

THE RELATIONSHIP OF DEPRESSION WITH SLEEP QUALITY IN PSYCHOLOGY STUDENTS OF UNIKA ATMA JAYA UNIVERSITY DURING THE COVID-19 PANDEMIC

Juan Feivel Stevanus

School of Medicine and Health Sciences Atma Jaya Catholic University of Indonesia

Email: feiveljuan@gmail.com

ARTIKEL INFO	ABSTRACT
Accepted 5 Oktober 2021 Revised 15 Oktober 2021 Approved 25 Oktober 2021	<i>Exotropia sensory is unilateral divergence as a sequel to vision loss or long-standing poor vision. Characterized by large angles, comitant strabismic, increased gradually. Surgical characteristic treatment success are final deviation less than 10 prism diopters at distance in the primary position. Large deviation requires operating on three or four horizontal muscle and operating only for poor vision. This research aims to report the exotropia sensory patients and the result of surgical treatment for sensory exotropia by examining the outcomes of the surgical treatment. This is a prospective descriptive study conducted from January 2018 to December 2020 at Dr.M.Djamil hospital, Padang. A total of 12 patients included in this study. Detailed history regarding the complaint, developmental history was taken. Patients were thoroughly evaluated for visual acuity, through anterior segment evaluation using slit lamp, and fundus examination, and finding the deviation of the eye by doing hisberg test and prisma krimsky near and distance test. The result of surgical treatment evaluated by examine Hirsberg test and prisma krimsky test. A total of 12 patient were included, of whom 6 cases (50%) are man and woman 6 cases (50%), and the patients are 21-30 age year old about 33,33%. From the etiology, retinal abnormalities are the most causes of the exotropia with 4 cases (33,33%). The patient are management by surgical and with monocular resect-resect hang back surgery. From 6-month follow up, the patient was satisfactory cosmetic result with orthotropia 85,71%. The patient exotropia sensory are 21-30 years old. The most common cause of sensory strabismus was retinal abnormalities, and the long-term outcome of surgery for sensory exotropia was satisfactory.</i>
Keywords: psychology; depression; sleep quality; COVID-19	

INTRODUCTION

The world is currently being hit by health problems caused by the COVID-19 virus, which is a new type, namely SARS-CoV-2. Data from the World Health Organization (WHO), COVID-19 cases in June 2020 have reached 10,395,647 infected people and 507,416 people have died and it is increasing every day (Puthran et al., 2016). In Indonesia, COVID-19 cases reached 55,093 cases. This condition caused the Indonesian

government decided to issue a Large-Scale Social Restriction (PSBB) policy starting in April 2020 (Kaparounaki et al., 2020; Owens & Group, 2014). The PSBB policy makes people less adaptable and can have an impact on physical and mental aspects (Anxiety, depression and sleep quality disorders) (Gao et al., 2020). Research in Greece on university students revealed that quarantine at home can cause psychological problems such

How to cite:	Stevanus, J. F. (2021) The Relationship of Depression with Sleep Quality in Psychology Students of Unika Atma Jaya University During the Covid-19 Pandemic. <i>Jurnal Health Sains</i> 2(10). https://doi.org/10.46799/jhs.v2i10.300
E-ISSN:	2723-6927
Published by:	Ridwan Institute

as depression, anxiety and sleep quality disorders (Badicu, 2018).

Prior to the COVID-19 outbreak, around 322 million global population suffered from depression in 2015 (4.4%). Depression was more common among women (5.1%) than men (3.6%). Prevalence rates vary by age, peaking in older adults (above 7.5% among women aged 55-74 years, and above 5.5% among men) (Rothan & Byrareddy, 2020). Depression also occurs in children and adolescents under the age of 15, but the incidence is lower than in older people (Maulida et al., 2020). Research in China on the COVID-19 pandemic found that 48% experienced depression with an age range of 21-30 years (Gao et al., 2020).

