasm. However, the study from Rosmilawati et al. (2020) showed that students from Kolej Komuniti Perak were less prepared for online learning during the COVID-19 pandemic. Readiness to the new norm of online learning among semester 3 and 4 students at the Department of Information & Communication Technology, Politeknik Sultan Mizan Zainal Abidin, is at a moderate level (Nor Aidawati &

Mazidah, 2021).

Many factors encourage students to study online and one factor that drives students to study a subject is the role of the teacher. This proves that instructors play an important role in keeping students motivated during face-to-face or online learning sessions. The study also found that students who are highly motivated and have a strong desire will continue to be interested in everything they learn. According to Dhawan (2020), online learning methods are highly dependent on technology, student attitude, student motivation to follow it as well as too much flexible time until students fail to follow it. Therefore, high motivation is very important to ensure that online learning has a positive impact on students. This is supported by the results of a study by Irma, Ugartini Magesvaran, and Intan Nur Syuhada (2021) who found that respondents among primary school students have a high motivation to follow online learning for Malay subjects during MCO. Likewise, the studies by Siti Nurbaizura and Nurfaradilla (2020) and Aida Shuhaida and Rohizani (2020) found that the role of teachers in online learning can increase students' interest and motivation to participate in teaching and learning sessions during the MCO period. According to Azmira and Siti Mariam (2023), they have found that motivation and encouragement in terms of promoting attendance and engaging respondents in discussions during online learning sessions by lecturers is beneficial. The role of the lecturer is very crucial in ensuring that teaching and learning are conducted effectively, without any loss of information for the students.

Whether it is face-to-face or online, learning satisfaction is important to ensure students stay motivated and engaged in their learning sessions. Online learning requires the involvement of both parties, which are students and lecturers themselves (Arwansyah et al., 2022). This is because if there are students who do not cooperate well, learning will not be able to run smoothly and efficiently. Hence, lecturers should plan their teaching and learning methods using the best applications to ensure students are engaged and motivated to gain knowledge. Chin et al. (2017) found that learning satisfaction describes the structure of students' attitudes and measures the affective aspects in which students are satisfied with a positive learning experience towards online learning.

Based on the problem statement mentioned above, this study was conducted to obtain findings among culinary students who took the Food Safety and Sanitation course. There are no more studies conducted specifically for this course and the findings may differ between this study and previous studies.

3.0 Methodology

3.1 Research Design

This survey was conducted to determine the level of readiness, motivation, and satisfaction of students with online learning for the Food Safety and Sanitation course. The design of this study is a guide to ensuring that the objectives and questions of the study are achieved. The research carried out was in the form of a quantitative study, and the method chosen was a survey.

The question of the survey is to answer the question of a constructed study. The researchers used the SPSS statistical system to analyze the information provided by the respondents.

3.2 Population

The sample of the study consists of 1st-semester students of the Culinary Certificate for the SKU10142 *Food Safety and Sanitation* course at Kolej Komuniti Kuantan, with a total of 60 randomly selected respondents. This number aligns with Krejcie and Morgan's (1970) recommendation, which states that a population of 60 people requires 52 respondents. However, the study included all 1st-semester students from three classes as respondents resulting in a total of 60 respondents. Unfortunately, only 57 respondents completed the survey.

3.3 Research Instruments

Survey questions with closed-ended questions are used as research instruments. It consists of four sections, namely sections A, B, C, and D, intending to obtain respondent demographic data, student readiness, student motivation, and student satisfaction in online learning about Food Safety and Sanitation. This study uses surveys taken from the study of Chew Fong Peng and Zahwah Jamaludin (2022). This item has been tailored to the Food Safety and Sanitation course and uses a 5 Likert scale. Section A reviews respondent demographics and includes information such as class, session, gender, race, the device used when following online Food Safety and Sanitation lessons, major networks accessing the internet, and location during the learning session. Part B is the readiness of students to learn Food Safety and Sanitation online and there are 8 items in this section. While Part C is about student motivation in online learning, Food Safety and Sanitation involves 7 items. The final part is part D of eight questions to be answered by students regarding student satisfaction with online learning about Food Safety and Sanitation. The following are the items used in the questionnaire contained in Parts B to D. A pilot study was carried out and item reliability analysis using Cronbach Alpha obtained a high value between 0.872 to 0.941 (Chua Yan Piaw, 2014).

