

STUDENTS BEHAVIOURAL INTENTION TO USE ONLINE CONSULTATION SYSTEM: THE CASE OF STUDLEC MEET SYSTEM

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Abstract: The effect of COVID-19 causes a lot of stress to the communities, especially to the education industry. Educators and students were forced to embark into the unknown territory through open distance learning (ODL) initiative. Lack of Internet facilities, poor infrastructure, slow devices, and abundance of works cause a lot of stress to the students, especially to those that reside in the rural area. Therefore, StudLec Management System was developed based on rapid application of development methodology. However, there is no subsequent research being conducted to investigate user behavioural intention to use the online consultation management system. Therefore, a quantitative research methodology was adopted to identify the level of user behavioural intention in using online consultation management system. Data were analysed based on descriptive statistics. Findings show that the development of StudLec can help students to manage their time, have proper consultation with their lecturers, as well as reduce stressful conditions resulting from the pandemic.

Keywords: Consultation management, information system development, rapid application development

1. Introduction

The novel Coronavirus 2019 or the codename known as COVID-19 has caused stress among communities. The vast spread of the deadly disease has led to the loss of many lives. Johns Hopkins University & Medicine (2020, November 10) reported a global death of 1.2 million lives, most of them were contributed by the United States of America with a total of 238,053. In Malaysia, a total of 294 lives were lost in the battle against this deadly disease. The sudden uprising of the pandemic has caused the government of Malaysia through the Ministry of Education to declare a sudden halt to the 2020 school session. In a similar move months ago, Ministry of Higher Education also suspended the registration of higher learning students days before the actual registration date, causing an uproar among students and their families (Zanariah Abd Mutalib, 2020). The suspension of face-to-face education has caused a lot of difficulties among students, especially those in the rural areas.

One of the problems identified from the collapse of the face-to-face interaction is consultation issues with the lecturer. Since the student and lecturer are miles apart, it is very difficult for the student to have a quality consultation with their lecturer. On the other hand, lecturers are occupied with a lot of tasks in relation to the online education, as most of them are very much used to the conventional face-to-face teaching and learning process.

Therefore, we have developed an information system to manage the consultation between the students and lecturers, known as StudLec Meet System (SMS). SMS is an application developed specifically for institutions of higher education. This system allows students to make an appointment with their lecturers easily. SMS can also help to avoid a redundant appointment with other students at one time. Students can access this system from any computer or mobile phone which is connected to the Internet to book an appointment with the lecturer. To use this system, both students and lecturers are asked to register their accounts and then a student can select which lecturer he or she wants to have a consultation with. Through this initiative, lecturers can share their schedule through the application and students can pick the best time out of the shared schedule to book a session. The application will also send a notification to lecturers and students whenever appointments are set or cancelled. This method is more convenient than personally texting the lecturers as it will separate academic appointments from personal messages.

However, since the system is still in the prototype phase, there is a need to investigate user behavioural intention to use the information section in its implementation. Therefore, the objective of this paper is twofold: first, to investigate user behavioural intention in using SMS, and second, to analyse the level of user behavioural intention in using SMS descriptively.

The subsequent sections are organized as follow: first, the literature on similar information system is discussed. Then, the methodology of the system is proposed, followed by the findings of the study. Next, the discussion and potential future study are proposed.

2. Literature Review

Nowadays, communities are seeking the extensive use of a computerized system. The purpose of shifting towards IT utilization is to reduce the human workload and at the same time to allow fewer staff or employees to run multiple processes in an organization. An organization may need only one worker for each system. Thus, some organizations have developed online scheduling systems to make arrangement for meetings and appointments easier. An appointment is a particular time scheduled for something such as a business deal, doctor visit and works much like a reservation. Various aspects of appointment processes, such as confirmations, reservations and cancellations are controlled automatically (Ridwan et al., 2016).

