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MENTAL HEALTH IMPACT OF THE COVID-19 PANDEMIC ON THE UNIVERSITY STUDENTS

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Abstract

COVID-19 has spread across the globe, resulting in significant changes in virtually every aspect of life. Previous researchs had shown that changes in the learning process during pandemic Covid 19 cause mental health problems among students. This study aims to reveal the mental health condition of students in terms of gender and learning methods. There were 170 participants in this study (129 women student and 41 men student). Data collection using the Depression Anxiety Stress Scale (DASS) was given via google form. The results showed that there were no significant differences in the levels of depression and anxiety between men and women student. In the condition of stress, there is difference levels stress among gender ($p,0,05$) Women more tend stress than men. The learning method had no influence on the mental health condition of students. In conclusion, the pandemic Covid 19 situation has an impact on stress and depression among students.

Keywords: mental health, Depression, Anxiety, Stress

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BACKGROUND

During the Covid 19 pandemic, the face-to-face learning process was transformed into a distance learning process using electronic media. Since March 2020 the learning process has been changed to online, the face-to-face learning process is planned to start in 2021. However, the high spread of Covid 19 has forced the government to postpone the face-to-face learning process in 2021 (Ihsan, 2021). The distance learning process has an impact on the quality of learning because it is considered less effective in increasing the professional competence of students to achieve the study program targets (Darsono et al., 2020). Another issue that impacts due distance learning is mental health issues.

Mental health issues arose because many people felt limited in their activities during Covid 19 pandemic, thus reducing productivity and meaning life in their communities. Mental health issues are considered important for students because they are expected to bring educational outcomes to society (Mustusilo, 2020). Previous research showed that students who participated in the distance learning process were more than 12 times higher in increasing their risk of stress by 0.458 times (Putri et al., 2020). Other research reports that the factors that become the theme of stress in students are learning assignments, fatigue and boredom at home and online learning processes that are considered boring (Liviana et al., 2020). Changes in learning methods from conventional to long distance cause stress (Hasanah et al., 2020; Andiarna & Kusumawati, 2020).

According Yuwono (2020) the cause of stress during a pandemic is the use of social media and the absence of a good coping strategy to adapt to conditions during the pandemic. Riyanto and Arini (2020) found that 86% of freshly graduated students reported bad conditions for their careers and future due to the recruitment of workers during the Covid 19 pandemic. Mental health issues are an important issue for understanding student conditions so that they can help students overcome obstacles and obstacles to the learning process.

Based on previous research, it is known that the learning process during the pandemic does not only have an impact on the quality of learning effectiveness, it also has an impact on the mental health conditions of students. Therefore, a measured assessment is needed to determine the health condition of students during the pandemic period. Reports on student health conditions can be used as the basis for intervention or policy making in order to improve the quality of mental health and learning during the Covid 19 pandemic.

Method

Sample

The sampling technique used in this study was purposive sampling. Purposive sampling is a sampling technique with certain considerations (Sugiyono, 2018). The criteria for determining the sample are as follows:

- a. Active students
- b. Students are still taking courses
- c. Experiencing distance lecturing
- d. Not doing an internship/Community service

The process of collecting data by distributing mental health scales via google form. google form is spread through social media such as whatsapp student groups. Data collection was conducted from 02 May 2021 to 20 May 2021. There were 182 participant data collected, but only 170 participant data were collected for the research.

Measures

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Socio Demographics characteristics. Through the questioners, participants provided information regarding sex, faculty, method of learning, level of semester.

Mental Health Measurement

Data collection techniques using primary data using the DASS scale. The DASS scale (Depression Anxiety Stress Scale) is a measuring tool for a person's emotional condition. DASS 42 was published by the Psychology Foundation of Australia (2014) and has been adapted in Indonesia by Damanik (2011) by testing 144 participants, with a total reliability value of 0.9483. Depression scale reliability was 0.9053 with correlated items ranging from 0.399 to 0.7831. On the scale of anxiety the reliability value is 0.8517 with correlated items ranging from 0.346 to 0.6547. On the stress scale the reliability value is 0.8806 with correlated items ranging from 0.3532 to 0.873. DASS tested by Damanik (2011) has 41 statements with correlation coefficient values ranging from 0.3994 - 0.7831

DASS 41 is in the form of a Likert scale with the answers to never, rarely, often, always. For answers that have never been given a score of 0, answers are rarely given a value of 1, answers are often given a score of 2, answers are always given a value of 3. The results of the three-dimensional DASS scale measurement are categorized as follows:

Table 1
Categorization between dimensions of the DASS scale

Stress	Anxiety	Depression	Categorization
0-14	0-7	0-9	Normal
15-18	8-9	10-13	Mild
19-25	10-14	14-20	Moderate
26-33	15-19	21-27	Severe
>34	>20	>28	Profound

Data analysis. The statistical analyses were performed using SPSS Statistics for Windows, version 16.

