ARE WE USING ENOUGH LIBRARY E-SERVICES? INVESTIGATING THE LEVEL OF LIBRARY E-SERVICES USAGE AMONG STUDENTS

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Abstract: Utilization of library e-services are a major concern, especially among practitioners. The emergence of Novel Coronavirus 2019 (COVID-19) has increased the dependency towards library e-services, such as online databases, electronic books, electronic journals, etc. Moreover, the movement control order (MCO), as well as the rising cases of COVID-19, has shifted the library, as well as librarian responsibility towards the online delivery of services. In the meantime, students rely heavily on library e-services to complete their works. However, not much is known regarding the utilization level of library e-services in the aftermath of COVID-19, especially regarding the perceived barriers. Therefore, the study aims to investigate the utilization level of library e-services in the aftermath of COVID-19 pandemic. A quantitative study was conducted; a total of 192 responses were recorded and analysed. Data were analysed using central tendency based on mean, standard deviation, and median. Findings show that the resultant central tendency of the study shows that the level of library e-services usage among undergraduate students at Universiti Teknologi MARA Cawangan Kelantan is at a moderate level, with the mean value of 4.66.

Keywords: Usage, digital library, electronic resources, utilization, and e-services

1.   Introduction

The sudden emergence of Novel Coronavirus 2019 or COVID-19 has deprived the world of the year 2020. Being regarded as the pinnacle of achievement, or an indicator of Malaysia becoming a modern nation (Saadatian, Haw, Mat, & Sopian, 2012; Khattab, 2004), the rise of COVID-19 has seen many casualties in term of life, development, sustainability, and household unemployment. According to the Department of Statistics Malaysia (2020, October 13), the unemployment rate in Malaysia stands at 741.6 thousand or 4.7%. Consequently, much to the surprise of many parents, the Ministry of Higher Education has called off the operation to welcome back higher learning students to their campus, in an attempt to prevent the widespread of COVID-19 (Hasniza Hussain, 2020).

Learning and teaching from the comfort of their home, the term Online Distance Learning (ODL) was coined among the community of teachers and lecturers. ODL has increased the dependency on the usage of library e-services, also known as the digital library (DL). The library e-services are defined as the collection of organized digital documents, objects, and services that includes online databases, electronic journals, images, text, videos, and audio resources (AlHaji, 2009; Mohamad Rahimi Mohamad Rosman, Mohd Nasir Ismail, & Mohamad Noorman Masrek, 2019). There has been much research on the library e-services, however, due to the expensive nature of the e-services, researchers encourage for further exploration of the topic (Mohamad Noorman Masrek & Ismail Samadi, 2017). Therefore, the objective of this paper is to investigate the level of library e-services usage among undergraduate students at Universiti Teknologi MARA Cawangan Kelantan.

The subsequent topics are organized as follow. First, the paper will briefly discuss the research model of the study. Next, the methodology of the study will be discussed and explained. Then, the finding of the study will be presented based on descriptive analysis using the Statistical Package for Social Science (SPSS) version 22. Finally, the conclusion will discuss the contribution and limitation of the study.

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2.   Research Model

The following Figure 1 shows the research model of the study. There are four variables selected for the study; perceived barriers, information quality, responsiveness, and usage of e-services. A total of 7 hypotheses were formulated and tested; however, due to the limitation of this study, the result of the hypothesis will be discussed elsewhere. The selection of the variables are based on the previous similar research on e-services; however, neither of this research performed data collection in the context of a pandemic, therefore indicating the significant contribution of this study. As a reference, the hypotheses of the study are as follows:

