

THE EFFECT OF ONLINE AND OFFLINE LEARNING METHODS ON THE PSYCHOLOGICAL IMPACT OF STUDENTS

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Abstract

The Covid-19 pandemic that hit the world, Indonesia and Aceh Province has impacted various sectors. Not only the economic sector, the teaching and learning process is also disrupted. The teaching and learning process cannot be done face-to-face, to prevent the spread of the corona virus. Anticipating the transmission of the virus, the government has issued various policies, such as isolation, social and physical distancing to large-scale social restrictions (PSBB). The purpose of the study was to identify whether the influence of online and offline learning models on the psychological impact of STIKes Medika Nurul Islam students. The type of research used is quantitative with a one-sample quasi-experimental design. The number of respondents in this study amounted to 160 students with sampling techniques using random sampling techniques. In this study researchers assessed the psychological impact of students with 3 aspects, anxiety, stress and depression using a watershed questionnaire. The results of this study showed there was an influence of online and offline learning on the psychological impact of students with a value of < 0.05 . student anxiety was obtained p value 0.010, student stress was obtained p value 0.023, and student depression was obtained p value 0.001. From the results of this study that there is an influence of online and offline learning methods on the psychological impact of students.

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1. Introduction

Coronavirus disease 2019 (Covid-19) outbreak that has hit 215 countries in the world, this pandemic condition affects all sectors of life, as well as the education sector. To fight Covid-19 the government has banned crowding, social distancing and maintaining physical distancing, wearing masks and always washing hands. In Aceh in early October 2020, the number of cases was 5,062 and 3,057 people recovered accumulated. Pidie Covid-19 Task Force data on October 7, 2020, recorded 320 cases of coronavirus in Pidie with details of 199 positive, 19 died and 102 recovered. Coronavirus cases continue to surge in Pidie. This is because several factors include people who consider trivial or do not believe in the corona virus, so that socialization provided directly or through various media, is not obeyed by most of the community.

Mid-September the Pidie District Education Office again extended the teaching and learning process at home or online students due to the impact of the Corona Virus (Covid-19) which is currently still not abating, as long as the status of Covid-19 is still orange and red. The online learning process refers to

the Joint Decree (SKB) of 4 ministers on the adjustment of learning policies during the Covid-19 pandemic. Unless the status of the yellow and green zones can be done face-to-face learning but with the approval of the local government.

The impact of the COVID-19, causing the economy in Indonesia to decline, dropped the rupiah exchange rate, the price of goods rose, especially medical devices. It also affects the education system in Indonesia. The result of the decision of the minister of education that all learning activities in both schools and colleges are carried out at home through available applications. The Minister of Education issued Circular Letter No. 3 of 2020 on the Prevention of Corona Virus Disease (COVID-19) in the Education Unit stating that it closed schools and universities. (Kemdikbud RI, 2020).

Through the Ministry of Education and Culture, the Government has prohibited universities from carrying out face-to-face (conventional) lectures and ordered to hold lectures or online learning (Circular Letter of the Ministry of Education No. 1 of 2020). Universities are led to be able to organize online or *online* learning (Firman, F., & Rahayu, S.,

2020). It was also responded quickly by STIKes Medika Nurul Islam – Sigli by issuing a letter of instruction on preventing the spread of corona virus disease (Covid-19) in the High School environment.

Online learning is defined as a computer network that is interconnected with other computer networks to all corners of the world. This media facilitates training and learning activities and the process of teaching and learning formally and informally, in addition to also facilitating the activities and communities of electronic media users, such as the internet, intranet, CD-ROM, Video, DVD, television, HP, PDA, and so on (Darmawan, 2012). In online application, lecturers and students have their own roles. Lecturers have a role as facilitators and guides in learning activities, while students have roles as knowledge constructors, independent learners, and problem solvers (Bintaro & Kusir) in Maudiarti, 2018.

Based on the results of an initial survey conducted on 20 students, 13 students were often late to respond to material provided through Google Classroom. And the ineffectiveness of learners using Zoom meetings, related to the availability of internet networks. The purpose of this study was to look at the influence of online and offline learning methods on the psychological impact of STIKes Medika Nurul Islam students.

2. Materian and Method

The type of research used is quantitative design with quasi design approach pre and post one sample test experiment. The population in this study was a student of STIKes Medika Nurul Islam. The sampling techniques in this study used a simple random sampling technique in which all total populations have the same right to become researchers. The sample number in the study amounted to 160 students conducted between June and August. The number of respondents is obtained by the lottery method of taking numbers, if the lottery taken by the respondent contains numbers then selected into a sample, and if taken by the respondent does not contain numbers then it is considered not selected to be a sample. In this study there were 2 groups of students who were compared, namely the study group with online methods by using the ZOOM application amounting to 80 respondents and the offline learning group in the room amounted to 80 respondents, All respondents both online and offline learning agreed to be respondents by signing a letter of approval of respondents at the STIKes Medika Nurul Islam Campus. Researchers measured student psychology by using watershed questionnaires after completing the online and offline learning process by using watershed questionnaires.

3. Result and Discussion

Overview of the Psychological Impact of a Student

Based on table 1, the majority of students experienced moderate anxiety 32 respondents (40%)

with online learning methods and the majority of students experienced mild anxiety 39 respondents (49%) with offline learning methods.

