Online Learning During the Covid 19 Pandemic for University Students: Academic Stress and Positive Affect

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Abstract—**The declaration of COVID-19 as a global pandemic by WHO resulted in implementing a lockdown to suppress the spread of the virus. This has provided new things in the implementation of daily life, especially in the world of education. The performance of learning is usually carried out directly but is currently carried out indirectly through various technological applications. During the COVID-19 pandemic, students must adapt to using the application to participate in the implementation of online learning. This study aims to determine the impact of online learning during the COVID-19 pandemic on students. The method used in this research is a literature review obtained through Google Scholar, APA PsycNet, and ScienceDirect conducted in September 2021. The results of the analysis of 17 journals show that most students experience academic stress, and only a tiny proportion feel a positive affect on online learning during the covid 19 periods. It is recommended that efforts be made to reduce academic stress such as counseling, exercise, adequate rest, virtual group counseling, and doing positive things.**

Keywords— Online learning; COVID-19 pandemic; academic stress; students; positive affect

I. INTRODUCTION

Covid-19 has been declared a global pandemic by WHO, which impacts all aspects of life. The high spread of COVID- 19 has forced the government to take policies that impact multiple fields, especially education. The transmission is fast and cannot be seen with the naked eye, causing everyone to wear a mask, keep a distance and carry out the health protocols that the government has set. One of the consequences of this is by closing schools and universities in carrying out face-to-
Facelearning directly.

Learning in the network (online) was chosen to carry out teaching activities during this COVID-19 pandemic. Online learning occurs in a network where teachers and students do not meet face to face [1]. Carrying out online education certainly has an impact on students. Positive and negative impacts can occur in the transition from face-to-face learning to online learning. Of course, it will significantly affect the learning process and its evaluation.

One of the negative impacts that will occur is related to the online learning process. The shift to online learning will make it difficult for students, less than optimal, and physically and psychologically limiting, resulting in an atmosphere not conducive to learning and achievement [2]. The psychological problems students face are experiencing pressure in participating in total online learning [1]. University students tend to experience psychological pressure and stress. One of the psychological pressures or stress that occurs to students is academic stress. Research conducted by [3] states that stress is part of modern life at this time. Based on this, it is a natural thing that stress occurs in students who undergo online learning.

Academic stress is mental and emotional stress that occurs due to the demands of campus life [4]. Various factors can cause academic stress to students, especially during this COVID-19 pandemic. Research conducted by [5] states that the symptoms of stress that occur in students increase during the COVID-19 pandemic. The increase in academic stress in students during the COVID-19 pandemic will cause various effects on students.

Based on research, the new educational concept order, adapting to the new social order, and many tasks cause academic stress [6]. The occurrence of these problems will certainly not have a good impact on the process and results of online learning during the COVID-19 pandemic. In addition to the negative impacts such as academic stress, there will be positive impacts.

Differences in the environment, parental support, financial ability, and other factors will affect the impact that occurs on students who carry out the online learning process. This supportive atmosphere will have a positive affect on students in online learning during the COVID-19 pandemic. Based on research conducted by [7], when students experience high academic stress, the positive affect will be below, and vice versa if the positive affect is high, the academic stress is low.

Positive affect is the meaning of life that has a positive contribution to the individual [8]. In this case, students experience situations that make them feel happy, happy, meaningful and others. According to research, the positive affect that occurs naturally in carrying out tasks shows that a positive mood can function as readiness in living life [9]. Despite life's challenges, this positive affect also refers to the tendency to experience positive emotions and positively interact with others.

Based on this, the positive affect is the impact on students undergoing the online learning process. The change in the learning process from face-to-face to online learning is expected to be something new and exciting for students. The use of technology can explore students' abilities to keep up with the current developments. In addition, students can be more

creative in carrying out learning during the COVID-19 pandemic.