Consulting lecturers is important to students. It is easy to meet and set appointments when the lecturers are physically present. However, lecturers are engaged in various activities such as attending meetings, handling and conducting classes, tutorials and many more. In practice, if the lecturers are not available, students would just leave a note on the notice board placed outside the lecturers' rooms or send a message requesting for an appointment. However, the lecturers tend to miss the notes or the message as it got mixed with another message on their phone. According to Mohd Helmy et al. (2010), a series of survey involving 50 university students found that 80 percent of the appointment notes had not been answered and that they had not met their lecturers. This needs urgent attention. Therefore, with an online appointment system, it would help arrange and organize appointments better. Both students and lecturers would easily be alert with the booked appointment sessions as the system will notify and separate the bookings from other non-related messages.

With regard to time, Liliana (2014) found that students often will message, call or go directly to the lecturer's room for clarification. However, the lecturer frequently takes an extended amount of time to respond to students' calls or SMS (Short Messaging System). Lecturers are normally busy or constantly unavailable and waiting for their responses is considered time-consuming by some students. In addition, the students also need to have the lecturer's phone number saved first if they want to message or call him or her. With the introduction of online appointment system, these hiccups can be much lessened and communication between both parties can immensely be improved.

The development of online appointment system is timely as it is designed with high flexibility and ease of use. It is introduced specifically for higher education institutions to manage appointments

between students and lecturers more effectively. The system is generally designed to avoid replicated or clashed appointment slots between different and multiple users.

3. Methodology

This study adopted a quantitative research methodology based on previous instruments. The instrument was finalized; then a pilot test of 100 respondents was performed to determine the reliability of the instrument. The data were collected among undergraduates due to easy access to the sampling frame. A total of 270 responses were received. Data were coded and analysed using the Statistical Package for Social Sciences (SPSS) version 24. The following section will discuss the finding accordingly.

4. Findings and Discussion

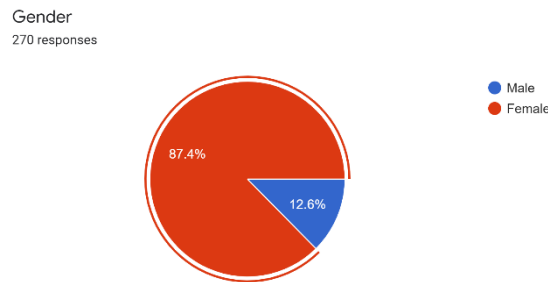


Figure 1: Gender

A total of 270 respondents were involved in the study. From the overall respondents, female respondents represented a total of 87.4% or N=236, while male respondents represented a total of 12.6% or N=34.

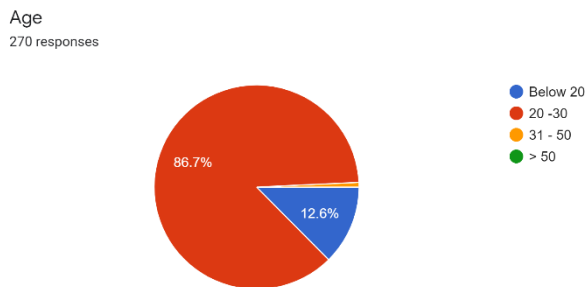


Figure 2: Age

Most respondents aged between 20-30 which equalled to 86.7% or N=234, below 20 constituted 12.6% or N=34 and those aged between 31-50 constituted 0.7% or N=2.

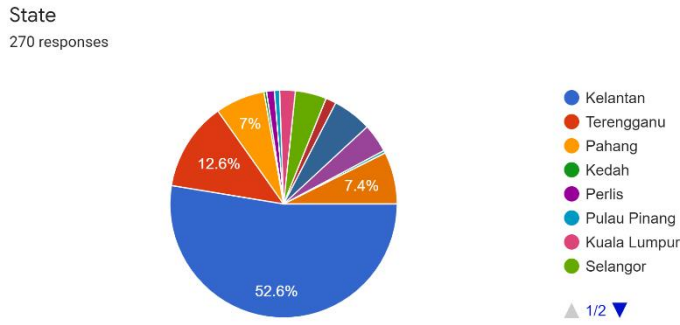


Figure 3: State

The above chart indicates that most respondents were from Kelantan with the percentage of 52.6% or N=142, followed by those from Terengganu with a total percentage of 12.6% or N=34.