Table 1. Overview of The Psychological Impact of Students Assessed Based on Anxiety Levels with Online and Offline Learning Methods

Variable	Learning Online (n=80)		Defenders Offline (n=80)	
	N	%	n	%
Anxiety				
Normal	21	26	31	39
Light	27	34	39	49
Currently	32	40	10	12
Heavy	0	0	0	0
Total	80	100	80	100

Table 2. Overview of The Psychological Impact of Students Assessed Based on Stress Levels with Online and Offline Learning Methods

Variable	Learning Online (n=80)		Defenders Offline (n=80)	
	n	%	n	%
Stress				
Normal	17	21	34	43
Light	26	33	41	51
Currently	37	46	5	6
Heavy	0	0	0	0
Total	80	100	80	100

Based on table 2, the majority of students experienced moderate stress 37 respondents (46%) with online learning methods and the majority of students experienced mild stress 41 respondents (51%) with offline learning methods.

Table 3. Overview of The Psychological Impact of Students Assessed Based on Depression Levels with Online and Offline Learning Methods

Variable	Learning Online (n=80)		Defenders Offline (n=80)	
	n	%	n	%
Depression				
Normal	28	35	62	77
Light	43	54	18	23
Currently	9	11	0	0
Heavy	0	0	0	0
Total	80	100	80	100

Based on table 3, the majority of students experienced mild depression 43 respondents (54%) with online learning methods and the majority of students experienced normal depression 62 respondents (77%) with offline learning methods.

Difference in Average Student Anxiety with Online Learning Methods and Offline Learning

Based on table 4 can be seen the results of the *Paired t Test* analysis showed that there was a difference in the average psychological impact on

students with online learning methods with a value of < 0.05 .

Table 4. The difference in average student anxiety with online learning methods and offline learning.

Variable	Group	Min-Max	P Value
Anxiety	Learning Online (n=80)	7-14	0,010
	Learning Offline (n=80)	5-12	0,036
Stress	Learning Online (n=80)	14-25	0,023
	Learning Offline (n=80)	9-19	0,030
Depression	Learning Online (n=80)	9-20	0,001
	Learning Offline (n=80)	5-15	0,037

Anxiety

The results of the data above show that the anxiety of students with online learning min-max value is 7-14 and in students with the min-max offline learning method is 5-12. This shows that student anxiety with online learning methods experienced a significant difference with a value of $0.010 < 0.05$, and in students with offline learning methods $0.036 < 0.05$.

The results of this study are in accordance with the results of research conducted by Saddik, Basema et. Al, (2020) student anxiety levels increased due to online learning methods they ran during the Covid-19 pandemic. Anxiety is a form of response to certain unwanted stimuli that can occur anywhere and which is difficult to observe directly but this anxiety can be identified through behavioral changes (Saddik et. al, 2020).

Anxiety felt by students especially because the online learning process decided by the government makes it difficult for them to adjust because the online learning process is not decided suddenly in order to break the chain of spread of the corona virus. In addition, academic pressure and financial constraints are factors that affect student anxiety (Al Saadi et. al, 2017).

Anxiety and depression of america states that college is a fun place for students but during the Covid-19 pandemic students have many challenges and can cause students to experience anxiety. This is because it is necessary to make adjustments to students with the transition period from the face learning process to the learning process of daring (Al Saadi et. al, 2017).

Stress

The results of the data above show that the stress of students with online learning min-max value is 14-25 and in students with the min-max

offline learning method is 9-19. This shows that student stress with online learning methods experienced a significant difference with a value of $0.023 < 0.05$, and in students with offline learning method $0.030 < 0.05$.

The stress response to each individual will be differently influenced by personality, stressor characteristics and coping strategies that are not appropriate will be able to be the cause of stress. Sharif et. Al, (2007) said the ability of a person's personality factors is very influential on how the individual processes stressors that can cause different stress impacts.

A factor that causes stress in students is distance learning that can consume a lot of internet quotas. Online learning methods can burden students in terms of cost and mental (Abbas, 2020). Some students experience this due to the limited cost of buying internet quotas. This condition is aggravated by the financial condition of families who are troubled by pandemic conditions (Al Dabal, et. al, 2010).

In addition, the stress that occurs in students is caused by the number of subject matter and lecture assignments that they must learn, lack of explanation from lecturers, the quality of teaching lecturers, the media used when teaching, the limitations of internet networks in some areas so that they have little difficulty in online lectures. Teaching methods and learning environments are one of the main factors causing stress for students (Al Dabal, et. al, 2010).

Depression

The results of the data above show that the depression of students with online learning min-max value is 9-20 and in students with offline learning methods the min-max value is 5-15. This shows that student depression with online learning methods experienced a significant difference with a value of $0.001 < 0.05$, and in students with offline learning method $0.037 < 0.05$.

The results of this study are in line with the results of a study conducted by Maia, et, al (2020) which stated that students assessed during the Covid-19 pandemic showed high levels of anxiety, stress and depression compared to the period before the pandemic. This proves that the Covid-19 pandemic has negative psychological effects for students (Maia et. al, 2020).

Many cases of depression are found in students that lead to death caused by online learning. The results of research conducted by Iga et, al (2020) the factors that cause depression in school-age children are the pressures experienced every day, the school environment, the family environment and financial health. From the results of the research can be concluded during the Covid-19 pandemic the online learning process causes depression in children because the tasks given make them burdened, the family environment and family finances become the

main factor into the problem during the Covid-19 pandemic (Saputri et. al, 2020).

4. Conclusion

From the results of research that has been done, there is a significant influence of learning methods carried out with psychological students, the results obtained by students experience psychological improvements such as anxiety, stress and depression due to online learning, the stress is caused by their daily learning online which makes the lack of social students with friends and the surrounding environment. Family economic factors are also one of the stressors in students because learning online every day makes them have to provide more internet quotas compared to offline learning.

5. Suggestion

The Covid-19 pandemic requires us to be able to adapt to the situation and conditions experienced today, especially for students who are studying very vulnerable to psychological disorders. The institution must provide a place of counseling for students, so that the problems that occur in students can be solved.

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