From the description above, the question arises that whether students experience academic stress or a positive affect on online learning during a pandemic. The studies that have been carried out will explain the impact that occurs on students. Individual circumstances, both from internal and external factors, will affect the results of online learning during the covid 19 periods.

The researchers felt it was important to discuss more online learning during the COVID-19 pandemic among university students. The results of this literature review will describe what impacts students have on the implementation of online learning during the covid 19 pandemics. In this literature review, the author limits the discussion by only mentioning:

1. What is the impact of online learning during the COVID-19 pandemic on students who experience academic stress?

2. What is the impact of online learning during the COVID-19 pandemic on students who experience a positive affect?

II. METHODOLOGY

This research method is a literature review taken from national and international journals. This study draws conclusions or overall conclusions from a literature review about online learning during the COVID-19 pandemic among students. The keywords used are "online learning OR online learning," "pandemic covid 19", "impact of online learning OR online learning affect," "academic stress OR academic stress," academic success." The literature used was searched in September 2021. The type of data in this research is secondary data, namely data obtained from the research results that previous researchers have carried out. The data sources of this research are in the form of national and international journals with the theme of the affect of online learning during the COVID-19 pandemic among university students. Electronic databases used to search literature are Google Scholar, APA PsycNet, and ScienceDirect.

The inclusion criteria for the collection of journal articles are all those related to the population of university students who carry out online learning, the impact or affect of online learning on university students during the covid 17 pandemics. In addition, all journals must be published in 2020 since covid-19 was declared a world pandemic, either in Indonesian or English.

Based on the systematically carried out analysis, it shows 17 articles that match the identification in this study. Data analysis in this study is to pay attention to the research result from those articles. The impact or effect of the research results is grouped accordingly with the thematic categories cross- referenced in 17 articles to identify common themes.

III. RESULT AND DISCUSSION

A. Study Characteristics

The following are selected studies for this literature review.

TABLE I.   TABULATION OF RESEARCH USED IN THE LITERATURE REVIE

No.	Authors	Research Method	Data base	Partici pants	Important Findings
1.	Deliviana, E., Erni, M. H., Hilery, P. M., & Naomi, N. M (2020)	Literature review	Google Scholar	-	During online lectures, students experience stress and even have an impact on their mental health and have difficulty sleeping because they have to do so many assignments from online lectures
2.	Fauziyyah, R., Awinda, R. C., & Besral, B (2021)	Literature review	Google Scholar	-	Learning during the COVID-19 period has become a burden that causes stress and anxiety for students
3.	Syarifudin, A. S (2020)	Literature review	Google Scholar	-	Students who have never taken online lectures are confused and ultimately do not complete the given task
4.	Browning, M. H., et al. (2021)	Cross-sectional design	Google Scholar	2534 students	Respondents experienced a high level of psychological impact
5.	Fitria, P. A., & Saputra, D. Y (2020)	Singel cross-sectional design	Google Scholar	110 students in the first semester	11 students are happy, eight are sad, 16 are confused, 17 are normal, seven are afraid and worried, seven are upset, 31 are bored
6.	Harahap, A. C. P., Harahap, D. P., & Harahap, S. R (2020)	Question naire method	Google Scholar	300 students	the majority of students experience academic stress during distance learning amidst the COVID-19 pandemic conditions

