

Psychological Impact of Online Learning Towards Students

Nadja Najwa Ruhazlan^{1*}, Nicholaus Christiardy Sumardi², Evelyn Augustine Tjitra³,
Valentino Michael⁴, Vanesa Nellie⁵, Sri Tiatri⁶

¹ Language and Literacy Department, Faculty of Education, University Malaya, Kuala Lumpur, Malaysia

² Industrial Engineering Department, Faculty of Engineering, Universitas Tarumanagara, Jakarta, Indonesia

³ Tarumanagara University, Jakarta, Indonesia

⁴ Informatics Engineering Department, Faculty of Information Technology, Universitas Tarumanagara, Jakarta, Indonesia

⁵ Informatics Engineering Department, Faculty of Information Technology, Universitas Tarumanagara, Jakarta, Indonesia

⁶ Faculty of Psychology, Universitas Tarumanagara, Jakarta, Indonesia

*pib190020@siswa.um.edu.my

ABSTRACT

The purpose of this research is to examine whether 1) ODL experience may affect DASS 42 test for analysing psychological condition of the students 2) level of satisfaction of students towards learning is affected by type of learning, 3) emotional disturbance students with different learning types. Sample was selected using a purposive sampling method that amounted to 25 respondents at Malaysia. Data is discussed through phenomenological analysis. The result of this research shows that the impact given by online learning is significant by creating anxiety and depression towards students.

Keywords: *Depression Anxiety and Stress Scale 42 (DASS 42), Online Distance Learning (ODL)*

1. INTRODUCTION

It's been almost two years since the COVID-19 pandemic started spreading throughout the world. With the government implementing the social distancing policy, many aspects are transformed from normal to new normal. This policy brings a dilemma for the education aspect in various countries [1]. Many schools and institutions have to adapt from a traditional face to face learning system to a new online learning system where technologies that use internet connection such as Microsoft teams and Zoom will be involved in it [1]. Online learning is considered one of the best available solutions to ensure education won't be obstructed during the pandemic [2]. Through online learning, students are not only expected to be active while learning the material given from the lecturer but also enriched themselves with all of the knowledge outside the material

given. Online learning provides benefits such as convenience and flexibility, however, this online learning system gives a number of disadvantages too such as lack of knowledge and student's dissatisfaction, and lack of technological support that leads to a new problem [3]. As it is stated before, schools and institutions have to adapt with the new system and students have to adapt to a new learning system too. At first, many students welcomed online learning as a new way of studying without knowing that it will create insecurity and give pressure to them. Studying at home means the student won't be able to meet and interact with their friends like usual. Number of tasks and deadlines, different platforms on every subject will distract student's focus [4].

In daily human life, psychology plays an important role. It explained why people act the way they do such as decision making, stress management and other behaviour that occurred

in the past or will be done in the future, especially for students [5]. Psychology will affect how students learn and develop, focus and problem solving. In other words, how students learn and incorporate information is directly influenced by psychology. The influence is supported by types of learners which will differentiate the final output from the students itself. First of all there are visual learners who learn by what they can visualize such as turning a subject into a mind map, looking at diagrams and charts, etc. Visual learners tend to be more comfortable with the old style teaching system with the lecturer explaining on a whiteboard. Secondly, there are auditory learners who prefer to listen to information rather than looking at it on a whiteboard. Auditory learners will be at their best when they talk with someone about a material they just learned. Moreover, there are kinesthetic learners who learn by participating in an activity or problem solving. Kinesthetic learners are unfitted with the new online system learning which sometimes students just sit and listen in front of their gadget. Last but not least, there are reading and writing learners which are so far the most flexible type of learners. This type of learner obtains information by reading from texts, articles, books, etc, and remembers it by rephrasing the information obtained from reading [6]. Illustration for type of learner will be shown in figure 1



Figure 1. Types of Learners

Knowing there are many types of learners, an online learning system might not be the most effective and suitable way for students with their own learning type. Some will really enjoy

the new learning system, some will try to enjoy it, and others will try to adapt to the online learning system. Today, COVID-19 is still the headline of the world without any signs of subsiding. Which means, students will have to continue their online learning without knowing when it will stop. Based on the difference in learning types, the purpose of this paper is to find out if there is a psychological impact to students, will the learning types affect the whole process of online learning?. This research tends to find proof that there is an impact given from online learning toward students in this pandemic situation. To make it simple the flowchart of this research will be shown on figure 2.

