



(MUDIMA)



Student Perceptions Regarding E-Learning During the Covid-19 Pandemic on the Level of Technostress

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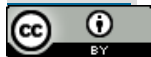
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ABSTRACT

The problem studied in this study was regarding the level of student technostress during the COVID-19 pandemic. This study aims to determine the effect of student perceptions of e-learning during the COVID-19 pandemic on students' technostress levels. This study uses quantitative research methods with explanatory survey research design. The population in this study were students of the economic education class 2019-2021. The sampling technique is simple random sampling, so a sample of 180 students is obtained as respondents in this study. Data collection was obtained by distributing questionnaires. The data analysis technique used is a simple linear regression test. The result of this study indicates that students' perceptions of e-learning and students' levels of technostress are in the high category. The study's result stated a significant effect of students' perceptions of e-learning on students' technostress levels with a sig value of $0.000 < 0,05$. In other words, e-learning contributes to student's technostress by 20,7%

INTRODUCTION

In December 2019, the first case of mysterious pneumonia was reported in Wuhan, Hubei Province, under Covid-19. COVID-19 was first reported in Indonesia on March 2, 2020, with two cases. The number of COVID-19 cases in Indonesia is increasing daily, so this situation has brought extraordinary changes to all levels of society. The high number of COVID-19 cases has prompted the government and the parties involved to implement policies to reduce social activities carried out by the community and urge the public to maintain distance and avoid activities that involve large numbers of people. This policy was taken to break the chain of spread of COVID-19, which at that time was peaking in cases in Indonesia.

In the 21st century, e-learning is a common thing because, with the development of technology, everything has become easier to do, including meeting online in terms of learning, and this follows the opinion of Pakarbudi & Setiawan (2016: 1), explaining that "e-learning or online learning is a revolution in information and communication technology that has been widely applied in the education sector." E-learning has become a medium for teaching and learning without direct face-to-face contact; therefore, many educational institutions

worldwide, especially in Indonesia, implement the e-learning process. According to Septiani (2018:93), "e-learning has several benefits in learning to increase absorption of the material being taught, increase active participation, increase students' independent learning abilities and improve the quality of learning material." This is in line with the opinion of Lilis et al. (2020: 74) that "the implementation of learning through e-learning is considered quite effective because the existence of the e-learning system makes lecturers and students able to communicate more optimally, in addition to exchanging ideas, sharing information and discussing the material certain things can also be done through this system." With these conditions, mastery of learning material can be further strengthened, and learning effectiveness can be increased. However, this is inversely proportional to the facts found in the field because the facts show that economic education students from the 2019-2021 class of Siliwangi University feel that the e-learning process is less effective. The following is a comparison of the effectiveness of e-learning with conventional learning:

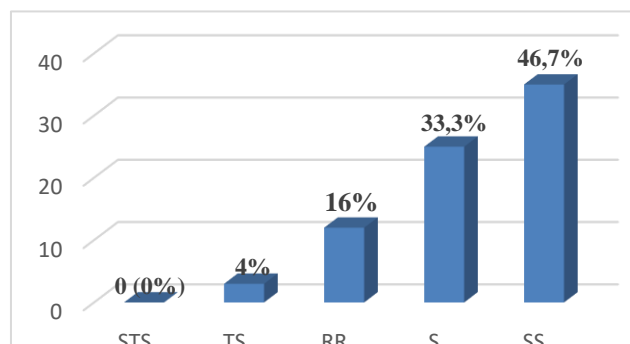


Figure 1. Effectiveness of E-Learning VS Conventional Learning

The graphic image above results from a survey conducted by researchers among economic education students at Siliwangi University. In this graph, 46.7% of economic education students strongly agree that face-to-face (conventional) learning is more effective than e-learning. This can

be seen from the achievement index of economics education students from the 2019-2021 class, when e-learning experienced a decline on average each semester. The following is the GPA data for economics education students:

Table 1. GPA for Odd Semester 2021/2022

No	GPA	Number of Students	Percentage (%)
1	3,00 – 3,20	4	5,3%
2	3,30 – 3,50	31	41,3%
3	3,60 – 3,80	29	38,7%
4	3,90 – 4,00	11	14,7%
Jumlah		75	100%

The data above shows that of the 75 students, there were 46.6% of students who got an achievement index below 3.50, and 53.4% got an achievement index above 3.50. Meanwhile, in the previous semester, out of 75 students, only 37.3% got an achievement index below 3.50, and 62.7% got above 3.50; this means that in the current semester, more students got an achievement index below 3.50 than in the previous semester and fewer students who got an achievement index above 3.50 compared to the previous semester. Based on table 1 During the e-learning process, students experience a decline in their achievement index each semester.

Apart from causing a decrease in student achievement indexes, the shift from conventional learning to e-learning also drastically impacts learning styles and changes in students' psychological conditions. In e-learning, students are required to adapt and operate various technological platforms that support e-learning quickly, responsively, and intelligently and are expected to continue to follow technological developments that continue to develop because, in the circumstances like this, technology is the main facility in implementing e-learning; this is what makes students stressed and stressed by the existence of e-learning which requires students to be versatile in using technology. Based on the results of pre-research conducted on 75 economic education students from the 2019-2021 class, as many as 64% of students strongly agreed that they felt stressed or depressed when taking part in e-learning during the Covid-19 pandemic, 25.3% of students were unsure if they feel stressed when participating in e-learning, 8% of students do not agree that they experience stress

when participating in e-learning, and 2.7% of students strongly disagree that they experience stress due to e-learning.

Students who feel stressed and depressed when using or dependent on technology usually suffer from technostress. Technostress is a disease caused by a person who cannot adapt to the various types of technology currently emerging or vice versa. Technostress can also be a disease that arises because a person is highly dependent on technology. Thus, students can experience symptoms of technostress because they cannot adapt to current learning technology. The symptoms of technostress, according to Chiappetta (2017:3), "are physical symptoms and psychological symptoms. "Physical symptoms during e-learning include headaches, tingling, difficulty resting, muscle pain in the hands and neck."

Based on data from pre-research on 75 economic education students from 2019-2021, it shows that 89.3% of students experienced physical symptoms of technostress, 6.7% of students were doubtful if they experienced physical symptoms of technostress, and 4% of students did not experience symptoms of technostress. Meanwhile, "psychological symptoms of technostress are difficulty concentrating, feeling panicked or anxious, easily angered, quickly bored, tired, becoming moody and neglectful of time." Based on pre-research data on 75 economic education students from 2019-2021, it shows that 85.3% of students experienced psychological symptoms of technostress, 5.3% of students were unsure about experiencing psychological symptoms of

technostress, and 9.4% of students did not experience symptoms. psychological technostress.

Thus, technostress has a negative impact arising from technology use. This follows Tarafdar's opinion in Mukhtar & Ismail (2019:76) that "technostress is excessive use of technology and has the impact of causing stress on activities and decreasing performance." This research aims to determine the influence of student perceptions regarding e-learning during the COVID-19 pandemic on students' levels of technostress.

METHODS

The method used in this research is quantitative survey research with a causal-explanatory research design. This research was carried out for 9 months, from March to November. It was conducted on Economic Education students at the Faculty of Teacher Training and Education at Siliwangi University located at Jl. Siliwangi No.24 Kahuripan, Tawang District, Tasikmalaya City.

The population is the entire unit to be analyzed. The population in this research is Siliwangi University Economics Education students class

2019, 2020, and 2021, totaling 325 students. While the sample is the number of respondents or informants studied, the sample in this study was 180 students. The sampling technique in this research uses a simple random sampling technique, namely a random sampling technique, without paying attention to the strata in the population. The data collection technique in this research is using a four-scale Likert scale questionnaire. Meanwhile, the data analysis technique in this research is the first prerequisite test for classical analysis, including the normality test, linearity test, and heteroscedasticity test. The second statistical analysis test uses a simple linear regression test, coefficient of determination test (R²), and partial test (t-test).

RESULTS AND DISCUSSION

The research was carried out by distributing questionnaires to 180 economic education students from the 2019-2021 class who were respondents in this research, so the results of the data obtained can be described in Table 2.

Table 2. Technostress Interval Level Value

Scale	Category
4.320 – 7.560	Very Low
7.560 – 10.800	Low
10.800 – 14.040	High
14.040 – 17.280	Very High

Based on the results of data processing by researchers, it is known that the total score of answers from respondents regarding technostress is 12,038, so it falls into the interval 10,800 – 14,040; this shows that the technostress of economic education for the 2019-2021 class is included in the high category. The highest level of technostress

occurred in the economic education students class of 2019, with a technostress level of 71.1%. The technostress level of the economic education students class of 2021 was 70.5%, and then the lowest level of technostress occurred in the economic education students class 2020 at 67.7%.

Table 3. E-Learning Interval Level Value

Scale	Category
3.600 – 6.300	Very Low
6.300 – 9.000	Low
9.000 – 11.700	High
11.700 – 14.400	Very High

Based on the results of data processing by researchers, it is known that the total score of answers from respondents regarding students' perceptions of e-learning is 9,935, so it falls into the interval 9,000 – 11,700, so this shows that the e-learning perceptions of economic education students from the 2019-2021 class are in the high category.

Tabel 4. Simple Regression

Coefficients ^a					
Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.	
1	(Constant)	30.954	5.318	5.820	.000
	E-learning	.651	.095	6.823	.000

a. Dependent Variable: Technostress

From the results of simple linear regression, there is a Tcount value above that is greater than Table, namely $6.832 > 1.97338$ and a significance value of $0.000 < 0.05$, so it can be said that the student perception variable regarding e-learning affects students' technostress levels.

