Relationship of self-regulated online learning and mental health among students of Faculty Technical and Vocational Education, University Tun Hussein Onn Malaysia during pandemic Covid-19

S.H. Zakariah[1,*], L. M. S. Ismail[1], N. F. Jumadi[1], N. A. I. A. Tukiran[1], N. A. Ahmad[1]

[1]Faculty of Technical and Vocational Education, Parit Raja, Batu Pahat, 86400, Malaysia

*Corresponding author's email: hajarz@uthm.edu.my

ABSTRACT: Pandemic Covid-19 leads the students to change their learning method from traditional learning to online learning. The students need to evaluate their self-regulated online learning towards their mental health. The purpose of this study is to identify the relationship of self-regulated online learning towards mental health of student Faculty of Technical and Vocational (FPTV) University Tun Hussein Onn Malaysia (UTHM) during Pandemic Covid-19. The research design used in this study is a quantitative method approach by distributing a survey questionnaire. 167 students of FPTV were involved in this survey. This study uses the Self-Regulated Online Learning Questionnaire (SOL-Q) and Depression, Anxiety and Stress Scale (DASS-21) which were adapted and adopted from previous research. Data were analysed using descriptive statistical analysis to determine the FPTV students self-regulated online learning of time management and environment construct and student mental health level. This research also used Speaman's Correlatiom Rank analysis to determine the relationship between self-regulated online learning and mental health. As a result, environment constructs M= 3.77, SD=.788 and time management M=3.47, SD=.603. The student's mental health result shows that mostly the FPTV's student have mild depression, severe anxiety and mild stress. The correlation value for time management with depression is rs= -.235, environment and depression is .rs= -.303, anxiety and time management is rs=-.177, anxiety and environment rs= -.306, stress and time management rs=-.306 and environment and stress rs=.-287. Thus, the result proves that there is a weak relationship between online learning of FPTV students on mental health during pandemic Covid-19.
Keywords: *Self-Regulated; Online Learning; Mental Health*

1. INTRODUCTION

In early March 2020, Malaysian government enacted strict regulations through social restriction to reduce the spread of COVID-19. Progressive rules are taken to reduce the spread of the virus through restrictions on social movement among the community. In the field of education, the learning method also changes from traditional methods to online learning. Hence, the Ministry of Education Malaysia (MOE) and the Ministry of Higher Education (MOHE) take an initiative by replacing the method of teaching and learning in Malaysia from face-to-face in the classroom, to online teaching and learning (Mustapah & Rosli, 2021).

However, online learning also has an impact on students' mental health. According to Mohamad et al. (2009) were found that when a person, especially a student, unable to balance the usage of a computer, then student will not see the learning phenomenon as something that is positive. Education or learning through computer screens too long also will affect mental, physical, emotional and even social health (Aida, 2020). These changes required students to have skills in self-regulated online learning. As mentioned by Abdillah and Musa (2021), online learning encourages students to reflect on learning by implementing self-assessment of learning. Student self-regulation online learning achievement are environment and time management. Learning environment of students change when students follow learning sessions from home. This changes will encourage students to have time management skills to manage their daily life (Wan Ali, Md Yunus, Hamzah & Tarmizi, 2008). Wan Ali et al. (2008) also stated that the students need these skills to give satisfaction and joy for students.

2. METHODOLOGY

This research uses a quantitative method to determine the relationship between online learning and mental health among students at Faculty of Technical and Vocational Education, Universiti Tun Hussein Onn Malaysia during pandemic Covid-19. A survey questionnaire were distributed to Year 1 Semester 2 and Year 2 Semester 1 undergraduate students because the students were involved in online learning for the first time.

2.1 Research Instrument

The questionnaire in this study is using of instruments Depression, Anxiety, and Stress Scale, which were adapted from (National Health and Morbidity Survey NHMS 2017; Musa, Fadzil & Zain., 2007). The instrument contains 21 items containing three important elements as Depression, Anxiety and Stress Scale elements. In addition, the questionnaire instrument was also adapted from Jansen, Leeuwen and Janssen (2017) for time management and learning environment instruments which Self-regulated online learning questionnaire (SOL-Q) for time management instruments

and learning environment.