3.4 Data Analysis

The study used descriptive analysis to obtain data for the three variables studied. Through descriptive statistics, data such as frequency, percentage, min score, and default fractions will be obtained for subsequent action. Instead of analyzing the findings of the study's objectives and the fourth study question, namely the relationship between the readiness, motivation, and satisfaction of students of semester 1 to learning the online Food Safety and Sanitation (SKU10142) course, the researchers used the Pearson Correlation Coefficient. This Pearson Correlation Coefficient will show the relationship between the three variables. Through that finding will also prove whether it will support or not the null hypothesis in this study. According to Pallant (2005), the correlation level is measured with several indicators, adjusted to the data properties. For this study, the correlation between variables is

determined using the Pearson Correlation Coefficient. The analysis used in this study is descriptive analysis to obtain the mean score value for the level determinant starting from 1.00 - 2.33 (Low), 2.34 - 3.66 (Moderate), and 3.67 - 5.00 (High) (Riduwan, 2012); and correlation analysis to determine the relationship between variables (Pallant, 2005).

4.0 Result

In this study, descriptive statistics are used to describe variables using the min and standard deviations referred from Riduwan (2012) as interpreted as in Table 1.

Table 1: Average Score and Mean Score Interpretation

Mean Score	Interpretation
1.00 – 2.33	Low
2.34 – 3.66	Moderate
3.67 – 5.00	High

The respondents' background is shown in Table 2, where a total of 57 respondents have provided feedback on the survey questions. It was found that there were more respondents among female students (37 people, 64.9%) than male students (20 people, 35.1%). While for the Intake Session, a total of 16 people (28.1%) were from the Dec 2020 Session, 31 people (54.4%) were from Session I 2021/2022 and 10 people (17.5%) were from Session II 2021/2022. The results of this study also show that the main learning communication platform is via Google Meet. This communication platform is chosen based on students' suitability because it is easier for them to interact with the lecturer more clearly than non-verbal interaction on a platform such as Telegram.

Table 2: Respondent Demographic

Respondent Profile (n=57)	Category	Frequency	Percentage (%)
Intake session	December session 2020	16	28.1
	Session I 2021/2022	31	54.4
	Session II 2021/2022	10	17.5
Gender	Male	20	35.1
	Female	37	64.9
The main device used	Desktop computer (PC)	1	1.8
	Laptop	25	43.9
	Mobile phone/Smartphone	31	54.4
	Tablet	0	0
Main network to access the internet	Wifi	20	35.1
	Mobile data	37	64.9
Communication platform	Google Meet	28	49.1
	Google Classroom	8	14.0
	Telegram	21	36.8
	Whatsapp	0	0
	Others	0	0

Location during the learning session	Own house	35	61.4
	Rent house	6	10.5
	Hostel	15	26.3
	Staying at a relative house	1	1.8
	Others	0	0

The result for each objective is as shown in Table 3 (Objective 1) and Table 4 (Objective 2).

Table 3: The Level of Online Learning Readiness, Motivation, and Satisfaction among Students' towards the SKU10142 *Food Safety and Sanitation Course*

Variable	Item	Mean	Standard deviation
Online Learning Readiness Among Students Towards the SKU10142 Food Safety and Sanitation Course	Have a device that is suitable for learning.	3.98 ¹	0.83
	Use the suitable device	3.70 ¹	1.21
	Have ICT skills.	3.67 ¹	0.95
	Using personal funds to subscribe to the internet for educational purposes.	3.77 ¹	0.96
	Prepare to choose an online learning method instead of face-to-face.	3.12 ²	1.14
	Prepare to answer and respond to the lecturer's questions in class.	3.30 ²	1.15
	Conduct self-study before attending online classes.	3.68 ¹	0.97
	Willing to participate in group work interactions.	3.51 ²	1.04
	Overall Mean	3.59 ²	1.03
Online Learning Motivation Among Students Towards the SKU10142 Food Safety and Sanitation Course	Get encouragement from parents to study online.	3.81 ¹	0.88
	Enjoy using online learning devices and platforms	3.81 ¹	0.93
	Higher self-confidence when learning online than face-to-face.	3.16 ²	1.10
	More motivated to learn online than face-to-face	3.14 ²	1.06
	Motivated to answer and respond to lecturers' questions	3.23 ²	1.05
	Online learning activities can attract my interest and increase my motivation towards this course.	3.60 ²	1.02
	Always engage in self-reflection after a learning session	3.75 ¹	0.89
	Overall Mean	3.50 ²	1.03