Result

Sociodemographic Analysis

Table 1 presents the sociodemographic characteristics of the participants. Participants were 170, they were largely female (75,9%) and male (24,1%). Picture 1 shows the percentage of depressive state, 41,2% (n=70) were in normal state, 58,8% (n=100) participant had depressive state. 24,1% (n=41) were in mild depressive state, 26,5% (n=45) were in moderate depressive state, 7,6% (n=13) were in severe depressive state and 0,6% (n=1) were in profound depressive state.

Picture 2 shows the percentage of anxiety state, 31,2% (n=53) were in normal state, 68,8% (n=117) participant had anxiety state. 8,8% (n=15) were in mild anxiety state, 32,4% (n=55) were in moderate anxiety state, 18,2% (n=31) were in severe state, 9,4% (n=15) were in profound anxiety state.

Picture 3 shows the percentage of stress state, 64,1% (n=109) were in normal state and 36% (n=61) had stress state. 22,4% (n=38) were in mild anxiety state, 11,8% (n=20) were in moderate anxiety state, 1,8% (n=3) were in severe state.

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Table 1

Sociodemographic Characteristic Sample

Sociodemographic characteristic	N	%
Sex	170	
Female	129	75,9%
Male	41	24,1%
Method of Learning	170	
Daring	139	81,8%
Luring	4	2,4%
Mix (daring and luring)	27	15,9%
Level of Semester	170	
Level 1 (semester 1 &2)	121	71,2%
Level 2 (semester 3 &4)	11	6,5%
Level 3 (semester 5&6)	16	9,4%
Level 4 (up semester 7)	22	12,9%
Faculty	170	
Business and Accounting	47	22,6%
Health	48	28,2%
Psychology	19	11,2%
Education	6	3,5%
Islamic Interdisiplinary	30	17,6%
Social humanities	4	2,4%
Engineering	13	7,6%
Science	3	1,8%

Mental Health Status of Participants

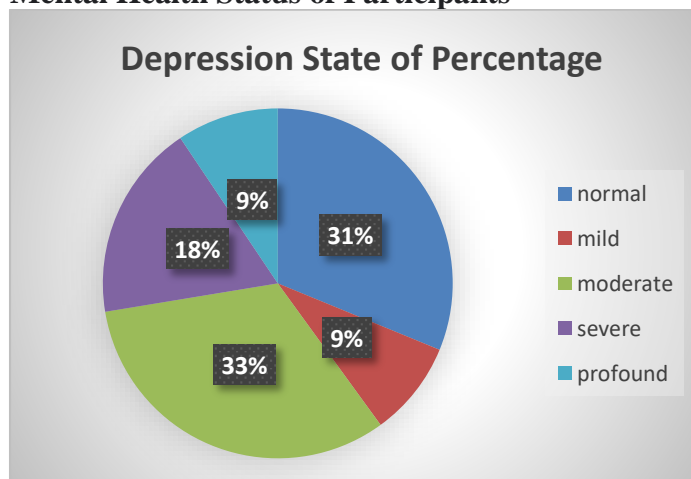


Figure 1
Depressive state percentage

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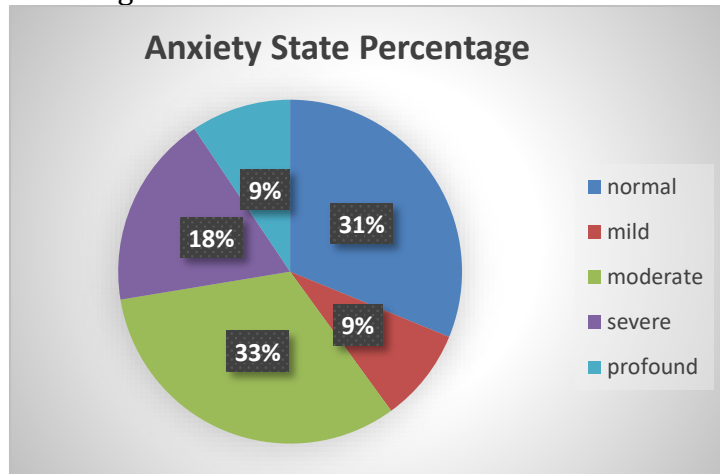