3. RESULT AND DISDUSSION

The data collection results showed that the mean value for the time management construct was the lowest at 3.47 (SD = 0.603), while the mean value for the environment construct was the highest at 3.77 (SD = .788). Then, 55 respondents (32.9 percent) experienced a mild level of depression, followed by respondents with moderate and severe depression who had the same frequency of 41 respondents (24.6 percent). Only two respondents (1.2 percent) experienced very severe levels of depression. In term of mental health (anxiety), 46 respondents experienced a severe level of anxiety (27.5 percent) then followed by 42 respondents who had a very severe level of anxiety (25.1 percent) of 167 respondents. Only 38 respondents (22.8 percent) experienced a mild level of anxiety which is the lowest number of the total number of respondents. In term of mental health, 69 respondents experienced a mild level of stress of (41.3 percent), 53 respondents had a moderate level of stress (24.6 percent) and only one respondent (6 percent) experienced very severe stress.

Next, Spearman's Rho analysis showed that there was a weak negative relationship between time management and statistically significant to depression (r_s=.-. 339, N = 167, p <.01). The results of this study prove that time management and depression have a weak relationship. Next, the correlation between environment and depression. Spearman's rho analysis showed that there was a weak negative relationship between environment and statistically significant to depression (rs =.-. 235, N = 167, p> .01). This results prove that environment and depression have a statistically weak significant relationship. In terms of relationship between time management and anxiety, the correlation analysis resulted that there was a weak negative relationship between time management and anxiety with rs =.-. 303, N = 167, p <.01. This results displayed that time management and have a weak relationship with anxiety. Next, the correlation between environment and anxiety showed there was a weak negative relationship between environment and statistically significant anxiety (rs =.-. 177, N = 167, p> .01). The results of this study proved that time management and depression have a statistically significant weak relationship.

For correlation between time management and stress, Spearman's rho analysis and the results showed that there was a weak negative relationship between time management and statistically significant stress (rs =.-. 306, N = 167, p <.01). The results of that time management and stress have a weak relationship are the correlation between environment and stress. Spearman's rho analysis showed that there was a weak negative relationship between time management and statistically significant to anxiety (r_s =.-. 287, N = 167, p <.01). As a result of Spearman's Rank-Order Correlation analysis, it can be concluding that the research hypothesis, Ho is rejected and the research hypothesis, Ha is accepted.

4. CONCLUSION

As a conclusion, this study was conducted to identify online self-directed learning on students' mental health at the Faculty of Technical and Vocational Education Universiti Tun Hussein Onn Malaysia through the constructs of time management, environment, depression, anxiety, and stress. The study results found that respondents experienced a high level of anxiety against online learning because of its high means-value compared to depression and stress. Clearly, this proved that online learning has an impacted to students 'mental health in terms of anxiety. Moreover, the study results proved that there is a weak relationship between time management constructs and online learning environment on mental health. This research conclude that online learning has an impact on students 'mental health. Indirectly, the research results obtained have successfully answered all the research questions that the researcher has identified.

REFERENCES

[1]   Mustapah, J., & Rosli, R. (2021). Tahap Kepuasan Pembelajaran Matematik Atas Talian Semasa Pandemik Covid19 6(4), 1–20.

[2]   Mohamad, M. M., Saud, M. S., & Ahmad, A. (2009). The Need In Training And Retraining For TVET Teachers In Malaysia. Journal of Technical Education and Training, 1(1), 51–57.

[3]   Aida, R. N. (2020). Pembelajaran online boleh beri kesan kesihatan mental.

[4]   Abdillah, N. A., & Musa, M. (2021). Student Readiness To Teaching and Learning (Pdp) New Norm in the Department of Information & Communication Technology (Jtmk), Polytechnic Sultan Mizan Zainal Abidin (Psmza). International Journal of Modern Education, 3(8), 114–124.

[5]   Wan Ali, W. Z., Md. Yunus, A. S., Hamzah, R., Abu, R., Ahmad Tarmizi, R., Md. Nor, S., Abu Bakar, K., & Ismail, H. (2008). Kemahiran Pengurusan Masa Pelajar Universiti Tempatan: Status Dan Hubungannya Dengan Pencapaian. Jurnal Teknologi, 49(1), 49–64.

[6]   NHMS. (2017). National Health & Morbidity Survey 2017. In Institute for Public Health, National Institutes of Health, Ministry of Health Malaysia, Kuala Lumpur: Vol. IV.

[7]   Musa, R., Fadzil, M. A., & Zain, Z. (2007). Translation, validation and psychometric properties of Bahasa Malaysia version of the Depression Anxiety and Stress Scales (DASS). ASEAN Journal of Psychiatry, 8(2), 82–89.