Online Learning Satisfaction Among Students Towards the SKU10142 Food Safety and Sanitation Course	More comfortable online than face-to-face.	2.96 ²	1.02
	Online learning techniques provide more advantages than face-to-face learning techniques.	2.95 ²	1.06
	Learning online is more interesting and enjoyable than learning in a classroom.	3.04 ²	1.00
	Can answer questions better online than face-to-face.	3.25 ²	0.97
	Always be able to refer back to the lecturer if I face any problems or confusion.	3.82 ¹	1.04
	Online activities and assessments are effective and can improve understanding of the course.	3.81 ¹	1.03
	Satisfied with online learning.	3.46 ²	0.98
	Be satisfied with the accuracy, suitability and quality of online learning.	3.58 ²	0.96
	Overall Mean	3.35 ²	1.00

Notes: ¹High; ²Moderate

The result of the first objective is shown in Table 3. Based on the result in Table 3, online learning readiness among students towards SKU10142 *Food Safety and Sanitation* Course shows an average level which is moderate (M=3.59) while the level of student motivation towards learning this course is also moderate (M=3.50). The overall analysis results of online learning satisfaction among students towards SKU10142 *Food Safety and Sanitation* Course is also at a moderate level (Mean = 3.35).

Table 4: Correlation between online learning readiness, motivation, and satisfaction among students towards SKU10142 *Food Safety and Sanitation* Course

Online Learning for SKU10142 Food and Sanitation Course				
Readiness	Pearson correlation	.941**	-	-
	Sig. (2-tailed)	<.001	-	-
Motivation	Pearson correlation	-	.918**	-
	Sig. (2-tailed)	-	<.001	-
Satisfaction	Pearson correlation	-	-	.906**
	Sig. (2-tailed)	-	-	<.001

**p <0.01 (2 tailed)

Meanwhile, to explain the result of the second objective, Table 3 shows a significant and very strong relationship between online learning readiness

among students towards SKU10142 *Food Safety and Sanitation* Course at $r = .941$, $p < 0.01$.

While the correlation between student motivation towards learning the course is $r = .918$, $p < 0.01$ where the analysis results show that motivation has a very strong positive relationship with online learning. The relationship between online learning satisfaction among students towards SKU10142 *Food Safety and Sanitation* Course shows a strong relationship at $r = .906$, $p < 0.01$. Based on the results of the correlation analysis, the results show that the three variables have a significant relationship and the strength of the relationship is between strong and very strong towards the learning of SKU10142 *Food Safety and Sanitation* course.

5.0 Discussion

The findings of this study show that Culinary Certificate students at Kolej Komuniti Kuantan have a moderate level of readiness to learn the SKU10142 Food Safety and Sanitation course through an online class, with an average score ($M=3.59$, $SD=1.03$). This finding is aligned with previous studies by Chew Fong Peng & Zahwah Jamaludin (2022), Rosmilawati, et al. (2020), and Kaviza (2020) who also recorded a moderate level of online learning readiness. Item analysis shows that respondents have a suitable device to join online learning ($M=3.98$, $SP=0.83$), but are lower in readiness to choose online learning than face-to-face learning ($M=3.12$, $SD=1.14$). Overall, student readiness is considered satisfactory with a mean score ($M=3.59$) and standard deviation ($SD=1.03$). This conclusion is aligned with the views of Chew Fong Peng and Zahwah Jamaludin (2022) who stated that, although students are willing to learn online, they still consider face-to-face meetings to be equally important. Furthermore, this study supports the conclusion of Atousa et al. (2016) who emphasized the importance of gaining knowledge about the online learning concept and understanding the strengths and weaknesses of this learning method.