Figure 2
Anxiety state percentage

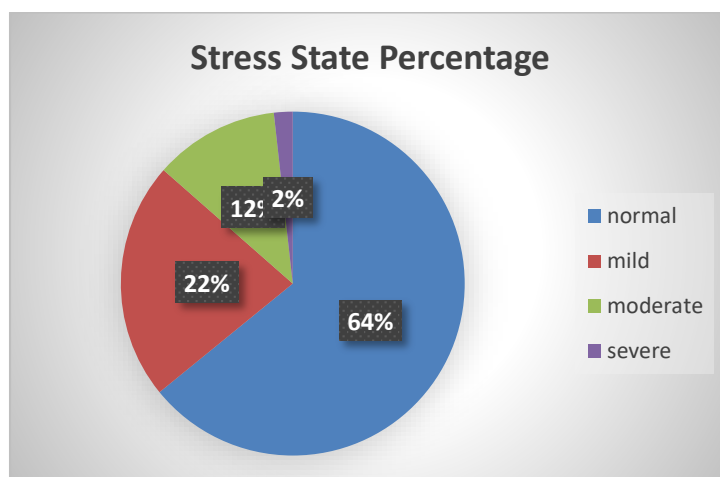


Figure 3
Stress state percentage

The differences of Mental Health Status in terms of gender

On table 2, there was no difference of Depression on man and woman students ($t = -2.148, p = .033$). On table 3, there was no difference of anxiety condition between woman and man students. On table 4, I found that there was difference of average score stress condition between man and woman students ($t = 3.65060, p = .001$). Findings also indicated that woman students had higher stress condition ($M = 13.1628, SD = 6.07864$) than man students ($M = 9.5122, SD = 5.99217$).

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Table 2. Coefficients of the Depression

Categories	N	M	SD	Independent Sample T-Test	
				T	P
Man	41	9.6585	5.21349	-2.148	.033
Woman	129	11.9535	6.17310		

Table 3. Coefficients of the Anxiety

Categories	N	M	SD	Independent Sample T-Test	
				T	P
Man	41	10.0488	5.59442	-1.81168	.114
Woman	129	11.8605	6.59401		

Table 4. Coefficients of the Stress

Categories	N	M	SD	Independent Sample T-Test	
				T	P
Man	41	9.5122	5.99217	-3.65060	.001
Woman	129	13.1628	6.07864		

The differences of Mental Health Status in method of learning

On table 5, there was a finding of analysis of variance (ANOVA) of mental health status (stress, anxiety, stress) on method learning. I found that there was no difference of average mental health (stress, anxiety, stress) score between method of learning included online, offline and mix method learning.

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Table 5. Coefficients of the Depression

Categories	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Anova</i>	
				<i>F</i>	<i>P</i>
Online	139	11.3165	.52901	.458	.633
Offline	4	14.2500	3.42429		
Mix method	27	11.4074	.91405		

Table 6. Coefficients of the Anxiety

Categories	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Anova</i>	
				<i>F</i>	<i>P</i>
Online	139	11.3885	6.62834	.572	.565
Offline	4	14.7500	6.70199		
Mix method	27	11.1111	5.07179		

Table 7. Coefficients of the Stress

Categories	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Anova</i>	
				<i>F</i>	<i>P</i>
Online	139	12.3237	6.50108	.697	.499
Offline	4	15.5000	5.56776		
Mix (online and offline)	27	11.5926	4.80592		

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Discussion

Women students tend to experience higher levels of depression than men students. The result of statistical tests showed that gender had a significant effect on depression scores with a value of $p = 0.033$ ($p < 0,05$). There is no significant difference of level anxiety between men and women. There were differences in the severity of stress related to gender, even though exposed to the same stressors. Women can have different responses from men. Statistical tests showed that gender had a significant effect on stress scores with a value of $p = 0.001$ ($p < 0.01$).

Previously, there was a little study discussing depression based on gender. Nazneen (2019) found that the tendency of depression in women was higher than men, women tend having personality traits of neuroticism. During the pandemic Covid 19, psychological stress students increased due to changes in the learning process (Hasanah, Ludiana, Immawati & Livana, 2020). Meanwhile, Guadagni, Umilta and Laria (2020) reported that pandemic covid 19 had affected women differently than it has affected men, women reported more sleep troubles more symptoms of anxiety and depression.

In this research, there is no significant difference of level anxiety between men and women. This is because women and men student experience the same stressor, challenges and learning adjustments. Oktawirawan (2020) reported that student anxiety during online learning include difficulty understanding the material, difficulty doing assignments, availability and condition of the internet network, technical constraints and worries about task.