Depression and poor sleep quality in students during the COVID-19 pandemic can be caused by several factors, such as previously students doing normal activities in the campus area sitting in front of a laptop screen or sitting in front of a laptop screen or computer for 6-8 hours, unable to meet face-to-face and interact with friends directly, unable to exercise outside the home, etc. Research on a thousand students at the Faculty of Health in Greece showed that during quarantine due to the COVID-19 pandemic, there was an increase in depression by 74.3%, anxiety by 42.5%, suicidal ideation by 63.3%, a decrease in sleep quality by 43.0% (Badicu, 2018). Depression is an event that is often found in students, including psychology students.

Depression is a mental disorder characterized by feelings of loss of interest or pleasure, decreased energy, feelings of guilt or low self-esteem, difficulty sleeping or poor sleep quality, decreased appetite, feelings of fatigue and lack of concentration. Depression can become chronic and recurrent, can substantially impair an individual's ability to carry out daily activities and can impact other

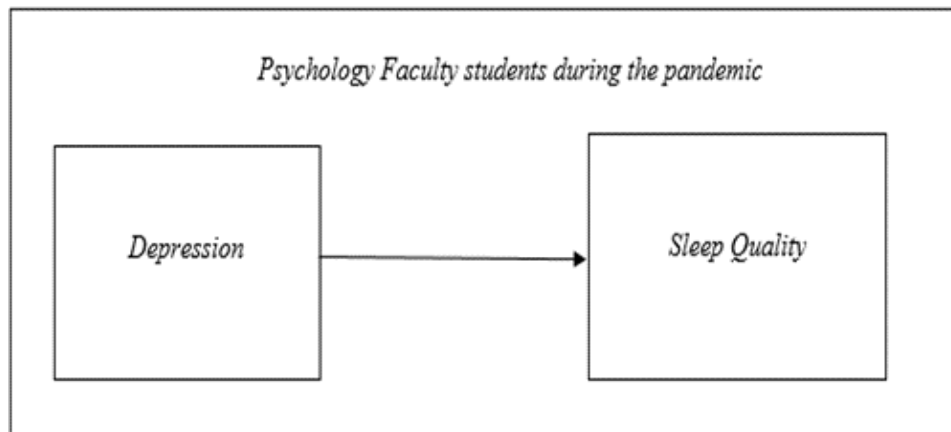
mental problems such as insomnia, poor sleep quality. According to WHO predictions that depressive disorders are ranked second (22.9%) after heart disease (Power et al., 2017). Research on psychology students in Canada showed that as many as 33% had depression (Badicu, 2018).

Research conducted by the online self-checking team of the Indonesian Psychiatric Association (PDSKJI) as of May 14, 2020, during the COVID-19 pandemic, there were 67% of respondents with mental disorders. 68% had an anxiety disorder, and 77% had psychological trauma. The study, which was conducted on 2,364 respondents in Java, even showed that there were 49% of respondents who even thought of ending their life (Brummelte & Galea, 2016).

Sleep is a very important physiological process for the human body. The need for rest and sleep for each individual varies according to the stage of development of the activity undertaken. The National Sleep Foundation recommends ages 18-25 need 7-9 hours of sleep per night (Durisko et al., 2015). During the COVID-19 pandemic, individuals who are unable to adapt to the situation and impact of the COVID-19 pandemic may experience sleep disorders such as insomnia and poor sleep quality. This condition can worsen other mental problems they face, such as depression, anxiety, and others. Psychology Faculty students learn about health problems and mental coping.

Based on these conditions, researchers are interested in conducting research on Atma Jaya Catholic University (UNIKA) Psychology Faculty students regarding the description of depression and sleep quality and the relationship between them during the COVID-19 pandemic. Depressive disorders in this study will be measured using the Patient Health Questionnaire (PHQ-9).