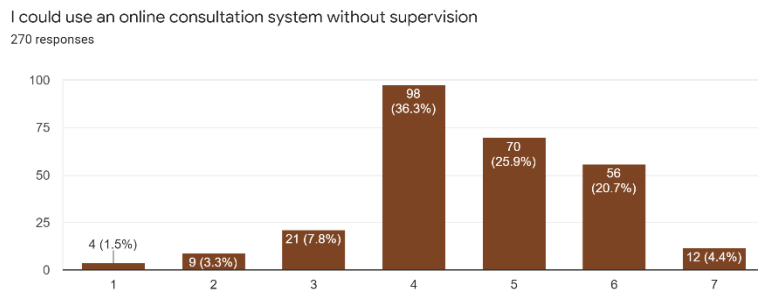


Figure 4: Respondents' Response – Self Efficacy 1 (SE1)

Out of 270 respondents, the majority chose 'neutral' with reference to the ability to use the online consultation without supervision (equals to 36.3% or N=98), while the second majority which represented 25.9% or N=70 responded 'sometimes agreed' and the third majority which equalled to 20.7% or N=56 selected 'agreed'.

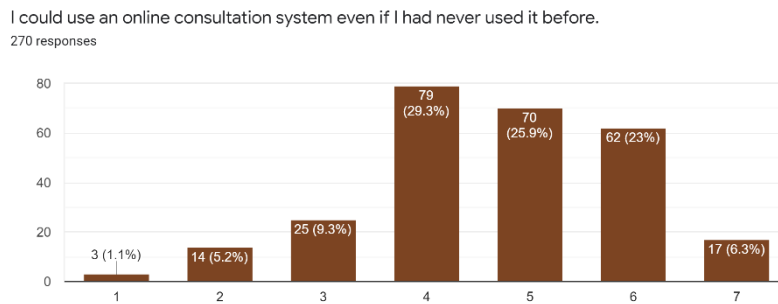


Figure 5: Respondents' Response – Self Efficacy 2 (SE2)

When asked whether the respondents could use an online consultation system with no experience, these are the highest feedback received from the respondents: 'neutral' (29.3% or N=79); 'sometimes agreed' (25.9% or N=70) and 'agreed' (23% or N=62).

I could use an online consultation system even if I only had the software manuals for reference.
270 responses

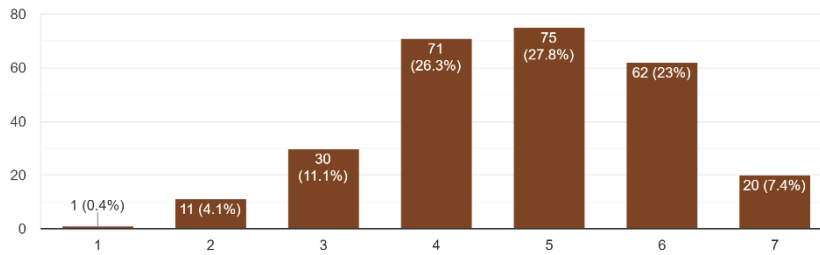


Figure 6: Respondents' Response – Self Efficacy 3 (SE3)

Based on the above figure, 27.8% or N=75 of the respondents 'sometimes agreed' that they can use the system by referring to the software manuals only, followed by those who responded 'neutral' (26.3% or N=71) and 'agreed' (23% or N=62).

I could use an online consultation system if I had seen someone else using it before trying it myself.
270 responses

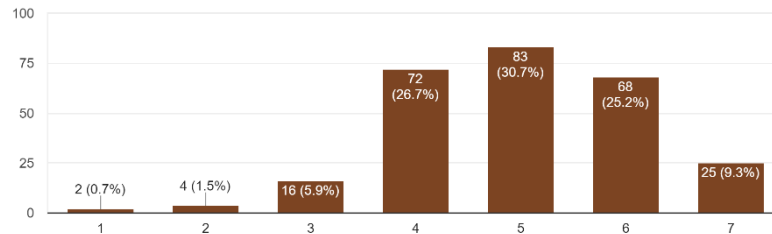


Figure 7: Respondents' Response – Self Efficacy 4 (SE4)

Most respondents claimed that they 'sometimes agreed' (30.7% or N=83) that they could use an online consultation system if they had seen someone else using it before giving it a try themselves. The second highest response was 'neutral' with 26.7% or N=72 while a total of 25.2% or N=68 chose 'agreed' as the response.

