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LONELINESS AND QUALITY OF LIFE IN COLLEGE STUDENTS WITH SYMPTOMS OF DEPRESSION DURING THE PANDEMIC

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ABSTRACT

This study aims to evaluate the correlation between loneliness and quality of life. Loneliness causes individuals to experience physical and psychological impacts. The physical impact of loneliness is the emergence of various diseases, and the psychological impact of individuals who experience loneliness are stress, anxiety, feelings of lack of social support, sadness, hopelessness, to increased symptoms of depression (Hawkley & Cacioppo, 2010). The study of loneliness among students is crucial, considering the impact of academic loneliness experienced by students will reduce their quality of life and interfere with their achievement (Rauschenberg et al., 2020). This research is quantitative research conducted on 184 colleagues from various universities in Indonesia. Spearman Rho's analysis described the correlation between loneliness and quality of life. The result showed a significant relationship between loneliness and quality of life with r *(184) = -0.348,* p *<0.05. The results showed that loneliness had a significant relationship with quality of life. Students with moderate and severe depression symptoms experience greater loneliness, which may substantially decrease their quality of life. On the contrary, decreasing loneliness will improve the quality of life for students with depression symptoms. The result also found that female students were lonelier than males.*

Keywords: *Loneliness, quality of life, depression symptoms, college students*

1. PREFACE

During the Covid-19 outbreak, government regulations require the educational sector to conduct online classes. The existence of social restrictions to overcome the spread of Covid-19 causes students to stay at home, unable to socialize with friends on campus. Thus, students have difficulty finding support, leading to increased psychological disorders such as loneliness, anxiety, and depression (Esteves et al., 2021; Fathoni & Listiyandi, 2021). According to Santoso (2021), there has been a significant increase in psychological disorders such as depression and anxiety, over 25%. Puspadhini (2011) found a 20% increase in depressive symptoms among Indonesian university students since the outbreak. The sense of isolation is due to the inability to carry out everyday activities, which affects physical and mental health. This condition is also one factor contributing to the increase in depressive symptoms among students during the Covid-19 outbreak (Son et al., 2020).

Social isolation significantly impacts the mental health, quality of life, well-being, and loneliness of students (Geirdal et al., 2021). Rinandi's (2021) research on loneliness in students during the Covid-19 pandemic showed that 66.95% of the respondents experienced mild loneliness, 19.91% experienced moderate loneliness, and the remaining 13.13% did not experience loneliness. Students experiencing mild loneliness experience decreased moods, such as a lack of appetite, laziness, boredom, and stress. According to Purnomo et al. (2021), which examined the level of loneliness and depression of students undergoing online learning during the Covid-19 pandemic, found that 33% of students experienced high-category loneliness and 27% medium category. The results showed that implementing social restrictions during the Covid-19 pandemic, the lack of

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socialization, and online learning made students vulnerable to loneliness (Bu et al., 2020; Labrague et al., 2021; Rauschenberg et al., 2020).

Perlman and Peplau (1982) explain loneliness as a standard or individual expectation regarding interpersonal relationships. If individuals feel that their expectations are met, they will not feel lonely. Based on previous research, loneliness causes individuals to experience physical and psychological effects. The physical impact of loneliness is the occurrence of various diseases, including stroke, high blood pressure, heart and lung problems, and obesity (Hawkley & Cacioppo, 2010). Likewise, the psychological effects of individuals experiencing loneliness include stress, anxiety, lack of social support, sadness, hopelessness, and increased depression symptoms (Holmes et al., 2020; Yanguas et al., 2018; Rokach, 2013). Cacioppo et al. (2006) state that there is a significant relationship between loneliness and depressive symptoms, which means that the higher the loneliness, the higher the depressive symptoms. Heikkinen and Kauppinen's (2004) also found that loneliness leads to more severe depressive disorders. Likewise, Leigh-Hunt et al. (2017) state that loneliness and social isolation can deteriorate mental health. Loneliness is not only experienced by adults and older adults; 73% of adolescents also experience loneliness (Coombs, 2020). At least 38% to 50% of adolescents ages 18 to 24 reported higher levels of loneliness than adults and older adults (Lisitsa et al., 2020; Oakley, 2020). Dagnew and Dagne (2021) evaluate the loneliness of 404 students. The result showed that 200 participants (49.5%) experienced loneliness, and males were more prone to loneliness than females. Therefore, it is crucial to investigate loneliness among college students in order to prevent adverse effects on mental and physical health as well as a decrease in quality of life (Lim et al., 2020; Loades et al., 2020; Rauschenberg et al., 2020; Labrague et al., 2021).

Quality of life is an individual's perceptions of their lives in the context of their culture and values concerning their goals, expectations, and living standards. A decline in quality of life can negatively impact physical health, psychological well-being, social relationships, and relationships with the environment (WHO, 2004). The decline in quality of life is usually observed sometime after the onset of depressive symptoms in college students. Quality of life includes psychological, physical, social, and environmental aspects. When students have a low quality of life, they engage in maladaptive behaviors such as binge drinking, feeling lonely, anxiety, despair, stress, and depression (Reeve et al., 2013; Ribeiro et al., 2018).

Kasar and Karaman (2021) evaluate the relationship between loneliness and quality of life. The result found a significant relationship between loneliness and quality of life. Meanwhile, Beridze et al. (2020) found no significant relationship between loneliness and quality of life. Based on previous studies, there are inconsistent findings regarding the correlation between loneliness and quality of life. Thus, this research is essential to determine the relationship between loneliness and quality of life to find a more accurate answer to the relations between loneliness and quality of life, especially in college students who experience depressive symptoms.