Women experience higher stress during the pandemic than men student. Lubis, Ramadhani and Rasyid (2020) confirmed that students experienced the most academic stress in moderate category. Other research showed women student reported worse emotional well being, higher levels of neuroticism and external locus of control compared to men student, it make women student tend to experience depression than men student (Clabaugh, Duque & Fields, 2021).

During the pandemic covid 19, the learning process was changed to distance learning. However, there are several faculties using face to face learning and mixed method learning. Especially for faculty using a lot of practical learning. In this research showed there is no difference of learning method among mental health state included depression, anxiety and stress among students. Previously research reported that online learning affected academic stress during pandemic, it causes online learning did not support with facilities and infrastructure, readiness and skills of lectures (Andiarna & Kusumawati, 2020).

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In Indonesia, changes to the learning process began in March 2019. Many evaluations of the learning process have been made by the government and several universities. They improve their learning facilities, accustomed to using online learning applications and some universities have their own learning system.

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REFERENCES

- Andiarna, F., & Kusumawati. (2020). Pengaruh Pembelajaran Daring Terhadap Stress Akademik pada Mahasiswa Selama Masa Pandemi Covid-19. *Jurnal Psikologi* 16 (2), 139-150.
- Clabaugh, A., Duque, J.F., & Fields, L.J. (2021). Academic Stress and Emotional Well-Being in United States College Students Following Onset of the Covid 19 Pandemic. *Frontier Psychology* 12, 1-8.
- Darsono, H., Fitri, A.N., Rahardjo, B., Imanuela, M.Z., Lasambouw, C.M. (2020). Efektivitas Pembelajaran saat Pandemi Covid 19 (kegiatan politeknik negeri Bandung). *Prosiding 11th Industrial Research Workshop and National Seminar (IRWNS)* Vol 11 (1). Doi: <https://doi.org/10.35313/irwns.v11i1.2190>.
- Damanik, E.D. (2011). The Measurement of Reliability, Validity, Items Analysis and Normative Data of Depression Anxiety Stress Scale (DASS). *Thesis*. Fakultas Psikologi, Universitas Indonesia, Depok.
- Guadagni, V., Umilta, A., & Laria, G. (2020). Sleep Quality, Emphaty, and Mood During the Isolation Period of the Covid 19 Pandemic in the Canadian Population: Females and Women Suffered the Most. *Frontier in Global Women Health* 1, 1-10.
- Hasanah, U. . Ludiana, Immawati, Livana. (2020). Gambaran Psikologis Mahasiswa dalam Proses Pembelajaran Selama Pandemi Covid 19. *Jurnal Keperawatan Jiwa* 8 (3), 299-306.
- Ihsan, D. (2020). P2G Minta Kemendikbud Tunda Belajar Tatap Muka di Tahun 2021. Retrieved <https://www.kompas.com/edu/read/2020/12/28/141242371/p2g-minta-kemendikbud-tunda-belajar-tatap-muka-di-2021> On February 1st 2021.
- Lubis, H., Ramadhani, A., & Rasyid, M. (2020). Stress Akademik Mahasiswal dalam Melaksanakan Kuliah Daring Selama Masa Pandemi Covid 19. *Psikostudia Jurnal Psikologi* 10 (1), 31-39.
- Nazneen, N.A. (2019). Perbedaan Kecenderungan Depresi Ditinjau Dari Jenis Kelamin Dengan Kovarians Kepribadian Neuroticism pada Mahasiswa Fakultas Psikologi UBaya. *Calyptra* 8(1), 696-701.
- Oktawirawan, D.H. (2020). Faktor Pemicu Kecemasan Siswa dalam Melakukan Pembelajaran Daring di Masa Pandemi Covid-19. *Jurnal Ilmiah Universitas Batanghari Jambi* 20 (2), 541-544.
- Putri, R.M., Oktaviana, A.D., Utami, A.S., Ni'maturohmah, Addina, H.A., & Nisa, H. (2020). Hubungan Pembelajaran Jarak Jauh dan Gangguan Somatoform dengan Tingkat Stress Mahasiswa UIN Syarif Hidayatullah Jakarta. *Indonesian Journal of Health Promotion and Behavior* 2 (1), 38-45.
- Yuwono, D.S. (2020). Profil Konfisi Stress di Masa Pandemi Covid 19 sebagai Dasar Intervensi dalam Praktek Mikrokonseling, *Ristekdikti, Jurnal Bimbingan dan Konseling* 5 (1), 132-138.