I could use an online consultation system if someone showed me how to do it first.
270 responses

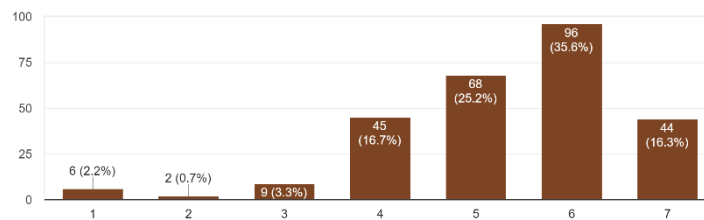


Figure 8: Respondents' Response – Self Efficacy 5 (SE5)

Most respondents 'agreed' that they could use an online consultation system if someone showed them how to do it first (35.6% or N=96). This is followed by 25.2% or N=68 of the respondents who responded 'sometimes agreed' and 16.7% or N=45 who answered 'neutral'.

Using an online consultation system gives me greater control over my work.
270 responses

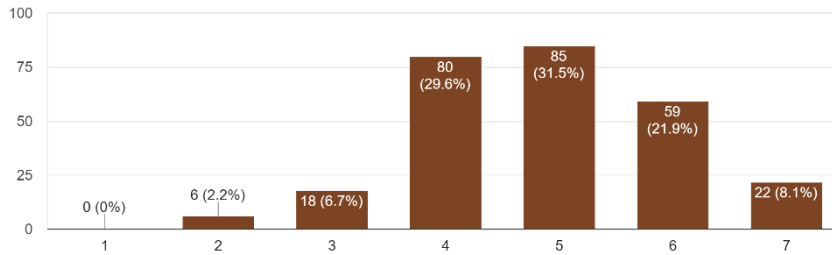


Figure 9: Respondents’ Response – Perceived Usefulness 1 (PU1)

With regard to using an online consultation system gives users greater control over their work, the highest feedback or 31.5% or N=85 was ‘sometimes agreed’, 29.6% or N=80 were ‘neutral’ and 1.9% or N=59 chose ‘agreed’.

Using an online consultation system improves my job performance.
270 responses

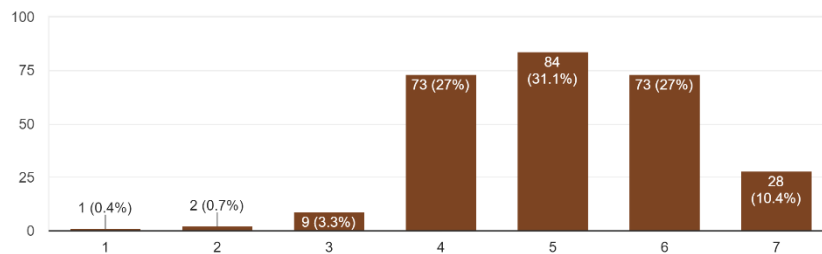


Figure 10: Respondents’ Response – Perceived Usefulness 2 (PU2)

The highest response for the use of an online consultation system can improve their job performance is ‘sometimes agreed’ (31.1% or N=84); while ‘neutral’ and ‘agreed’ shared the same percentage of response which was 27% or N=73.

Using an online consultation system enables me to accomplish tasks more quickly.
270 responses

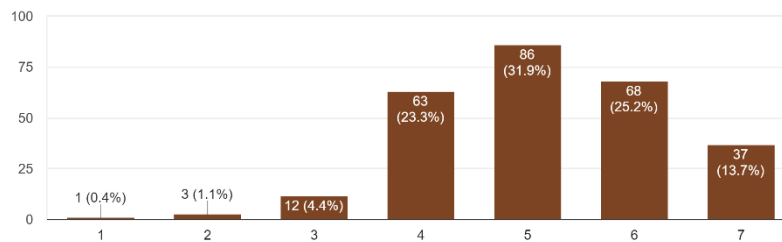


Figure 11: Respondents’ Response – Perceived Usefulness 3 (PU3)

A total of 31.9% or N=86 respondents answered ‘sometimes agreed’ for the statement of using an online consultation system enables them to accomplish tasks more quickly. The second highest response which equalled to 25.2% or N=68 was ‘agreed’ and the third which represented 23.3% or N=63 responded ‘neutral’.