H1: Information quality has a significant relationship with the usage of e-services.
H2: Perceived Barriers has a significant relationship with information quality.
H3: Perceived Barriers has a significant relationship with responsiveness.
H4: Perceived Barriers has a significant relationship with the usage of e-services.
H5: Responsiveness has a significant relationship with the usage of e-services.
H6: Information quality mediates the relationship between Perceived Barriers and usage of e-services.
H7: Responsiveness mediates the relationship between Perceived Barriers and usage of e-services.
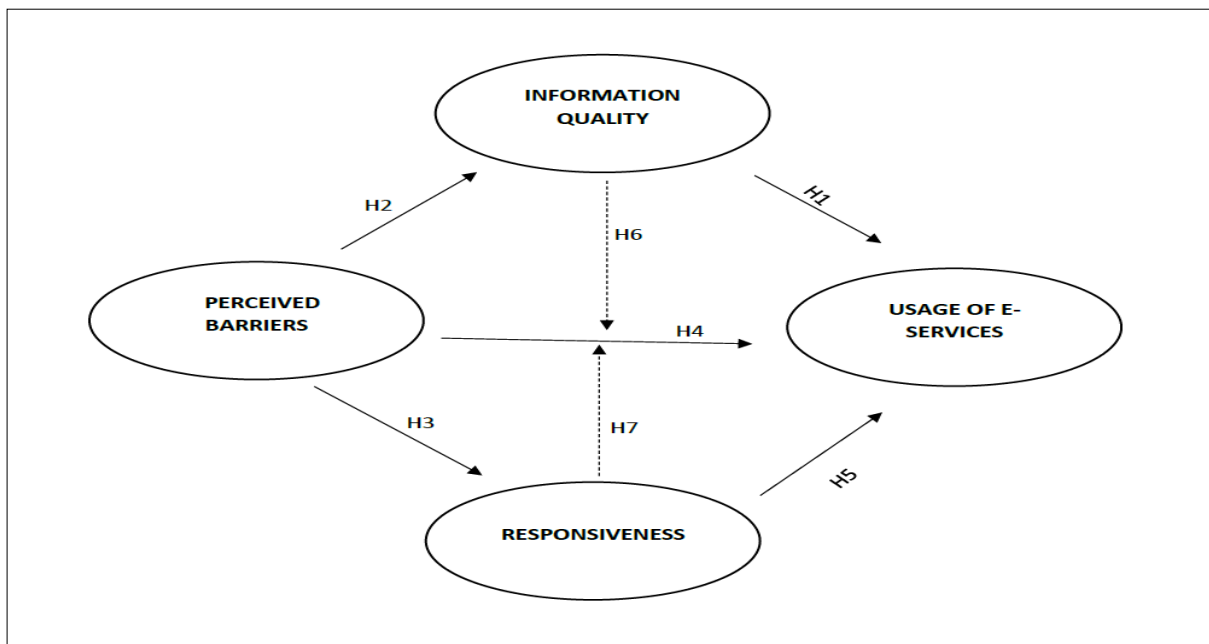

Figure 1: Research Model

3.   Methodology

The conduct of this study is quantitative using a questionnaire. The questionnaire was developed by adapting and adopting previous instruments of Masrek and Gaskin (2016), Khan and Qutab (2016), and Samadi and Masrek (2015). The instrument was pre-tested using expert review, face validity, pilot study, and reliability analysis. Recommendations and suggestions from expert reviewers were given utmost careful consideration and the revised instrument was sent back for the approval of the experts. Then, the data collection proceeded to using a Google Form distributed to the respective respondents, selected based on random sampling. The respondents of the study consisted of undergraduate students from Universiti Teknologi MARA Cawangan Kelantan. A total of 250 students were selected, in which only 192 valid responses were received; indicating a response rate of 79%. Data analysis was performed using Statistical Package for Social Science (SPSS) version 22 to identify the level of library e-services usage among undergraduate students in the aftermath of a COVID-19 pandemic. The following sections will discuss the finding of the study.

4. Findings

Table 1 shows the result of central tendency analysis for information quality (INQ). The mean for INQ1 (M = 5, SD = 1.17) is 5.13. The mean for INQ2 (M = 5, SD = 1.18) is 5.14, while the mean for INQ3 (M = 5, SD = 1.16) is 5.09. The mean for INQ4 (M = 5, SD = 1.14) is 5.15, and the mean for INQ5 (M = 5, SD = 1.14) is 5.06. The overall mean score for information quality is 5.11.

