

Comparison Analysis of Depression, Anxiety, and Stress Levels in Students in Business Management Department and Information Engineering Department of Batam State Polytechnic on Online Learning in the Covid-19 Pandemic

Sri Dona Oktavia and Dian Mulyaningtyas

Business Management, Politeknik Negeri Batam, Ahmad Yani, Batam, Indonesia

Keywords: Depression, Anxiety, Stress, Major, Online Learning.

Abstract: This study examines the Comparative Analysis of Depression, Anxiety, and Stress Levels for Students of the Department of Business Management and Department of Informatics Engineering at the Batam State Polytechnic Against Online Learning During the COVID-19 Pandemic. The population in this study were students of the Department of Business Management and the Department of Informatics Engineering. The respondents in this study were students of the Department of Business Management and the Department of Informatics Engineering from 2018 to 2020, with a total sample of 188 students. The sampling technique here uses the Random Sampling method. In this study, the data is collected through questionnaires given directly to respondents online. This study uses a quantitative approach with descriptive statistical analysis methods and a Chi-Square test. The results of this study are students of the Department of Business Management have higher levels of depression, anxiety, and stress compared to students of the Department of Informatics. There is no significant effect between students' depression, anxiety, and stress level in online learning towards majors.

1 INTRODUCTION

The spread of the COVID-19 virus has caused a lot of concern, especially in the education sector. In education, the teaching and learning process is carried out face-to-face, which can trigger the spread of the COVID-19 virus. To prevent this from happening, the Ministry of Education and Culture issued a Circular Letter of the Ministry of Education and Culture Number 4 of 2020 concerning "Implementation of Education Policies in the Emergency Period of the Spread of Corona Virus Disease (COVID-19), which requires learning from home through online learning (Kemendikbud 2020).

Online learning (on the network) is applied to start from the elementary school level to the tertiary level for an undetermined time limit. Most universities in Indonesia have used Blended Learning, including the Batam State Polytechnic. Blended Learning itself is learning that combines direct (face-to-face) learning with online learning. However, due to this pandemic, face-to-face learning is impossible and can only use online learning. Many applications currently support

online learning, such as Whatsapp, Zoom, Google Classroom, Google Duo, and other applications.

Online learning is the right solution during this pandemic, and this policy was implemented by the government starting in March 2020. Using this online learning system, students will face many obstacles, such as limited ownership of electronic devices (computers, laptops, smartphones), internet access, teaching new methods, the ineffectiveness of practicum lessons, and inconsistent study time choices.

On the other hand, students who finished online lectures complained that they felt the task had become more complicated than face-to-face learning as usual. Even though there are many assignments in many courses that must be completed, the deadline for completing the projects given is relatively short. Students think that the tasks assigned are too heavy for them, and they are worried that it will cause psychological problems, which in turn affect their immunity. Therefore, if this situation continues to occur without any countermeasures, it will cause physical and mental pressure on students. Then many

of them complain about online learning on social networks such as Instagram, Twitter, Facebook, Tiktok, and other social media.

2 LITERATURE REVIEW

2.1 Depression

Depression is a severe mental illness, usually characterized by feelings of sadness or anxiety. Most students sometimes feel sad or anxious. Untreated depression can interfere with daily activities. As a reaction to depression, some students feel depressed. Students may cry all the time, not go to class or lock themselves up, not realizing that they are under pressure. Depression can affect academic performance. Students face many academic burdens, such as doing assignments, answering questions in class, understanding material, competing with classmates, and meeting teacher and parent expectations, all of which lead to learning pressure (Kamble, 2018).

2.2 Anxiety

Anxiety is a word we use to describe restlessness, worry, and fear. It involves emotional and physical feelings that we may face when we are worried or nervous about something. So all forms of situations that can threaten human comfort can cause anxiety. The existence of conflict is one source of the emergence of anxiety. Because individuals cannot deal with problems, physical threats and stress can also cause anxiety (NIMH, 2018).

2.3 Stress

Simply, stress can be defined as a state of a person whose balance is disturbed. Stress is manifested by various symptoms, such as restlessness, increased tension and anxiety, body aches (headache, heartburn, itching, and diarrhea), fatigue, muscle tension, sleep disturbances, or increased blood pressure and heart rhythm. Stress also manifests itself in behavioral changes. Individuals become irritable, more irritable, do not eat, or show changes in eating patterns. Some people feel depressed, helpless, lethargic, and have low self-esteem (Aryahi, 2016). Oktawirawan's research (2020) mentions the factors that cause anxiety about online learning. In this study, nine factors that cause stress in students, including:

1. Inadequate understanding of the material

2. Task deadlines
3. Internet is not stable
4. Difficulty in doing tasks
5. Difficult to buy internet quota
6. Technical constraints
7. Impairment
8. Late for class
9. Not ready to face the next level

Lack of understanding and short task deadlines are the main factors of this study, which cause students' anxiety about online learning. The current government is very much overcoming the difficulty of purchasing internet quotas through education quota assistance funds and collaboration with local universities.

In addition, the research of Hasanah et al. (2020) shows that seven factors cause student stress during the pandemic as below:

1. Studying Assignments
2. Bored at home
3. Can't meet loved ones
4. The online learning process becomes boring
5. Due to a lack of tools, laboratory practice learning is not possible
6. Unable to participate in online education due to limited internet quota
7. I can't do hobbies like usual

From the explanation above, there are four factors related to online learning, namely college assignments, tedious online learning processes, unable to participate in online education due to quota limitations, and unable to do laboratory practice because of unavailable tools.

2.4 Online Learning

Online learning is not a face-to-face learning system but a platform or learning method that can help students and lecturers in the teaching and learning process at a distance. Online learning is a learning activity that uses the internet to help users improve accessibility, connectivity, flexibility, and generate various learning interactions.

Here are some applications that can use for online learning are as follows:

1. Learning Management System

Learning Management System (LMS) is one or more software used for management purposes, documents, activity reports, teaching and learning activities and online activities (connected to the internet), E-learning, and training materials, all of which are done online. (Gusty et al., 2020). Here are some LMS

licensed open source and very often used in learning activities during COVID-19 are as follows:

- E-learning
 - Google Classroom
 - Moodle
 - Schoology
 - Edmodo
 - Kahoot
 - Video Conference
2. Video conferencing is a multimedia application that, due to its large bandwidth capacity, allows actual and time duplex data, voice, and image communications to be applied to networks with high data transfer rates (Gusty et al., 2020). Here are some video conferencing applications that are used to support online learning, namely:
- Google Meet
 - Zoom Meeting
 - Cisco Webex
 - Whatsapp

3 RESEARCH METHOD

3.1 Population and Sample

The population in this study were students of Batam State Polytechnic, Department of Business Management and Informatics Engineering. The sample used in the study were active students from the Department of Business Management and the Department of Informatics Engineering for the academic year 2018 to 2020, with a total of 188 students, each consisting of 94 students.

3.2 Method

The research method used is a quantitative research method with descriptive statistical analysis. In presenting the data will display tables, graphs, pie charts, mean and percentage calculations, and the chi-square test to analyze the level of comparison of depression, anxiety, and stress in students of the Department of Education. Batam State Polytechnic's Business Management and Informatics Engineering towards online learning. After the data is processed, an analysis is carried out to conclude the existing problems.

4 RESULT

4.1 Validity Test

Validity is the degree of accuracy between the data that occurs in the object of research (Sugiyono, 2013). This validity test uses the Pearson correlation analysis method, namely correlating the item score with the total score. Then the significance test was carried out with the criteria using the r table at a significance level of 0.01 with a 2-sided test. If the positive value of r count r table, then the item can be declared valid. The validity test in this study can be seen in the following table.

Table 1: Recapitulation of Validity Test Results for Depression, Anxiety and Stress Variables.

Item	r count	r table	Decision
X1.1	0,629	0,263	Valid
X1.2	0,710		Valid
X1.3	0,777		Valid
X1.4	0,669		Valid
X1.5	0,766		Valid
X1.6	0,796		Valid
X1.7	0,808		Valid
X1.8	0,694		Valid
X1.9	0,869		Valid
X1.10	0,696		Valid
X1.11	0,775		Valid
X1.12	0,806		Valid
X1.13	0,805		Valid
X1.14	0,634		Valid
X2.1	0,429	0,263	Valid
X2.2	0,656		Valid
X2.3	0,613		Valid
X2.4	0,604		Valid
X2.5	0,675		Valid
X2.6	0,577		Valid
X2.7	0,726		Valid
X2.8	0,539		Valid
X2.9	0,651		Valid
X2.10	0,750		Valid
X2.11	0,649		Valid
X2.12	0,729		Valid
X2.13	0,660		Valid
X2.14	0,659		Valid
X3.1	0,527		Valid

X3.2	0,669	0,263	Valid
X3.3	0,564		Valid
X3.4	0,618		Valid
X3.5	0,681		Valid
X3.6	0,523		Valid
X3.7	0,533		Valid
X3.8	0,536		Valid
X3.9	0,596		Valid
X3.10	0,618		Valid
X3.11	0,650		Valid
X3.12	0,529		Valid
X3.13	0,738		Valid
X3.14	0,850		Valid

(Source: Results of SPSS 25 Output Data Processing, 2021)

4.2 Reliability Test

How reliable or consistent is the indicator variable is measured by a reliability test (Ghozali, 2012). The value of the reliability of the indicator/item of the questionnaire statement received can be searched using the Cronbach Alpha formula. The alpha method is appropriate for use on a scale (Ndica 1-4, 1-5) or a range score (Ndica 0-20, 0-50). Reliability (reliable) if the indicator/questionnaire item has a Cronbach Alpha value > 0.60 (Ghozali, 2012). The results of the reliability test for each variable used in this study can be seen in the following table:

Table 2: Recapitulation of Reliability Test Results for Depression, Anxiety and Stress Variables.

Variable	Alpha Cronbach	Standard Value	Decision
Depression (X1)	0,939	0,60	Reliable
Anxiety (X2)	0,886	0,60	Reliable
Stress (X3)	0,776	0,60	Reliable

(Source: Results of SPSS 25 Output Data Processing, 2021)

4.3 Descriptive Statistics

Descriptive statistical analysis provides an overview of the situation and circumstances carried out by classifying the total number of respondents' scores. From the total score of respondents' answers obtained, the assessment criteria are arranged for each statement item. Based on the results of research conducted on 188 respondents.

Table 3: Depression, Anxiety, Stress Scale.

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

Then the results of the data obtained will be grouped and compared according to the DASS Test 42 questionnaire assessment score (Lovibond and Lovibond 1995). The results of the value can be seen in the following table:

Table 4: Final Result of Depression Score on Student Respondents majoring in Business Management and Information Technology.

Category	Business Management		Information Technology	
	f	%	F	%
Normal	31	33%	41	44%
Mild	18	19%	18	19%
Moderate	22	23%	12	13%
Severe	10	11%	10	11%
Very Severe	13	14%	13	14%
TOTAL	94	100%	94	100%

Table 5: Final Result of Anxiety Score on Student Respondents majoring in Business Management and Information Technology.

Category	Business Management		Information Technology	
	f	%	F	%
Normal	16	17%	18	19%
Mild	4	4%	11	12%
Moderate	13	14%	20	21%
Severe	24	26%	19	20%
Very Severe	37	39%	26	28%
TOTAL	94	100%	94	100%

From the results of descriptive statistics, this study shows that students of the Department of Business Management have higher levels of depression, anxiety, and stress than students of the Department of Informatics, Batam State Polytechnic, towards online learning.

Table 6: Final Result of Stress Score on Student Respondents majoring in Business Management and Information Technology.

Category	Business Management		Information Technology	
	f	%	f	%
Normal	29	31%	42	45%
Mild	16	17%	18	19%
Moderate	22	23%	23	24%
Severe	18	19%	9	10%
Very Severe	9	10%	2	2%
TOTAL	29	31%	42	45%

(Source: Microsoft Excel Data Processing Results, 2021)

4.4 Chi-Square Test

The chi-square test (Chi-Square) tests the two-sample comparative hypothesis if the data is nominal and the sample is large. If the calculated Chi-Square value < Chi-Square table, then we fail to reject H0. The test results can be observed in the following table:

Table 7: Results of Chi Square Test Analysis Effect of Depression Level with Majors.

Category	Major		d	Calculated Chi square	Chi square Table
	Business Management (%)	Information Technology (%)			
Normal	31 (36%)	41 (43,6%)	4	4.330 ^a	13,277
Mild	18 (19,1%)	18 (19,1%)			
Moderate	22 (23,4%)	12 (12,8%)			
Severe	10 (10,6%)	10 (10,6%)			
Very Severe	13 (13,8%)	13 (13,8%)			
Total	94 (100%)	94 (100%)			

Table 8: Results of Chi Square Test Analysis Effect of Anxiety Level with Majors.

Category	Major		d	Calculated Chi square	Chi square Table
	Business Management (%)	Information Technology (%)			
Normal	16 (17%)	18 (19,1%)	4	7.371 ^a	13,277
Mild	4 (4,3%)	11 (11,7%)			
Moderate	13 (13,8%)	20 (21,3%)			
Severe	24 (25,5%)	19 (20,2%)			
Very Severe	37 (39,4%)	26 (27,7%)			
TOTAL	94 (100%)	94 (100%)			

Table 9: Results of Chi Square Test Analysis Effect of Stress Level with Majors.

Category	Major		d	Calculated Chi square	Chi square Table
	Business Management (%)	Information Technology (%)			
Normal	25 (27,2%)	38 (40,4%)	4	7.258 ^a	13,277
Mild	17 (18,5%)	19 (20,3%)			
Moderate	20 (21,7%)	21 (22,3%)			

Severe	19 (20,7%)	9 (9,6%)		
Very Severe	11 (12%)	7 (9,1%)		
TOTAL	94 (100%)	94 (100%)		

(Source: Results of SPSS 25 Output Data Processing, 2021)

From the chi-square test results, this study shows that there is no significant effect between the level of depression, anxiety, and stress of students in online learning towards majors.

4.5 Discussion

4.5.1 Comparative Analysis of Depression Levels in Students of the Department of Business Management and Informatics Engineering

Based on the results of the research with the chi square test, the results of the chi square count were 4,330 while the chi square table was 13,27670 so that the chi square count < chi square table. This means that the department has no effect on the depression level of the students of the Department of Business Management and the Department of Informatics Engineering. So in this study the level of depression of students in online learning is not influenced by majors.

Based on the results of the interpretation of the level of depression in the students of the Department of Business Management and Informatics using the DASS Test score of 42, it was found that the level of depression was very severe in both majors of 14%. While the level of severe depression is 11%, moderate depression is 23% in Business Management Department students and 13% in Informatics Engineering Department, mild depression is 19% and normal levels are 33% for Business Management students and 44% for students. Informatics Engineering. This means that the level of depression in Business Management students is greater than the depression level in Informatics Engineering students.

Based on the respondents' answers to the depression variable, it shows that the fourth statement, namely students feel sad and depressed, has a variable mean of 1.67 in the Department of Business Management and 1.28 in the Department of Informatics, which is the item that most dominates or influences the level of student depression. This response shows that students of the Department of Business Management feel sadder and depressed than students of the Department of Informatics. This is in accordance with the opinion expressed by Kamble (2018) which states that students who are depressed

and untreated can interfere with daily activities and cause various reactions, one of which is that some students feel depressed.

The results of this study are in line with the research conducted by Asanov et al. (2021) and Hasanah et al. (2020), based on the results of the study it was found that most students were depressed. These results are in accordance with current research which states that most of the students of the Department of Business Management and the Department of Informatics are depressed.

4.5.2 Comparative Analysis of Anxiety Levels in Students of the Department of Business Management and Informatics Engineering

Based on the results of the research with the chi square test, the results of the chi square count were 7.371 while the chi square table was 13,27670 so that the chi square count < chi square table. This means that the department has no effect on the anxiety level of the students of the Department of Business Management and the Department of Informatics Engineering. so in this study the level of student anxiety in online learning is not influenced by majors.

Based on the results of the interpretation of the anxiety level of the students of the Department of Business Management and Informatics using the DASS Test score of 42, it was found that the students of the Department of Business Management and the students of the Department of Informatics had very severe anxiety levels, namely 39% and 28%, respectively. While the level of severe anxiety is 26% in the Business Management Department and 20% in the Informatics Engineering Department, the moderate anxiety level is 14% in the Business Management Department students and 21% in the Informatics Engineering Department, the mild anxiety level is 4% in the Business Management Department students. and 12% in the Department of Informatics Engineering, and normal anxiety levels in both majors were 17% and 19%. This means that the level of anxiety in Business Management students is greater than the anxiety level of Informatics Engineering students.

Based on the respondents' answers to the anxiety variable, it shows that the fourth statement, namely that if he was in a situation that made him feel very anxious and would feel very relieved when all this ended, has a variable mean of 2.20 in the Department of Business Management and 1.87 in the Department of Informatics, which is the item that most dominates or influences the level of depression in students. This

response shows that students of the Department of Business Management feel themselves in a situation that makes them feel very anxious and will feel very relieved if all of this end compared to students of the Department of Informatics. This is in accordance with the opinion expressed by NIMH (2018) which states that all forms of situations that can threaten human comfort can cause anxiety.

The results of this study are in line with research conducted by NurCita & Susantiningsih (2020) and Hasanah et al. (2020), based on the results of the study it was found that most students experienced anxiety. These results are in accordance with current research which states that most students from the Department of Business Management and the Department of Informatics experience anxiety.

4.5.3 Comparative Analysis of Stress Levels in Students of the Department of Business Management and Informatics Engineering

Based on the results of the research with the chi square test, the results of the chi square count were 7.285 while the chi square table was 13,27670 so that the chi square count < chi square table. This means that the department has no effect on the stress level of the students of the Department of Business Management and the Department of Informatics Engineering. So that in this study the stress level of students in online learning is not influenced by majors.

Based on the results of the interpretation of stress levels on students of the Department of Business Management and Informatics using the DASS Test score of 42, it was found that students of the Department of Business Management and students of the Department of Informatics had very severe depression rates, namely 10% and 2%. Meanwhile, the level of severe stress was 19% for the students of the Department of Business Management and 10% for the Department of Informatics, the level of moderate stress was 23% for the students of the Department of Business Management and 24% for the students of the Department of Informatics, the level of mild anxiety was 17% for the students of the Department of Business Management. and 19% in the Department of Informatics Engineering, and normal anxiety levels in both majors were 29% and 31%, respectively. This means that the level of stress in Business Management students is greater than the anxiety level of Informatics Engineering students.

Based on the respondents' answers to the stress variable, it shows that the fourth statement, namely

easy to get annoyed, has a variable mean of 1.82 in the Department of Business Management and 1.53 in the Department of Informatics Engineering, which is the item that most dominates or influences the level of student depression the most. This response indicates that students of the Department of Business Management find themselves irritated more easily than students of the Department of Informatics. This is in accordance with the opinion expressed by Aryahi (2016) which states that stress also manifests itself in behavior change. That is, the individual becomes irritable, does not eat or shows changes in eating patterns.

The results of this study are in line with research conducted by Maulana & Iswari (2020), Harahap et al. (2020), AlAteeq et al. (2020), Hasanah et al. (2020), and Mardiaty et al. (2018). Based on the results of the study, it was found that most of the students experienced stress. These results are in accordance with current research which states that most students from the Department of Business Management and the Department of Informatics experience stress.

4.5.4 Comparative Analysis of Depression, Anxiety and Stress Variables in Business Management and Informatics Engineering Students

To see the level of comparison of depression variables, anxiety variables and stress variables, a combination of mild, moderate, severe, and very severe categories will be carried out where the four categories state that students majoring in Business Management and Department of Informatics experience depression, anxiety and stress. The result of the value can be seen in Figure 4.13 below:

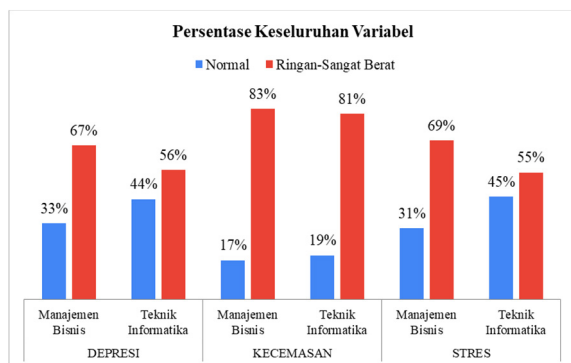


Figure 1. Overall Percentage of Variables.

Based on Figure 4.13 above, it can be seen that the variable with the Normal category which has the

lowest percentage is found in the anxiety variable at 17% and 19%, while the Mild-Very Severe category (experiencing depression, anxiety, stress) is the highest in the anxiety variable at 83% and 81%. so it can be concluded that the anxiety variable is the variable with the highest percentage level, which means that students of the Department of Business Management and the Department of Informatics experience more anxiety than depression and stress.

5 CONCLUSIONS

Based on the data analysis that the researcher has done on all the data obtained, the researcher can draw the following conclusions:

1. This study indicates that the assessment of the level of depression in students of the Batam State Polytechnic Business Management Department towards online learning is normal for 31 (33%) students and 63 (67%) other students are depressed.
2. This study indicates that the assessment of the level of anxiety in Batam State Polytechnic Business Management Department students towards online learning is normal for 16 (17%) students and 78 (83%) other students who experience anxiety.
3. This study shows that the assessment of stress levels for students of the Batam State Polytechnic Business Management Department towards online learning is normal for 29 (31%) students and 65 (69%) students who experience stress.
4. This study indicates that the assessment of the level of depression in students of the Batam State Polytechnic Informatics Engineering Department towards online learning is normal for 41 (44%) students and 53 (56%) other students are depressed.
5. This study indicates that the assessment of the level of anxiety in students of the Batam State Polytechnic Informatics Engineering Department towards online learning is normal for 18 (19%) students and 76 (81%) other students who experience anxiety.
6. This study indicates that the assessment of stress levels for students of the Batam State Polytechnic Informatics Engineering Department towards online learning is normal for 42 (45%) students and 52 (55%) other students who experience stress.
7. From the results of descriptive statistics, this study shows that students of the Department of Business Management have higher levels of depression,

anxiety, and stress than students of the Department of Informatics, Batam State Polytechnic, towards online learning.

8. From the Inferential Statistical Test results using the Chi-Square test, this study shows that there is no significant effect between the level of depression, anxiety, and stress of students in online learning towards majors.

ACKNOWLEDGEMENTS

Acknowledgments are addressed to all lecturers of the business administration study program and all Batam State Polytechnic Business Management Department staff.