Using an online consultation system improves the quality of the work I do.
270 responses

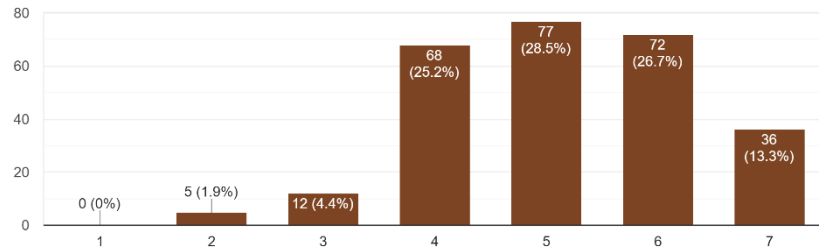


Figure 12: Respondents' Response – Perceived Usefulness 4 (PU4)

In relation to the statement 'online consultation system improves the quality of work users do', the most popular response was 'sometimes agreed' (28.5% or N=77), followed by 'agreed' (26.7% or N=72) and 'neutral' which recorded a slight difference of 4 respondents (equals to 25.2% or N=68) from those who chose 'agreed'.

Using an online consultation system provides helpful guidance in performing tasks.
270 responses

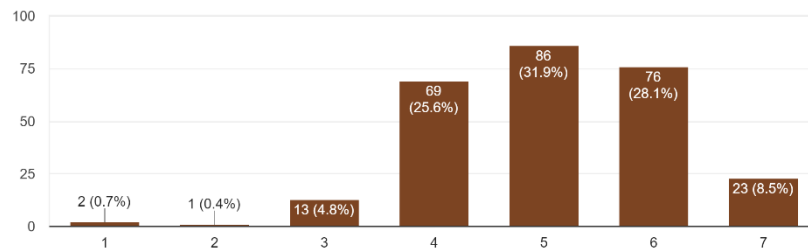


Figure 13: Respondents' Response – Perceived Ease of Use 1 (PEU1)

Based on Figure 13, the top choice (31.9% or N=86) was 'sometimes agreed', next was 'agreed' (28.1% or N=76) and the third highest was 'neutral' (25.6% or N=69). This is with regard to the use of online consultation system provides helpful guidance in performing tasks.

Overall, I find using an online consultation system easy to use.
270 responses

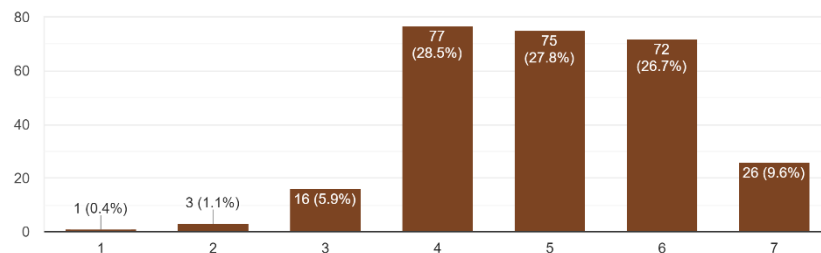


Figure 14: Respondents' Response – Perceived Ease of Use 2 (PEU2)

As for Figure 14, the ratings are as follows: 'neutral' (28.5% or N=77), 'sometimes agreed' (27.8% or N=75) and 'agreed' (26.7% or N=72). This is pertaining to the finding on the use of the online consultation system is easy.

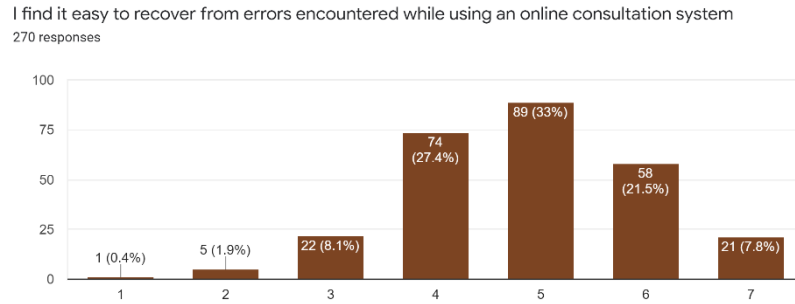


Figure 15: Respondents' Response – Perceived Ease of Use 3 (PEU3)

Majority of the respondents chose 'sometimes agreed' (33% or N=89) to the statement that they find it easy to recover from errors encountered while using an online consultation system. This is accompanied by 'neutral' (27.4% or N=74) and 'agreed' (21.5% or N=58) responses respectively.