Table 1: Information Quality

	Item	Mean	Std. Dev.
INQ1	The library e-services provide complete information.	5.13	1.17
INQ2	The library e-services provide relevant information.	5.14	1.18
INQ3	The library e-services provide information in an appropriate format.	5.09	1.16
INQ4	The library e-services provided up-to-date information.	5.15	1.14
INQ5	The library e-services provide detailed information.	5.06	1.14

Table 2 shows the result of central tendency analysis for responsiveness (RES). The mean for RES1 (M = 4, SD = 1.30) is 4.57. The mean for RES2 (M = 5, SD = 1.19) is 4.98, while the mean for RES3 (M = 5, SD = 1.26) is 4.90. The mean for RES4 (M = 5, SD = 1.18) is 4.83, and the mean for RES5 (M = 5, SD = 1.23) is 4.89. The overall mean score for responsiveness is 4.83.

Table 2: Responsiveness

	Item	Mean	Std. Dev.
RES1	The library e-services application don't crash often.	4.57	1.30
RES2	The library e-services are simple and easy to navigate.	4.98	1.19
RES3	The library e-services application is responsive to clicks.	4.90	1.26
RES4	The library e-services loads quickly.	4.83	1.18
RES5	The library staff serves efficiently through the library e-services.	4.89	1.23

Table 3 shows the result of central tendency analysis for perceived benefits (PEB). The mean for PEB1 (M = 4, SD = 1.31) is 4.33. The mean for PEB2 (M = 4, SD = 1.44) is 4.25, while the mean for PEB3 (M = 4, SD = 1.45) is 4.23. The mean for PEB4 (M = 4, SD = 1.48) is 4.33. The overall mean score for perceived benefits is 4.29.

Table 3: Perceived Barriers

	Item	Mean	Std. Dev.
PEB1	I don't have enough time to use the library e-services in the aftermath of covid-19.	4.33	1.31
PEB2	I don't have enough facilities to use the library e-services in the aftermath of covid-19.	4.25	1.44
PEB3	I don't feel comfortable to use the library e-services in the aftermath of covid-19.	4.23	1.45
PEB4	Too many obligations at home prevented me from using the library e-services in the aftermath of covid-19.	4.33	1.48

Table 4 shows the result of central tendency analysis for usage of e-services (USE). The mean for USE1 (M = 4.5, SD = 1.18) is 4.69. The mean for USE2 (M = 4, SD = 1.20) is 4.64, while the mean for USE3 (M = 4, SD = 1.15) is 4.61. The mean for USE4 (M = 5, SD = 1.17) is 4.70. The overall mean score for usage of e-services is 4.66.

Table 4: Usage of E-Services

	Item	Mean	Std. Dev.
USE1	I fully use the available library e-services features to complete my information task in the aftermath of COVID-19.	4.69	1.18
USE2	I use most of the available library e-services features in performing my information task in the aftermath of COVID-19.	4.64	1.20
USE3	I make use of the available library e-services features thoroughly to accommodate my information task in the aftermath of COVID-19.	4.61	1.15
USE4	I use all available library e-service features to help with my information task in the aftermath of COVID-19.	4.70	1.17

5.   Discussion and Conclusion

The resultant central tendency of the study shows that the level of library e-services usage among undergraduate students at Universiti Teknologi MARA Cawangan Kelantan is at a moderate level, with the mean value of 4.66. The result could be interpreted that the undergraduate students might be using other resources not provided by the library, such as free open access journal and Google Scholar. This is supported by previous studies of Bagudu and Sadiq (2013), Chiong et al. (2016), Matusiak (2012) and Sahak and Masrek (2014), who found that students prefer to use non-DL resources. Moreover, as mentioned by Masrek and Samadi (2017), lack of usage of the library e-services can be credited to the lack of engagement between the user and the e-services itself.

As a conclusion, the result of this study may help the library to plan their e-services acquisition by focusing on services, material and resources that are needed by their stakeholders. In addition, libraries must also have a proper planning to enhance the level of user engagement between the students and library e-services. This can be done through proper activities such as library open-day, eBook competition, webinar, etc.

This study is not without limitation. Firstly, we only use minimal variables concerning technological factors. Future study may improve the model by integrating other factors, such as individual factors, contextual factors, socio-economic factors, etc. Secondly, the future study can also investigate the relationship between engagement and usage, especially the mediating effect of engagement towards information system usage.

6.   Acknowledgement

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