Figure 1
Conceptual Framework



METHOD

This study used an analytical, observational research design with a cross-sectional approach. This study aims to evaluate the relationship between depression and sleep quality in psychology undergraduate students at UNIKA Atma Jaya. The research will use Google Forms with respondents students of Psychology undergraduate study program at Atma Jaya

Catholic University Jakarta during the COVID-19 pandemic in the time period November 2020 – March 2021. The target population is all undergraduate psychology students in DKI Jakarta. The affordable population is all students of Psychology undergraduate study programs at Atma Jaya Catholic University, Jakarta, in November 2020 – March 2021. The sample of the research are all Psychology undergraduate study program students who meet the inclusion criteria and do not meet the exclusion criteria.

Sampling was carried out by consecutive sampling with the proportion of each active student of Psychology undergraduate study program willing to participate by filling out an online questionnaire in the period November 2020 – March 2021 with inclusion criteria all active students of Psychology undergraduate study

program at Atma Jaya Catholic University, Jakarta and with exclusion criteria psychology undergraduate study program students who are not willing to be respondents and do not give informed consent and did not fill out the questionnaire completely.

Data processing and analysis using descriptive analysis (Univariate), namely the proportion of students who experience depression and poor sleep quality will be calculated based on the characteristics (Age, gender, education level). Bivariate analysis with Fisher was applied to determine the relationship with sleep quality. In processing and analyzing data, researchers used the STATA program.

Results and Discussions

A. Result

This research was conducted online using Google Form in November 2020 to March 2021 and obtained 315 respondents who met the inclusion criteria, including 284 (90.2%) women and 31 (9.8%) men, age range 17 -32 years, with a mean age of 19.75 years and a standard deviation of 1.44. There are 50.79% of the 2018 batch of respondents, 81.59% of the 2019 class of respondents, 18.41% of the 2020 batch

of respondents, and 18.10% of the 2017 class of respondents.

The results of this study also showed 80% of respondents with depression, including 32.70% mild level,

25.71% moderate level and 21.59% severe level. There are 93.65% of respondents with poor sleep quality.

Table 1
Overview of Characteristics, depression and sleep quality of UAJ Psychology students

Characteristics	(N)	(%)
Age		
Gender		
- Man	31	9,84
- Woman	284	90,16*
Class Of		
- Year 2017	57	18,10
- Year 2018	103	50,79
- Year 2019	97	81,59*
- Year 2020	58	18,41
Depression		
- Not Depressed	63	20,0
- Depressed	252	80,0
- Mild	103	32,70*
- Medium	81	25,71
- Severe	68	21,59
Sleep Quality		
- Good	20	6,35
- Bad	295	93,65*

Note: * = highest percentage

Based on gender, respondents who experienced depression were women (80.95%) and men (70.94%). The male respondents found 32.26% mild depression, 22.58% moderate and 16.13% severe. While the female respondents found 32.75% mild depression, 26.02% moderate level and 22.18% severe level. Based on education level, respondents from the class of 2019 with depression (84.54%), the class of 2018 (79.61%), the class of 2017 (77.19%), and the class of 2020 (70.58%). Respondents in the 2017-2020 class were more likely to have mild depression (29.9% - 35.09%), with moderate depression (18.97% -28.87%) and severe depression (17.54% -25, 77%). Moderate (28.87%) and severe (25.77%) depression were more common in 2018

class respondents. Based on gender, poor sleep quality was more common in female respondents (94.01%). Poor sleep quality was more common in 2019 class respondents (95.88%). Meanwhile, the class of 2018 respondents (94.17%), the respondents of the class of 2020 (89.66%), and the class of 2017 (92.98%) had poor sleep quality.

The results of this study showed that respondents with depression showed poor sleep quality (97.20%) and those without depression showed poor sleep quality (79.37%). Data analysis using Fisher's bivariate statistical test showed that there was a difference between depression level and sleep quality in psychology students (p value = 0.000). The results of the analysis test showed a significant

relationship between depression and sleep quality in psychology students at UNIKA Atma Jaya.