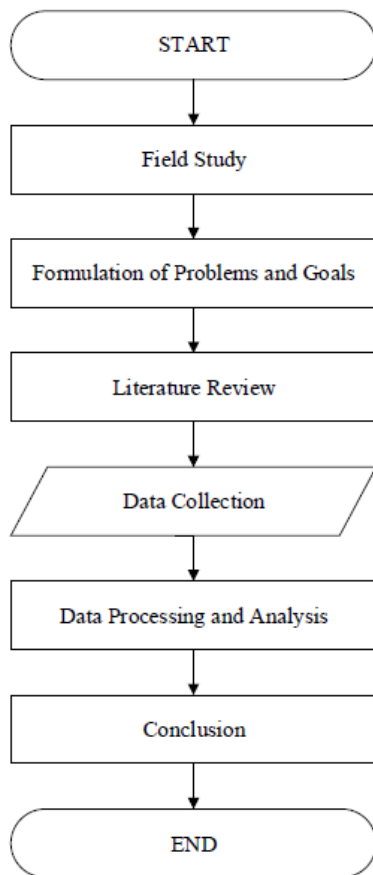


Figure 2. Research Flowchart

2. METHOD

This research is conducted by a qualitative method of phenomenology through non-probability sampling. In this case, a purposive

sampling is used to conduct the research. The population in this study are all undergraduate students from Malaysia. Since the sampling method used is a non-probability sampling method which means that not all students in Malaysia have the same opportunity to be selected as a sample. While the sample selection technique used in this study is purposive sampling. To meet with the primary objective of this research the sample in this study was 25 students from University Malaya, Malaysia. The respondents were all in online distance learning for full-time one semester and enrolling in an education course consisting counselling, early childhood and teaching English as second language. This research focused solely on students who gained online learning in theory and practice courses since the use of online learning because of the COVID-19

Data collection in this study was carried out by distributing questionnaires online using google-form. Based on the data collected, it is known that the majority of respondents were female with a sum of 13 people (52%) and the left over are male with 12 people (48%). Table 1.0 shows the results of the demographic information of the respondent.

The instruments were adapted from previous studies and online Depression Anxiety and Stress Scale (DASS 42) to measure research variables, research objects were measured by the subjective experience of the research subject. [7]. The categories are Depression(D), Anxiety(A),and Stress(S). Figure 3 shows the measurement standard for the DASS 42.

Category	Depression (D)	Anxiety (A)	Stress (S)
Normal	0 – 7	0 – 7	0 – 14
Mild	10 – 13	8 – 9	15 – 18
Moderate	14 – 20	10 – 14	19 – 25
Severe	21 – 27	15 – 19	26 – 33
Extremely Severe	28+	20+	34+

Figure 3. Standard Measurement of DASS 42

DEMOGRAPHIC INFORMATION OF THE RESPONDENTS

Socio-Demographic	Response	Frequency	Percentage (%)
Gender	Male	12	48
	Female	13	52
Race	Malay	12	48
	Chinese	4	16
	Indian	4	16
	Others	5	20
Course	Counselling	10	40
	Early Childhood	7	28
	TESL	8	32
Area	Rural	15	60
	Urban	10	40
Previous Medical History of Distress	Yes	7	28
	No	18	72

Table 1.0 Demographic Data of Respondent

3. RESULTS AND DISCUSSION

Since March 2020 University Malaya has been implementing online distance learning due to Covid-19 outbreak. This change has been giving some implication towards students' mental health and the level of acceptance in adapting this learning method. The researchers have decided to do some tests using the existing instrument to measure the level of stress perceived by the students. The result of DASS 42 conducted on the research subject found that 23% of the research subjects

have levels of depression above normal, 40% got the anxiety level above normal and 37% stress level above normal. This shows that online learning has given the impact indirectly towards the students' stress level. The DASS-42 is a 42 item self-report scale designed to measure the negative emotional states of depression, anxiety and stress. The principal value of the DASS in a clinical setting is to clarify the locus of emotional disturbance, as part of the broader task of clinical assessment. The essential function of the DASS is to assess

the severity of the core symptoms of depression, anxiety and stress. As the scales of the DASS have been shown to have high internal consistency and to yield meaningful discriminations in a variety of settings, the scales should meet the needs of both researchers and clinicians who wish to measure current state or change in state over time.[8] Another study that can relate to this research was from Maulana and Iswari (2020) conducted research undergraduate students stress level in Vocational Study due to online learning of statistics for business course. The result showed that 3% of the students had a stress level in extremely severe categories, 13% in severe categories, 8% in moderate categories, 24% in mild categories, and 52% in normal categories.[9] Hence clearly shows that most of the students have certain psychological experiences resulting from the online learning.

Next, the level of satisfaction in students affected by learning mode. The first two weeks the research subjects find that the implementation of ODL is still bearable and convenient. Even in the first online meeting class using the Microsoft Team the students were so happy to see each other after a long time. They are still feeling comfortable and still adapting to the features of the applications. Till the third week out of 14 weeks the excitement and determination are starting to fade slowly. We can see more and more students are now uninterested in showing their face on camera, low in response in the class and started to receive low response in questions and answers sessions. This resulted from ranging from the students due to unstable internet conditions, intense tasks and trying to catch up with the assignment deadline. A study of nursing students showed anxiety among participants related to the effects of the COVID-19 virus (Huang & rong Liu, 2020). [10] According to a study, initially, individuals feel happy with a long holiday because they can rest more and do nothing. Over time, according to Wilson, individuals will feel bored because they can not

leave the house and do nothing. This research shows that something that is done statically, it will cause boredom. This condition applies during the COVID-19 outbreak (Williams, Armitage, Tampe, & Dienes, 2020). [11] Other research shows that boredom displays low self-control (Mugon, Struk, & Danckert, 2018). [12] So someone who is quickly bored while studying at home has low self-control. This shows that individuals who tend to be drilled are unable to arrange, guide, regulate, and direct the forms of behavior that can bring it in a positive direction [7]