REFERENCES

- AlAteeq, Deemah A., Sumayah Aljhani, and Dalal AlEesa, 2020. Perceived Stress among Students in Virtual Classrooms during the COVID-19 Outbreak in KSA. *Journal of Taibah University Medical Sciences*. 15(5):398–403. DOI: 10.1016/j.jtumed.2020.07.004.
- Aryahi, Farida, 2016. Stres Belajar, Suatu Pendekatan Intervensi Konseling, Edukasi Mitra Grafika. Sulawesi Tengah.
- Asanov, Igor, Francisco Flores, David McKenzie, Mona Mensmann, and Mathis Schulte, 2021. Remote-Learning, Time-Use, and Mental Health of Ecuadorian High-School Students during the COVID-19 Quarantine. *World Development* 138:105225. DOI: 10.1016/j.worlddev.2020.105225.
- Gusty, Sri, Nurmiati, Muliana, Oris Krianto Sulaiman, Ni Luh Wiwik Sri Rahayu Ginantra, Melda Agnes Manuhutu, Andriasan Sudarso Sudarso, Natasya Virginia Leuwol, Apriza, Andi Arfan Sahabbudin, Puji Hastuti, Akbar Yuli Setianto, Tia Metanfanuan, Lulu Jola Uktolseja, Sherly Gaspersz, Karwanto, Erni Rante Bungin, and Samuel Y. Warella, 2020. Belajar Mandiri : Pembelajaran Daring Di Tengah Pandemi COVID-19. P. 186 in, edited by J. Simarmata, Yayasan Kita Menulis.
- Harahap, Ade Chita Putri, Dinda Permatasari Harahap, and Samsul Rivai Harahap, 2020. Analisis Tingkat Stres Akademik Pada Mahasiswa Selama Pembelajaran Jarak Jauh Dimasa COVID-19. *Biblio Couns, Jurnal Kajian Konseling Dan Pendidikan* 3(1):10–14. DOI: 10.30596/bibliocouns.v3i1.4804.
- Hasanah, Uswatun, Nuri Luthfiatil Fitri, Supardi Supardi, and Livana PH, 2020. Depression Among College Students Due to the COVID-19 Pandemic. *Jurnal Keperawatan Jiwa* 8(4):421. DOI: 10.26714/jkj.8.4.2020.421-424.
- Hasanah, Uswatun, Ludiana, Immawati, and Livana PH, 2020. Gambaran Psikologis Mahasiswa Dalam Proses Pembelajaran Selama Pandemi COVID-19. *Jurnal Keperawatan Jiwa* 8(3):299–306.
- Kamble, Rahul Gajanan, 2018. Academic Stress and Depression Among College Students. *International Journal Of Current Research* 10(12):76429–33. DOI: 10.24941/ijcr.33132.12.2018.
- Kemendikbud, 2020. Surat Edaran No. 4 Tahun 2020 Tentang Pelaksanaan Kebijakan Pendidikan Dalam Masa Darurat Penyebaran Coronavirus Disease (COVID-19). 300.
- Kusnayat, Agus, Nani Sumarni, Agus Salim Mansyur, Qiqi Yuliati Zaqiah, and Universitas Telkom Bandung, 2020. Pengaruh Teknologi Pembelajaran Kuliah Online Di Era COVID-19 Dan Dampaknya. 1(2):153–65.
- Mardiati, Ike, Fatkhulhq Hidayatullah, and Cokro Aminoto, 2018. Faktor Eksternal Tingkat Stres Mahasiswa Keperawatan Dalam Adaptasi Proses Pembelajaran. *The 7th University Research Colloquium* 2018. STIKESPKU Muhammadiyah Surakarta 173–79.
- Maulana, Hutomo Atman &., and Rosada Dwi Iswari, 2020. Analisis Tingkat Stres Mahasiswa Terhadap Pembelajaran Daring Pada Mata Kuliah Statistik Bisnis Di Pendidikan Vokasi. *Jurnal Ilmiah Kependidikan* 14(1):17–30.
- NIMH, National Institut Of Mental healt, 2018. Kecemasan & Serangan Panik. U.S Depertement Of Health & Human Services, National Institute of Mental Health. Joko Adi Pamungkas, Anta Samara (Translator) 0–39.
- NurCita, Boenga, and Tiwuk Susantiningsih, 2020. Dampak Pembelajaran Jarak Jauh Dan Physical Distancing Pada Tingkat Kecemasan Mahasiswa Fakultas Kedokteran Universitas Pembangunan Nasional ‘Veteran’ Jakarta. *Journal of Borneo Holistic Health* 3(1):58–68.
- Oktawirawan, Dwi Hardani, 2020. Faktor Pemicu Kecemasan Siswa Dalam Melakukan Pembelajaran Daring Di Masa Pandemi COVID-19. *Jurnal Ilmiah Universitas Batanghari Jambi* 20(2):541. DOI: 10.33087/jiubj.v20i2.932.
- Sugiyono, 2015. Metode Penelitian Kuantitatif, Kualitatif Dan R&D. ALFABETA,CV. Bandung, 21st ed.