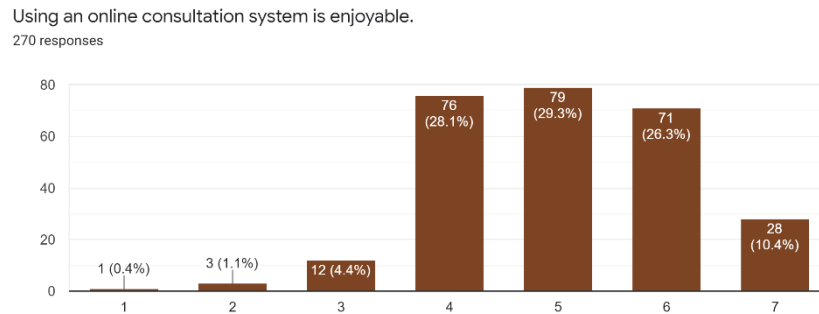


Figure 16: Respondents' Response – Attitude Towards Usage 1 (ATU1)

About 29.3% or N=79 of the respondents 'sometimes agreed' that using the online consultation system is enjoyable, while 28.1% or N=76 were 'neutral' and 26.3% or N=71 'agreed' with the statement.

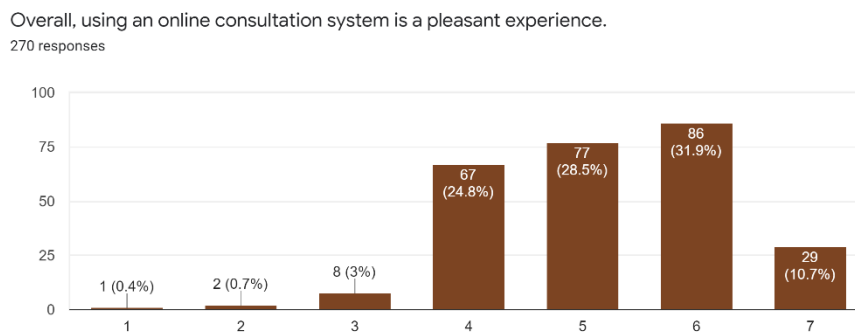


Figure 17: Respondents' Response – Attitude Towards Usage 2 (ATU2)

Most respondents 'agreed' (31.9% or N=86) that using an online consultation system is a pleasant experience. Furthermore, 28.5% of respondents or N=77 'sometimes agreed' followed by 24.8% of respondents or N=67 chose 'neutral' in response to the statement.

My attitude toward using an online consultation system is very favourable.
270 responses

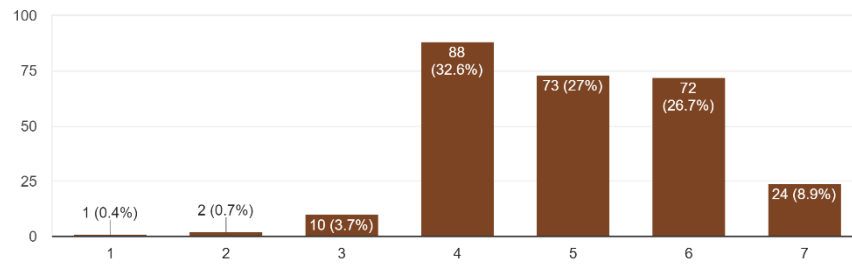


Figure 18: Respondents' Response – Attitude Towards Usage 3 (ATU3)

A total of 32.6% or N=88 respondents responded 'neutral' in terms of their attitude in using an online consultation system as very favourable. The second highest percentage is 27% or N=73 opted for 'sometimes agreed' and 26.7% or N=72 selected 'agreed'.