B. Discussions

1. Overview of Characteristics, Depression, and Sleep Quality of Psychology Students UNIKA Atma Jaya

In this study, the majority of respondents with depression (80%) included 32.70% mild depression, 25.71% moderate depression, and 21.59% severe depression. According to Economou, 80.2% of psychology faculty students experienced depression. Hasanah et al (2020) stated that 21.1% of students experienced mild depression, 17% moderate depression and 3.4% severe depression, depression during the COVID-19 pandemic was caused by feeling bored, do not understand the lecture material optimally, have not been able to adapt to online learning, and feel that their abilities and grades have decreased (Hasanah et al., 2020). Research by (Maia & Dias, 2020) shows that students who were evaluated during the pandemic period showed significantly higher levels of anxiety, depression, and stress compared to students in normal times with 41.5% of students experiencing depression. (Kaparounaki et al., 2020) research also shows that the percentage of health science students with depression experienced a large increase during the COVID-19 pandemic (Fitriah & Hariyono, 2019).

2. Description of Depression and Sleep Quality Based on Gender and Education Level of Psychology Students UNIKA Atma Jaya

Based on gender, respondents who experienced depression were more women (80.95%). According to

(Porter, 2021), female students are more likely to experience depression (81.7%) than boys. (Fernández et al., 2021) research shows that female students (63%) are more depressed than boys. Based on the level of education, respondents from the 2019 batch were most commonly found with depression (84.54%), including mild depression (29.90%), moderate depression (28.87%) and severe depression (25.77%) (Wang et al., 2020). Research conducted by Fitriah (2019), 3rd semester or second year students have a higher level of depression (80.95%), compared to students in 5th semester or third year (13.09%) and 7th Semester or Fourth Year (5.35%).

3. The Relationship of Depression with Sleep Quality of Atma Jaya Psychology Students

This study showed that respondents with severe depression and had poor sleep quality were 100%, while respondents with mild depression and had poor sleep quality were 93.20%. According to a study by (Li et al., 2020) in China, poor sleep quality and sleep duration were associated with a higher prevalence of depressive symptoms in students in this study. These results suggest that reduced sleep duration and quality may be risk factors for mental health disorders among college students. Based on Saadeh's research in Jordan, 86.5% of depressed students experienced poorer sleep quality than students who did not experience depression. For college students, depression could be caused by academic tasks, financial and family problems which were exacerbated by the COVID-19 pandemic (Vigo et al., 2021).

CONCLUSIONS

There were 315 respondents, ranging in age from 17 to 32 years, the mean age being 19.75 years, Standard Deviation 1.44, 90.2% female respondents. Respondents were women with depression (80.95%) and men (70.94%). Respondents were female (94.01%) and male (90.32%) with poor sleep quality. The class of 2019 respondents with poor sleep quality (95.88%), the class of 2018 (94.17%), the class of 2020 (89.66%), and the class of 2017 (92.98%). The results of this study showed that respondents with depression showed poor sleep quality (97.20%). There is a relationship between depression level and sleep quality, which is indicated by a significant difference between depression level and sleep quality in psychology student respondents (p value = 0.000).