Table 5. Contribution of The Independent Variable to The Dependent Variable

Model Summary ^b				
Model	R	Adjusted R Square	Std. Error of the Estimate	
1	.455	.207	10.043	

a. Predictors: (Constant), E-learning
b. Dependent Variable: Technostress

Based on the table above, the coefficient of determination (R square) is 0.207, which means that the influence of student perceptions regarding e-learning on student technostress levels is 20.7%. The remaining 79.3% was influenced by other variables not examined in this research. E-learning in this research focuses on students' perspectives when implementing e-learning, namely whether the e-learning process is running effectively

or not. Of course, each student's perception of e-learning will be different depending on each student's opinion.

E-learning is learning that makes things easier for lecturers and students because they can learn anywhere without being constrained by location and distance. However, with the shift from classical face-to-face learning to e-learning, students feel stressed because they constantly have to contact technology for extended periods; this causes the intensity of students' relationship with technology to become higher, the increased use of technology means that students are not only in front of the screen to complete assignments but also to attend lectures. This is the main trigger for students who are vulnerable to experiencing symptoms of technostress, these symptoms tend to affect people with jobs or activities that are intensive with technology.

Based on the results of this research, the perception of e-learning seen from four indicators shows that it is in the high category. Technically, Siliwangi University's class of 2019-2021 economic education students have started to adapt to the e-learning process; this can be seen from the recapitulation of respondents' answers that according to them, the e-learning process makes it easier for them to collect assignments from lecturers, this e-learning is easy to access via computer or cellphone, and the features are easy to use. Regarding technical matters, the 2019-2021 economic education students at Siliwangi University encountered no significant obstacles in the e-learning process.

But apart from that, several things trigger economic education students from the 2019-2021 class to experience technostress due to the e-learning process, including 52.2% of them feeling forced to do more academic work than they usually did before because of the workload. There were too many lectures given by lecturers during e-learning during the Covid-19 pandemic; 53.3% of students felt that their work and abilities would be replaced by technological sophistication sooner or later; besides that, 53.9% of students also experienced physical problems (such as headaches, visual disturbances,

tingling, neck pain) due to sitting too long in front of a laptop during the e-learning process. Another thing that causes students to feel stressed during the e-learning process is that 53.3% of students find it challenging to understand the material when e-learning takes place, and 51.7% of students think that face-to-face learning in class is more effective than e-learning. This is in line with research conducted by Widiyono (2020: 174), which explains that the ineffectiveness of online learning occurs due to too many assignments given by lecturers. Hence, the understanding of the material absorbed by students is not optimal. Students need direct face-to-face learning to receive verbal explanations regarding lecture material from lecturers because discussions in online forums cannot provide a thorough explanation of the lecture material being discussed.

The influence of students' perceptions regarding e-learning during the COVID-19 pandemic on students' levels of technostress is in line with the behaviorist theory of B.F Skinner, which explains that changes in a person's behavior occur due to the stimulus provided. The stimulus in this research is e-learning and behavior change, referring to students' increasing levels of technostress; this is also supported by research conducted by Sunarya (2021:166) regarding "The Relationship between Online Learning and Student Stress Levels During the 2021 Covid-19 Pandemic," which states that online learning significantly affects student stress levels.

The results of this research show new findings regarding the influence of student perceptions regarding e-learning during the COVID-19 pandemic on stress. The type of stress referred to here is technostress, caused by students' inability to cope and get used to information technology, which is a medium to support the smooth running of the lecture process. Technology has a positive impact on the continuity of the e-learning process. Using computers causes physical, physiological, and psychological health problems, such as personal discomfort, anxiety, and panic. Apart from the negative consequences of technostress, research on this problem in education, especially in higher

education, is still limited because most previous research on technostress was conducted on subjects within organizational and work environments.

Based on the explanation above, the researcher states that the student perception variable regarding e-learning has a significant effect with a positive correlation to the level of student technostress; this means that the higher the student's perception regarding e-learning, the higher the level of technostress that students in the Education Department have: economics, Faculty of Teacher Training and Education, Siliwangi University class of 2019, 2020 and 2021.

CONCLUSION

Based on the results of this research, student perceptions regarding e-learning significantly influence the technostress level of economic education students in 2019-2021. The technostress among students majoring in economics education class 2019-2021 at Siliwangi University is techno-overload and techno-insecurity. Based on the results of this research, students should be able to develop and further improve their abilities in using technology healthily in implementing e-learning to minimize things that can trigger technostress. The campus is expected to be able to improve the quality of e-learning both in terms of the materials provided, the learning models, and the media used to attract student enthusiasm in participating in e-learning so that it can reduce students' technostress levels. It is hoped that future researchers will be able to research other variables that influence student technostress or can also carry out more in-depth research on similar topics but in post-COVID-19 pandemic conditions.

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