I intend to continue using an online consultation system.
270 responses

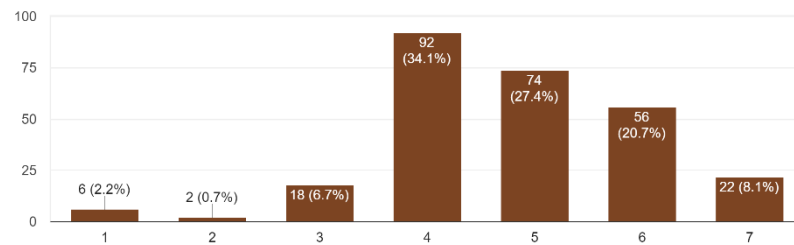


Figure 19: Respondents' Response – Behavioral Intention to use ODL 1 (BI1)

With reference to Figure 19, 'neutral' was the highest response (34.1% or N=92 respondents), followed by 'sometimes agreed' (27.4% or N=74) and 'agreed' (20.7% or N=56) for the statement asking for confirmation on whether respondents intend to continue using the online consultation system.

I predict I would continue using an online consultation system
270 responses

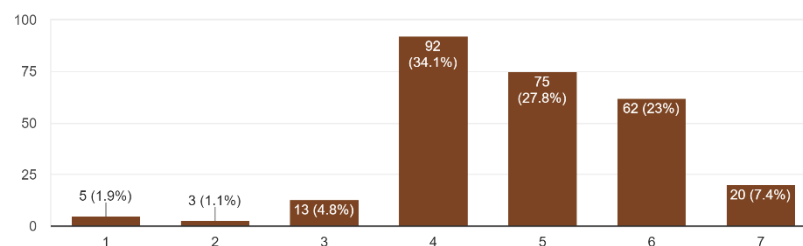


Figure 20: Respondents' Response – Behavioral Intention to use ODL 2 (BI2)

Most respondents answered 'neutral' (34.1% or N=92), while 27.8% or N=75 respondents chose 'sometimes agreed' and 23% or N=62 favoured 'agreed' in response to the statement of whether they would continue using the online consultation system.

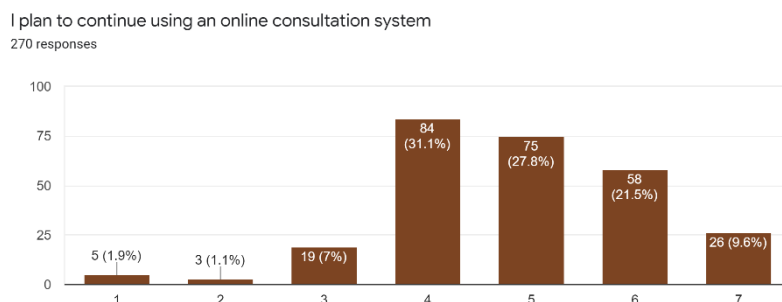


Figure 21: Respondents' Response – Behavioral Intention to use ODL 3 (BI3)

The majority recorded 'neutral' in response to the plan to continue using the online consultation system which equalled to 31.1% or N=84 respondents. 'Sometimes agreed' and 'agreed' fell second and third respectively with the percentage of 27.8% or N=75 and 21.5% or N=58 respondents.

5. Conclusion

This paper investigates the importance of StudLec Information System in the aftermath of COVID-19 pandemic. A quantitative analysis was performed and data were translated based on descriptive analysis. The results show that the development of StudLec Information System can help students strategize their time, have a proper consultation with his or her lecturers, as well as reduce stressful conditions which are among the inevitable consequences of the pandemic. A total of 58.9% respondents agreed that they plan to continue using the online consultation management system, indicating that there is a high level of confidence that the online consultation management system may bring benefits to both the students and lecturers.

The contributions of this paper are as follows; first, the paper provides an introduction to the importance of an information system in the aftermath of COVID-19; second, the paper provides an overview of the current level of interaction between students and information system in the aftermath of COVID-19; and third, this study adds to the body of knowledge on the topic of information system management.

However, this study is not without limitations. First, it is acknowledged that the study did not include discussion on the inferential level and was not based on a relevant research model. These will be addressed in a subsequent research project which is intended for the next publication. Second, this study only focuses on the theory generalization rather than population generalization.

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