No.	Authors	Research Method	Data base	Participants	Important Findings
7.	Hutauruk, A. J (2020)	Descriptive qualitative approach	Google Scholar	Six respondents who represented several batches of students	Constraints faced by students in the online learning process include obstacles in the field of internet networks, limitations of online learning application features, and obstacles in terms of learning services that make students stressed
8.	Putri, Rizky Muharany, et al. (2020)	Analytical observation	Google Scholar	470 students	Courageous learning causes students to experience symptoms of somatoform disorders
9.	Firman (2020)	Qualitative	Google Scholar	Nine samples, three lecturers, and six students	The implementation of online learning has an impact positive on student learning independence
10.	Hasanah, Uswatun (2020)	Analytical descriptive approach	Google Scholar	190 students	The majority of psychological problems experienced by students in the online learning process are anxiety
11.	Rusdiana, E., & Nugroho, A (2020)	Quantitative approach	Google Scholar	undergraduate students in Law	Online learning during the COVID-19 period had the impact of getting attention, and students became enthusiastic, diligent and interested in online learning.
12.	Lancaster, M., & Arango, E (2021)	Cross-sectional	APA PsycNet	225 undergraduate students	Most college students experience increased stress and sleep disturbances during COVID-19
13.	Besser, A., Flett, G. L., & Zeigler-Hill, V (2020)	Cross-sectional	APA PsycNet	1,21, 945 women and 272 men	students have challenges in adapting to sudden and abrupt transitions from traditional learning approaches to stressful online learning approaches

No.	Authors	Research Method	Data base	Participants	Important Findings
14.	DeRosset, T., Marler, E. K., & Hatch, H. A (2021)	Quantitative research methods	APA PsycNet	304 participants	Students reported higher levels of depression, anxiety, and stress compared to non-students.
15.	Husky, M. M., Kovess-Masfety, V., & Swendsen, J. D (2020)	Survey method	ScienceDirect	291 students	Samples experienced increased anxiety and moderated to severe stress during the pandemic
16.	T. Szopiński and K. Bachnik (2021)	Survey method	ScienceDirect	317 students	Poor internet connectivity made it difficult for them to participate in online learning and it was noted that some students difficulties using some functions of the MS Teams software
17.	M. Maqableh and M. Alia (2021)	Survey method	ScienceDirect	1336 students	Surveys' analysis results show that students had several problems such as technological, mental health, time management, and balance between life and education.

B. Stress Academic

Academic stress is divided into two components, namely biological and psychosocial. This biological component arises as a result of stress that causes physiological reactions. Next is the psychosocial component, which is cognitive behavior, emotional and social [10].

a) Biology

The human body's response is the sympathetic nervous system and endocrine, nervous system that causes stress. This stress arises from physiological reactions, including headaches, increased heart rate, and shaking legs.

b) Psychosocial
(a) Cognitive behavior

Individual cognitive reactions when dealing with stress, difficulty concentrating, forgetfulness, feeling useless, confused, hopeless, negative thinking, decreased achievement, not enjoying life, and having difficulty making decisions happened to students who underwent online learning during the covid 19 periods.

(b) Emotional

Emotional reactions that indicate fear and psychological or physical discomfort and stress can trigger sadness or depression

(c) Social

Shows changes in individual behavior both with other individuals and with their social environment.

C. Positive Affect

Positive affect includes attentive, interested, alert, excited, enthusiastic, inspired, proud, determined, strong, and active [11].

D. Key Findings

The impact of online learning during the COVID-19 pandemic on students: academic stress

TABLE II.   THE IMPACT OF ONLINE LEARNING DURING THE COVID-19 PANDEMIC ON STUDENTS: ACADEMIC STRESS

No.	Indicators		Research
1.	Biology		Putri, Rizky Muharany., dkk (2020), Lancaster, M., & Arango, E (2021), Deliviana., et al (2020)
2.	Psycho social	Cognitive behavior	Fitria, P. A., & Saputra, D. Y (2020), Fauziyyah, R., Awinda, R. C., & Besral, B (2021), Browning, M. H., et al (2021), Syarifudin, A. S (2020), Harahap, A. C. P., Harahap, D. P., & Harahap, S. R (2020), Hasanah, Uswatun (2020), Besser, A., et al (2020), M. Maqableh and M. Alia (2021)
		Emotional	Fauziyyah, R., et al (2021), DeRossett, T., Marler, E. K., & Hatch, H. A (2021), Husky, M. M., et al. (2020), Lancaster, M., & Arango, E (2021), Deliviana., et al. (2020), M. Maqableh and M. Alia (2021)
		Social	Besser, A., et al (2020), Hutauruk & Sidabutar (2020), T. Szopiński and K. Bachnik (2021), M. Maqableh and M. Alia (2021)

Based on the table above, it can be concluded as follows:

a) Biology

Based on research that has been done, students experience somatoform disorder symptoms, which are characterized by physical complaints, such as chest pain and headaches that interfere with daily life [12]. Another study also states that students experience headaches, causing difficulty sleeping [13]. Furthermore, research conducted by [14] also stated that students experience pressure in terms of feelings resulting in heart rate.

b) Psychosocial

(a) Cognitive behavior

Sleep patterns caused by working on assignments that pile up occur in students can cause stress [14]. Research conducted by [15] also shows that students feel sad, confused, afraid, anxious, annoyed, and bored. Furthermore, research conducted by [2] showed that the ability of students to adapt from traditional learning to online learning made students feel that they did not enjoy life. Students who take online learning also feel anxious, so they

feel useless [16]. The results of the same research were also carried out by [15]; [17]; [18]; [19]; [20]; [21].

(b) Emotional

Students who carry out online learning during the COVID-19 pandemic also feel anxiety, depression in carrying out lectures [16]. Other studies also show that students experience discomfort, causing sleep disturbances [13]; [14]. Students also mentioned that higher levels of depression, anxiety when undergoing online learning [22]. Subsequent research also states that students experience increased anxiety, which causes discomfort in undergoing the learning process during the COVID-19 period [23]; [21].

(c) Social

The research results also stated that there were changes in individuals due to adapting from face-to-face learning to online learning [2]. This is also in line with research conducted by another researcher [24]. The research results also stated that Poor internet connectivity made it difficult for them to participate in online learning and it was noted that some students difficulties using some functions of the MS Teams software [25]; [21].

The impact of online learning during the COVID-19 pandemic on students: positive affect

TABLE III.   THE IMPACT OF ONLINE LEARNING DURING THE COVID-19 PANDEMIC ON STUDENTS: POSITIVE AFFECT

No.	Indicators	Research
1	Attentive	Firman, F (2020), Rusdiana, E., & Nugroho, A (2020)
2	Interested	Firman, F (2020), Fitria, P. A., & Saputra, D. Y (2020), Rusdiana, E., & Nugroho, A (2020)
3	Alert	-
4	Excited	Fitria, P. A., & Saputra, D. Y (2020)
5	Enthusiastic	Firman, F (2020), Rusdiana, E., & Nugroho, A (2020)
6	Inspired	-
7	Proud	-
8	Determined	Rusdiana, E., & Nugroho, A (2020)
9	Strong	-
10	Active	-

Based on the table above, it can be concluded that this is in line with research that has been done that students become more active, attentive, interested, and enthusiastic in learning [26]. Other studies also revealed that students became interested and excited in carrying out learning [15]. Subsequent research also stated that online learning during the COVID-19 period had received attention, students became enthusiastic, determined, and interested in online learning [27].

IV. CONCLUSION

A. Conclusion

Based on the results of this literature review, online learning during the COVID-19 pandemic among students. Most students experience academic stress and somatoform disorders, characterized by physical complaints, such as chest pain and headaches that interfere with daily

life. Students who learn during the COVID-19 pandemic also experience academic stress marked by difficulty sleeping, feeling sad, confused, afraid, anxious, annoyed, and bored. Furthermore, students also feel anxiety, depression in carrying out lectures, changes in individual behavior both with other individuals and their social environment due to adapting from face-to-face learning to online learning. In addition to experiencing academic stress, a few students also experienced a positive affect in carrying out online learning during the COVID-19 pandemic, which was marked by students becoming more active, happy, and comfortable in carrying out lectures.

B. Limitations

This literature review research does not focus on students in Indonesia only. The results of this literature review also take the results of international research. This becomes a limitation in an environmental grouping or student habits in implementing online learning during the COVID-19 pandemic.

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