REFERENCES

- Badicu, G. (2018). Physical Activity And Sleep Quality In Students Of The Faculty Of Physical Education And Sport Of Braşov, Romania. *Sustainability*, 10(7), 2410. [Google Scholar](#)
- Brummelte, S., & Galea, L. A. M. (2016). Postpartum Depression: Etiology, Treatment And Consequences For Maternal Care. *Hormones And Behavior*, 77, 153–166. [Google Scholar](#)
- Durisko, Z., Mulsant, B. H., & Andrews, P. W. (2015). An Adaptationist Perspective On The Etiology Of Depression. *Journal Of Affective Disorders*, 172, 315–323. [Google Scholar](#)
- Fernández, D., Vigo, D., Sampson, N. A., Hwang, I., Aguilar-Gaxiola, S., Al-Hamzawi, A. O., Alonso, J., Andrade, L. H., Bromet, E. J., & De Girolamo, G. (2021). Patterns Of Care And Dropout Rates From Outpatient Mental Healthcare In Low-, Middle-And High-Income Countries From The World Health Organization's World Mental Health Survey Initiative. *Psychological Medicine*, 51(12), 2104–2116. [Google Scholar](#)
- Fitriah, A., & Hariyono, D. S. (2019). Hubungan Self Esteem Terhadap Kecenderungan Depresi Pada Mahasiswa. *Psycho Holistic*, 1(1), 8–17. [Google Scholar](#)
- Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., Wang, Y., Fu, H., & Dai, J. (2020). Mental Health Problems And Social Media Exposure During Covid-19 Outbreak. *Plos One*, 15(4), E0231924. [Google Scholar](#)
- Hasanah, U., Fitri, N. L., Supardi, S., & Livana, P. H. (2020). Depression Among College Students Due To The Covid-19 Pandemic. *Jurnal Keperawatan Jiwa (Jkj): Persatuan Perawat Nasional Indonesia*, 8(4), 421–424. [Google Scholar](#)
- Kaparounaki, C. K., Patsali, M. E., Mousa, D.-P. V., Papadopoulou, E. V. K., Papadopoulou, K. K. K., & Fountoulakis, K. N. (2020). University Students' Mental Health Amidst The Covid-19 Quarantine In Greece. *Psychiatry Research*, 290, 113111. [Google Scholar](#)
- Li, W., Cui, H., Li, K., Fang, Y., & Li, S. (2020). Chest Computed Tomography In Children With Covid-19 Respiratory Infection. *Pediatric Radiology*, 1. [Google Scholar](#)
- Maia, B. R., & Dias, P. C. (2020). Ansiedade, Depressão E Estresse Em Estudantes Universitários: O Impacto Da Covid-19. *Estudos De Psicologia (Campinas)*, 37. [Google Scholar](#)
- Maulida, H., Jatimi, A., Heru, M. J. A., Munir, Z., & Rahman, H. F. (2020). Depresi Pada Komunitas Dalam Menghadapi Pandemi Covid-19: A Systematic Review. *Jurnal Sains Dan*

- Kesehatan*, 2(4), 519–524. [Google Scholar](#)
- Owens, J., & Group, A. S. W. (2014). Insufficient Sleep In Adolescents And Young Adults: An Update On Causes And Consequences. *Pediatrics*, 134(3), E921–E932. [Google Scholar](#)
- Porter, M. E. (2021). ¿ *Qué Es La Estrategia?* [Google Scholar](#)
- Power, C., Greene, E., & Lawlor, B. A. (2017). Depression In Late Life: Etiology, Presentation, And Management. *Mental Health And Illness Of The Elderly Mental Health And Illness Worldwide*. Singapur: Springer, 187–218. [Google Scholar](#)
- Puthran, R., Zhang, M. W. B., Tam, W. W., & Ho, R. C. (2016). Prevalence Of Depression Amongst Medical Students: A Meta - Analysis. *Medical Education*, 50(4), 456–468. [Google Scholar](#)
- Rothan, H. A., & Byrareddy, S. N. (2020). The Epidemiology And Pathogenesis Of Coronavirus Disease (Covid-19) Outbreak. *Journal Of Autoimmunity*, 109, 102433. [Google Scholar](#)
- Vigo, D., Jones, L., Munthali, R., Pei, J., Westenberg, J., Munro, L., Judkowitz, C., Wang, A. Y., Van Den Adel, B., & Dulai, J. (2021). Investigating The Effect Of Covid-19 Dissemination On Symptoms Of Anxiety And Depression Among University Students. *Bjpsych Open*, 7(2). [Google Scholar](#)
- Wang, S., Toy, M., Hang Pham, T. T., & So, S. (2020). Causes And Trends In Liver Disease And Hepatocellular Carcinoma Among Men And Women Who Received Liver Transplants In The Us, 2010-2019. *Plos One*, 15(9), E0239393. [Google Scholar](#)

Copyright holder:

Juan Feivel Stevanus (2021)

First publication right:

Jurnal Health Sains

This article is licensed under:

