The Relationship between Understanding of Materials and Burnout with Stress Levels of Nursing Students at Bale Bandung University (UNIBBA) In E-Learning During the Covid-19 Pandemic

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Abstract
Covid-19 has made many changes, especially in the education sector, which has shifted the learning process which is generally carried out face-to-face to e-learning. This system change has an impact on the psychosocial conditions of students who are not familiar with this method, one of which is the increase in student stress. This is caused by various factors, including an understanding of the material provided, learning boredom that arises, and so on. This study aims to determine the level of understanding of the material and the saturation of learning with the stress level of nursing students at Bale Bandung University (UNIBBA) in e-learning during the covid-19 pandemic. The research design used a cross-sectional with a correlational approach. A sample of 86 nursing students aged 17-26 years was taken by purposive sampling. The research instrument used a questionnaire sheet via a google form and a statistical test with Spearman Correlation Rank at an error rate of 5%. The results showed that most of them experienced mild stress (62.8%), almost all students were quite good at understanding the material (76.7%), and almost all of them experienced learning boredom at a moderate level (76.7%). From the results of the Spearman Rank test, it was concluded that there was a relationship between understanding of the material and stress levels (correlation coefficient -0.221, p-value 0.041), and there was a relationship between learning saturation and student stress levels (correlation coefficient 0.353 and p-value 0.001). Thus, the researcher advises students to continue to increase coping stress, especially in the e-learning learning process by controlling the emotional feelings that arise due to the stressful situation.

Keywords: stress level; understanding of the material; learning saturation; College student; Learning E-learning;
Introduction

In the past year, the people of Indonesia and the world have been shocked by the outbreak of a new type of coronavirus (Novel Corona Virus or nCoV), currently officially referred to as COVID-19, which stands for "coronavirus disease that was discovered in 2019" (Okada et al., 2020).

The Covid-19 virus has a wide and fast pattern of spreading to date, March 13, 2021, there have been 119,692,742 Covid-19 cases worldwide, 96,316,941 of them have recovered while 2,653,382 others have died. For case data from 5 countries in Southeast Asia, the Philippines recorded 616,611 Covid-19 cases, Malaysia 320,939, Singapore 60,088, Thailand 26,757, and Vietnam 2,550 cases (Covid et al., 2021).

Positive cases of Covid-19 were detected in Indonesia for the first time on March 2, 2020, when there were two confirmed cases of infection from a Japanese citizen. Until March 2021, Indonesia had reported 1,410,134 positive cases and ranked first in the most in Southeast Asia with 25,987 deaths (Christian & Kristina, 2022).

Data on Covid-19 cases in West Java until March 2021, which were confirmed positive were 229,632 cases, with a death toll of 2,712 people and 193,816 recovered patients. In the Bandung City area, there have been 14,393 confirmed cases of COVID-19, while data in Bandung Regency has recorded 8,930 cases of Covid-19 (Schopow et al., 2021).

Education in the world has also felt the impact of the covid-19 outbreak that occurred, where not a few countries issued lockdown or quarantine policies that affected schools and universities. As a result, children and youth became out of school or universities were temporarily closed for a limited time The government is trying to slow the spread of Covid-19 (Nugroho, 2020).

Various policies including the implementation of Social Distancing in various regions in Indonesia also affect the learning methods carried out during the covid-19 pandemic. As is the policy "Process of Teaching and Learning Activities that has been stipulated in the Circular Letter of the Minister of Education and Culture Number 3 of 2020 concerning Prevention of COVID-19 in Education Units, and Number 36962/MPK.A/HK/2020 concerning Online Learning and Working from Home in the Context of Preventing the Spread of Corona Virus Disease (COVID-19), as well as Circulars and instructions from Head of Region, and Chancellor of each University, ".

Although it has been agreed, that learning is carried out by e-learning, it still causes controversy. With various complaints felt by students during the e-learning learning process, such as not all students having facilities that support learning activities e-learning, Inadequate internet connection, unsupported devices g, and expensive internet quotas, become barriers to e-learning learning. (HA. Maulana, 2020).

Based on a systematic review by Niken Bayu Argaheni (2020) "The impact of e-learning lectures during the covid-19 pandemic on Indonesian students", namely e-learning still confuses students; students become passive, less creative and productive; accumulation of information/concepts on students is less useful; students experience stress; as well as improving students' language literacy skills.
The results of M. Hifzil Muiz's research (2020) "The Influence of Online Lecture Learning Technology in the Covid-19 Era and Its Impact on Student Mentality" found that there was a close relationship between online lectures and the mental attitude of the students participating in the lectures.

According to the journal Systematic Review: "Impact of Online Lectures During the Covid-19 Pandemic on Indonesian Students", NB Argaheni (2020) explained that there were 38.57% of students experienced moderate stress, 28.57% severe stress, and 32.86% experienced stress. light. This feeling of stress is also caused because students find it difficult to understand the material with online learning, as well as because they are worried about contracting Covid-19.

In the journal entitled "Analysis of Academic Stress Levels in Students During Distance Learning in the Covid-19 Period", Ade Chita Putri Harahap et al (2020) conducted research related to stress level analysis on 300 students. It was stated that out of 300 students, 39 students had a high category of academic stress, 225 students had a medium level of academic stress, and 36 students had a low level of academic stress.

In the Journal entitled Academic Burgnout During the Covid-19 Pandemic, Elisabeth Christiana stated that students could experience academic burnout during the Covid-19 pandemic.

Burnout is a state in which a person experiences emotional conditions such as feeling tired and physically exhausted as a result of increasing task demands. Burnout arises as a response to situations that tend to be emotionally demanding. According to Ayala (Christiana, 2020).

The results of Dian Herdiana's (2021) research also show that student boredom is caused by internal factors that come from themselves, such as not being used to learning with online systems, and external factors, such as the monotony of lecturers in delivering material. Stress itself is "[C]conditions for an individual who experiences an imbalance due to a mismatch between what is desired and reality and affects the individual's behavior (Sandra & Ifdil, 2015).

"The problems experienced by students during the Covid-19 pandemic, such as the demands imposed by the online teaching and learning model, made them depressed and eventually caused symptoms of stress" (Muslim, 2020).

From the explanation of the results of the research above, it can be concluded that e-learning can indeed help students in learning activities wherever and whenever, but behind that there are several obstacles that are felt by the students themselves, such as not understanding the material, impaired internet access, physical fatigue. and emotional to the stress that befell students.

This study examines other factors specifically that affect students experiencing stress in online learning methods.
The research method used is quantitative research using a correlational study research design which identifies the variables that exist in one object, with a research chart as follows:

![Research Chart](image)

The population in this study are all students who are actively enrolled in lectures in the Program. Nursing Studies, Faculty of Health, the University of Bale Bandung in the 2020/2021 academic year, totaling 114 people.

The samples in this study were students who actively participated in lectures in the even semesters of the 2020/2021 academic year.

The sampling technique used in this research is Non-Probability Sampling (nonrandom sampling) with the sampling technique using purposive sampling, namely the sampling technique with certain considerations (Putri et al., 2019).

The instrument used in this study used a questionnaire on understanding the material, learning saturation, and the Depression Anxiety Stress Scale (DASS), which was made by Wahit Iqbal (2009).

Research Result

Researchers present the results of research and discussion of research data analysis that has been carried out by researchers, namely:

Based on age, it is known that most of the respondents' ages ranged from 17 - 20 years, and 21 - 23 years. The characteristics of the 86 respondents based on age are as follows:

| No | Age           | F  | Percentage (%) |
|----|---------------|----|----------------|
| 1. | 17 - 20 Year  | 53 | 61.6           |
| 2. | 21 - 26 Year  | 33 | 38.4           |
|    | Total         | 86 | 100            |

*Source: Primary Data Processed by Researchers*

Based on table 1, it can be seen that most of the respondents (61.6%) are 17-20 years old.
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Table 2.
Frequency Distribution of Respondents by Level

| No | Level | Frequency (F) | Percentage (%) |
|----|-------|---------------|----------------|
| 1. | I     | 33            | 38.4           |
| 2. | II    | 23            | 26.7           |
| 3. | III   | 21            | 24.4           |
| 4. | IV    | 9             | 10.5           |
| **Total** | **86** | **100**       |                |

Source: Primary Data Researched by Researchers

Based on table 2 it can be seen that some of the respondents are at level I (38.4%) and some are at level II-IV.

Table 3
Distribution of Respondents’ Frequency by Gender

| Gender | Frequency (F) | Percentage (%) |
|--------|---------------|----------------|
| Male   | 10            | 11.6           |
| Female | 76            | 88.4           |
| **Total** | **86** | **100**       |

Source: Primary data processed.

Based on table 3, it can be seen that almost all of them are female 76 people (88.4%).

Based on the results Spearman Rank coefficient -value is 0.001 or smaller than the alpha value (0.05) so $H_0$ is rejected and $H_a$ is accepted. This means that there is a significant relationship between learning burnout and student stress levels. From the interpretation of the correlation coefficient, the result is 0.353 which is between (0.20 - 0.399). This shows that the relationship between learning saturation and student stress levels has a weak relationship. However, there is a unidirectional or positive relationship, meaning that the higher the learning saturation, the heavier the student's stress level. Thus, it can be concluded that there is a positive and significant relationship between learning saturation and the stress level of UNIBBA nursing students in E-learning.

Discussion

The Relationship between Understanding of Materials and Stress Levels of UNIBBA Nursing Students in E-Learning Learning During the Covid-19 Pandemic

Based on the results of the Spearman Rank test on 86 respondents, with a percentage value of student respondents who have a good understanding of 17 respondents (19.8%), then students who have sufficient understanding are 66 respondents (76.7%), and students who have less understanding are 3 respondents (3.5%). It can be seen that the Spearman Rank coefficient is -0.221*. The statistical test results obtained an -value of 0.041. Then
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It can be seen that the \( p \)-value (0.041) < \( \alpha \) (0.05) so that \( H_0 \) is rejected. Thus, it can be concluded that there is a positive and significant relationship between understanding of the material and the stress level of nursing students, with the strength of the Spearman rank test results, namely that there is a very low relationship between understanding of the material and student stress levels.

Judging by Melani Kartika Sari's research, 2020 Concerning the Stress Level of First Level Nursing Undergraduate Students in Facing the Covid 19 Outbreak and Online Lectures at Stikes Karya Husada Kediri. The stressors that cause the most stress are difficulty understanding material online and fears of contracting Covid-19. This means that understanding the material can be one of the stressors that can cause student stress during e-learning.

Meanwhile, according to the results of Rira Kartika's 2020 research on Factor Analysis of the Emergence of Stress Symptoms in Students Due to Distance Learning During the Covid-19 Pandemic. The causes of the emergence of symptoms of stress in students due to the impact of distance learning during the covid-19 pandemic are lecture assignments, learning environment, noise, limited understanding of the material obtained, not being able to meet loved ones including college friends, internet networks that are constrained, difficulty doing group assignments, unable to carry out hobbies, as usual, piling homework, wasteful internet quota, difficulty coordinating group assignments, no fixed class schedule, unable to carry out hobbies, as usual, piling homework, changes in family relationships, unable to adapt, as well as the boredom experienced during distance learning.

Thus, from the results of the correlation relationship, it is found that there is a significant relationship between understanding of the material and stress levels. This means, that understanding the material can still have an influence or impact and cannot be separated from the problem, namely the level of stress.

The strength of the relationship obtained is very low and has a negative direction, meaning that the correlation between understanding of the material and the level of stress is the opposite. Where this is not in accordance with the initial hypothesis of the study, namely that there is a positive relationship between understanding of the material and stress levels. In this case, it can also mean that the level of stress that occurs may not be fully influenced by the inability of students to understand the material provided online or in e-learning.

With no research that examines the relationship between understanding the material and stress levels, based on the results and other references, researchers can assume that understanding the material can have an impact, as one of the triggering factors for the emergence of student stress in the e-learning learning process. However, it does not have a strong influence on the emergence of student stress levels.

In line with the results of Rira Kartia's research, 2020 there are other factors that cause the emergence of stress symptoms during e-learning learning, some of which are lecture assignments with the intensity of giving assignments that are too frequent while the time limit for collecting assignments is only for a short time, the learning environment.
when they are at home each creates limitations in questioning material that they do not understand, the internet network is constrained because it is a determinant of the success of current learning, internet quotas are wasteful, or cannot adapt to the learning process. Based on these factors, it can be assumed that there are other factors that have a stronger influence on the stress experienced by students during e-learning.

**The Relationship between Burnout and the Stress Level of UNIBBA Nursing Students in E-Learning During the Covid-19 Pandemic**

Based on the Spearman Rank test on 86 respondents, the percentage value of student respondents who experienced moderate burnout was 66 respondents (76.7%), then students who experience light learning saturation with a total of 13 respondents (15.1%), and students who have high learning saturation with a total of 7 respondents (8.1%). It can be seen that the Spearman Rank coefficient is 0.353*. The statistical test results obtained an \( R \) value of 0.001. Then it can be seen that the \( R \) value (0.001) < alpha (0.05) so that H0 is rejected. Thus, it can be concluded that there is a positive and significant relationship between burnout and the stress level of UNIBBA nursing students, with the strength of the Spearman rank test results, namely, there is a low relationship between understanding of the material and student stress levels.

The results of this study are in line with the results of research conducted by Fatmawati, 2018 about the relationship between learning saturation and academic stress. The results of the study with a 95% confidence level showed that there was a positive and significant relationship between learning boredom and academic stress with an \( R \) value \( > R \) Table of \( 0.476 > 0.206 \) and \( p = 0.000 (p <0.05) \))

Furthermore, based on the results of the study by Angela Irena, 2011 regarding the relationship between stress and learning saturation of accelerated class students at Domenico Savio Middle School Semarang based on the results of data analysis obtained a correlation coefficient of 0.326 with \( p <0.05 \), this indicates there is a significant positive relationship between stress and boredom of accelerated students.

This is in line with what was expressed by Mulder (2005), in Fatmawati, 2018 that the negative consequences of learning saturation are damage to academic performance, in the form of bad habits in learning, low learning motivation, irrational cognition, obsessive and compulsive, self-esteem and confidence. low self. Students’ experience of stress if left prolonged and not handled immediately can have a new impact as stated by Silvar (2001) in Fatmawati 2018, namely in the long-term effect of learning boredom which as a result can cause symptoms of academic stress.

The results obtained researchers, researchers assume that the higher the level of student learning saturation, the higher the level of perceived stress. On the other hand, if the level of learning saturation is light, students tend to have a light stress level.
Conclusion

From the results of the Spearman Rank test, it was concluded that there was a relationship between understanding of the material and stress levels (correlation coefficient -0.221, p-value 0.041), and there was a relationship between learning saturation and student stress levels (correlation coefficient 0.353 and p-value 0.001). Thus, the researcher advises students to continue to increase coping stress, especially in the e-learning learning process by controlling the emotional feelings that arise due to the stressful situation.
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