The results of online learning satisfaction among students towards the SKU10142 Food Safety and Sanitation Course show an interesting comparison to previous studies from Islamic Education teachers and other students. Although the study from Islamic Education teachers shows a high level of motivation ($M=4.00$, $SP=0.54$), this finding is different from the study of Ali et al. (2022) who found that the level of student motivation is low (mean score 2.18). In this study, the online learning motivation among students towards the SKU10142 *Food Safety and Sanitation* Course is considered satisfactory ($M=3.50$, $SP=1.03$), aligned with the findings of Chew Fong Peng & Zahwah Jamaludin (2022) regarding KOMSAS learning. Item analysis shows that respondents tend to be motivated by encouragement from parents ($M=3.81$) and a preference to use online learning devices and platforms ($M=3.81$). However, the item "more motivated to learn *Food Safety and Sanitation* course online than face-to-face" obtained the lowest mean score ($M=3.14$, $SD=1.06$), indicating that students are more motivated in face-to-face. In conclusion, despite the motivation for online learning, students'

preference remains for face-to-face learning. In the context of Generation Z who are skilled in technology, the convenience of using online learning methods can increase their motivation and interest, in line with Faridah and Afham Zulhusni's study (2019).

The analysis of student satisfaction with learning SKU10142 Food Safety and Sanitation online shows a moderate level of satisfaction ($M=3.35$, $SD=1.00$). This finding is consistent with the study of Chew Fong Peng & Zahwah Jamaludin (2022), in which the item "always be able to refer back to the lecturer if I have problems or confusion" reached the highest mean score ($M=3.82$, $SD=1.04$). This shows the important role of lecturers as a reference to overcome online learning problems. Mahaliza & Mansor (2021) also emphasized that teachers play a major role in solving students' learning problems during online classes. The study of Ismail et al. (2021) also showed that students can accept and feel satisfied with online learning sessions held by lecturers. This finding is aligned with the results of a study by Juwariah and Roslinda (2021), who stated that online learning has a positive impact on students. However, the item that assesses "Food Safety and Sanitation online learning techniques provide advantages over face-to-face learning techniques" received the lowest mean score ($M=2.95$, $SD=1.06$). This shows that students tend to be more interested in face-to-face learning techniques than online learning. This finding is consistent with the study by Mohd Fairuz et al. (2020) which stated that students could not adapt to the new norm, and prefer face-to-face learning. This opinion is in line with the findings of Mishra (2020), who showed a negative reaction of students to online learning, due to limited social interaction and the speed of the teacher's teaching during online classes.

The results show that there is a significant and high positive relationship between online learning satisfaction among students towards the SKU10142 Food Safety and Sanitation Course. Pearson's correlation showed high values for Readiness ($r = .941$, $p<0.01$), Motivation ($r = .918$, $p<0.01$), and Satisfaction ($r = .906$, $p<0.01$), indicating that 1st-semester students who take this course online have a high level of readiness, high motivation, and good satisfaction. Despite facing challenges and restrictions during the COVID-19 pandemic, students still show positive attitudes towards online learning. This finding is in line with the study of Chew Fong Peng & Zahwah Jamaludin (2022), where willingness, motivation, and having a significant relationship with online learning, although the order was different. Although their study showed motivation as the highest correlation variable, this study emphasized readiness as the most influential factor, followed by motivation and satisfaction. However, the conclusion of this study is consistent with the study by Nur Syarafina et al. (2020) which showed a significant relationship between technology tools, motivation, and students' awareness of digital learning.

6.0 Conclusion

The importance of lecturers cannot be disputed when it comes to motivation as well as increasing students' readiness to engage in online classes

effectively. Students need to be well prepared for online learning not only as a response to emergencies but as part of their learning experience, given the advances in technology in today's era. Although some studies show that student satisfaction with online learning is only moderate, different results show a high level of satisfaction, especially in the mathematics subject (Juwairiah & Roslinda, 2021). Rosmani Ali et al. (2021) found that students expressed high levels of satisfaction with interactions, activities, and teaching materials used in online classes. Regardless of the varying levels of satisfaction reported in this study, educators and students play an important role in ensuring the successful implementation of online teaching and learning.

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Author Contributions

Marhaini, M.: Conceptualisation, Methodology, Software, Data Curation, Validation, Writing Draft Preparation; **Tajul Azmi, A.G.:** Conceptualisation, Data Curation, Validation, Supervision; **Sarimah, I.:** Validation, Writing-Reviewing and Editing

Conflicts of Interest

The authors acknowledge that there were no conflicts of interest that could affect the integrity of this study. This research is conducted with sincerity and objectivity to ensure its effectiveness as a useful source of information regarding students' readiness, motivations, and satisfaction towards online learning.

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