Furthermore, online learning results in emotional disturbance. The research subject was seen to have complaints about too many tasks given by the lecturers, short amount of time and near gap between assignments causing the students to have mood swings and emotional disturbance. They have been feeling stressed out a lot all the time. The researchers assume that the lecturer may not be able to fit and rationally think about the students capability to fulfill the academic tasks and requirements. The lecturer may still not be able to adapt the learning and teaching pattern through online learning. Also due to lack of support system by the family, friends or even the solid trusted learning source is limited making the emotional disturbance is much worse. ODL restricts the physical interaction and meaningful communication between the students. In the end, learning was felt to be less effective, primarily when two weeks after education was carried out. To reduce emotional disturbances, some students try to build communication with lecturers to tolerate tasks that they think are so heavy.[7]

4. CONCLUSION

In general, Covid-19 has a significant impact on the world of education, including in the educational system in Indonesia. Traditional and routine learning that emphasizes the interaction of teachers and students in the classroom and outside the classroom shifts to distance learning. As we have already discussed above, there were

several types of learners which will differentiate the final output from the students itself. An online learning system might not be the most effective and suitable way for students with their own learning type.

With the Covid-19 cases still on a high rate, students will have to continue their online learning without knowing when it will stop, which absolutely has a Psychological impact on students nowadays. Psychology will affect students' behavior while they are having a lesson. Based on the data shown in Table 1.0, it is clear that research found that 23% of the research subjects have levels of depression above normal, 40% got the anxiety level above normal, and 37% are normal. The result is quite startling as many people said that the online learning system is a good way to improve the education system for the future. However with the high level of anxiety and depression, it is far from perfect that online learning would be the best solution for educational purposes or as an emergency method in this pandemic situation.

Furthermore, from the data shown in Table 1.0 is it true that online learning will give a big psychological impact through students, although the impact does not affect every student, however, the majority of students have experienced the impact.

Last but not least, hopefully Covid-19 will end soon.

REFERENCES

- [1] Yazid, H., & Neviyarni. (2021). *Pengaruh Pembelajaran Daring Terhadap Psikologis Siswa Akibat COVID-19. Jurnal Human Care*, 6(1), 207-213.
- [2] Chung, E., Noor, N. M., & Mathew, V. N. (2020a). *Are You Ready? An Assessment of Online Learning Readiness among University Students. International Journal of Academic Research in Progressive Education and Development*, 9, 301-317.
- [3] Subarto. (2020). *Momentum Keluarga Mengembangkan Kemampuan Belajar Peserta Didik Di Tengah Wabah Pandemi Covid-19. Adalah: Buletin Hukum dan Keadilan*, 4(1), 13-18.
- [4] Oktawirawan., Dwi., Hardani. (2020). *Faktor Pemicu Kecemasan Siswa dalam Melakukan Pembelajaran Daring di Masa Pandemi Covid-19. JIUBJ : Jurnal Ilmiah Universitas Batanghari Jambi*, 20(2), 541-544.
- [5] Lindsay, Geoff. (2007). *Educational Psychology and The Effectiveness of Inclusive Education/Mainstreaming. British Journal of Educational Psychology*, 77(1), 1-24.
- [6] Husmann, Polly., & O'Loughlin, Valerie (2018). *Another nail in the coffin for learning styles? Disparities among undergraduate anatomy students' study strategies, class performance, and reported VARK learning styles. Anatomical Science Education*, 12(1).
- [7] Irawan, Andi & Dwisona, Dwisona & Lestari, Mardi. (2020). *Psychological Impacts of Students on Online Learning During the Pandemic COVID-19. KONSELI : Jurnal Bimbingan dan Konseling (E-Journal)*, 7,. 53-60. 10.24042/kons.v7i1.6389.
- [8] Lovibond, S.H. & Lovibond, P.F. (1995). *Manual for the Depression Anxiety Stress Scales 2nd.Ed. Sydney: Psychology Foundation. ISBN 7334-1423-0*
- [9] Maulana, H. A., & Iswari, R. D. (2020). *Analisis Tingkat Stres Mahasiswa Terhadap Pembelajaran Daring Pada Mata Kuliah Statistik Bisnis Di Pendidikan Vokasi. Khazanah Pendidikan*, 14(1).
- [10] Huang, L., & rong Liu, H. (2020). *Emotional responses and coping strategies of nurses and nursing college students during COVID-19 outbreak. MedRxiv*.

[11] Williams, S. N., Armitage, C. J., Tampe, T., & Dienes, K. (2020). Public perceptions and experiences of social distancing and social isolation during the COVID-19 pandemic: A UK-based focus group study. MedRxiv

[12] Mugon, J., Struk, A., & Danckert, J. (2018). A failure to launch: Regulatory modes and boredom proneness. *Frontiers in Psychology*, 9, 1126