2. RESEARCH METHOD

This study is a quantitative correlation study. The characteristics of the participants in this study were men and women, college students aged 18 to 25 years, currently pursuing a bachelor's degree (S1) in Indonesia, studying in semesters 4 and 6, and having depression symptoms based on the BDI-II (Beck & Alford, 2009). The data were collected from February to May 2022 using a questionnaire distributed online through social media. The online questionnaire contained sociodemographic questions (i.e., gender identity, age, class of, and university origin) and questions on loneliness, depressive symptoms, and quality of life.

Depression. The Beck's Depression Inventory (BDI-II) which was created by Aaron T. Beck to detect depression and to measure the intensity of depression (Beck et al., 1988). This instrument consists of 21 items with sequential numbers ranging from none (0) to severe (3). This measuring instrument was introduced by Beck et al. in 1961 and then revised by Beck, Steer and Garbin in 1971. The interpretation of the score to explain the level of depression from mild to severe is that (a) a score of 0-13 indicates no depression, (b) a score of 14-19 indicates mild depression, (c) a score of 20-28 indicates moderate depression, and (d) a score of 30-63 indicates severe depression. The measuring instrument of the BDI-II has been adapted and validated into the Indonesian language by Ginting et al. (2013) with a reliability of 0,90.

Loneliness. The UCLA Loneliness Scale proposed by Russell in 1978. The UCLA Loneliness Scale is a 20-item measure that assesses how often a person feels disconnected from others using a 4-point rating scale (1=never; 4=always). This measure was adapted and validated by Fauziyyah (2017) with a reliability of 0.875. This measure has 10 negative items, namely items 1, 4, 5, 6, 9, 10, 15, 16, 19, and 20. 10 positive item numbers are 2, 3, 7, 8, 11, 12, 13, 14, 17, and 18.

Quality of Life. The World Health Organization Quality of Life (WHOQOL-BREF) was used to evaluate quality of life, developed by the WHO in 2004. This tool consists of 26 statements that that are rated on a five-point Likert scale from 1 (very poor) to 5 (excellent) (very good). The instrument is divided into four sections: psychological health, physiological health, social relationships, and environmental health. The WHOQOL-BREF has a test-retest reliability between 0.80 and 0.90 (Saxena, et al., 2001).

3. RESULT AND DISCUSSION

The data were not normally distributed. Thus, Spearman Rho's analysis was used to describe the correlation between two variables of loneliness and quality of life. The result showed a significant relationship between loneliness and quality of life with r (184) = -0.348, p <0.05. The findings of this study are in line with Kasar and Karaman (2021) and Gould et. al., (2021) that the loneliness experienced by students reduces the quality of life.

Based on the level of depression symptoms of the participants, this study found several results. There was no correlation between loneliness and quality of life based on mild depression symptoms with r (184) = -0.031 p = 0.912 > 0.05. The correlation test of loneliness and quality of life based on moderate depression symptoms showed a significant relationship with r (184) = -0.306, p = 0.018 < 0.05. Moreover, the correlation between loneliness and quality of life based on severe depression symptoms led to a significant relationship with r (184) = -0.280, p = 0.003 <0.05 (Table 1). This finding indicates that students who have moderate to severe depression symptoms report more loneliness, which can significantly reduce their quality of life.

This finding aligns with the previous study that loneliness predicts quality of life through depression. The loneliness students feel with or without the presence of depressive symptoms may decrease their quality of life (Ahadi & Hasani, 2021). Depressive symptoms in university students impact motivation, productivity, creativity, and concentration in the academic environment (Mohammad et al., 2022). Research conducted by Cooper et al. (2020) states that depressed students focus too much on failure and often blame themselves for failure, thus reducing their quality of life.

Table 1
Results of Loneliness and Quality of Life Based on Level of Depression Symptoms

	Loneliness and Quality of Life	
	r	p
Mild depression symptoms	-0.031	0.912
Moderate depression symptoms	-0.306	0.018
Severe depression symptoms	-0.280	0.003

This study tested differences in loneliness variables on the basis of gender. The Mann Whitney U test shows the value of *U* (184), 3356.000, $p = 0.017 < 0.05$. This means that there is a significant difference between loneliness in men and women (Table 2). This finding indicates that women experience loneliness higher than men. In line with a previous study, women are more likely to admit loneliness than men (Borys & Perlman in Rokach, 2018).

Table 2
Results of Loneliness Based on Gender

		Loneliness	
Gender	mean	*u*	*p*
Male	83.74	3356.000	0.017
Female	102.48		

Furthermore, this study evaluates the differences in quality of life variables based on gender. Mann Whitney U test shows that there was no significant difference between the quality of life in men and women with *U* (184), 4122.000, $p = 0.798 > 0.05$ (Table 3). This finding contrasts with a previous study from Chraif and Dumitru (2015), who said that men's quality of life is higher than women. This result can be explained based on Bonsaksen's research (2012) that depression may mediate the relationship between gender and quality of life. Thus, overcoming depression is essential to improve the quality of life. Moreover, according to Fadda and Jirón (1999), the difference in the quality of life based on gender can be understood from differences in perceptions of needs and roles, access to resources, and decision-making processes. Trybusińska and Saracen (2019) explain that women's attitudes think more negatively about their physical health, so they feel a decreased quality of life. Also, Campos et al. (2014) reported that women with good physical and psychosocial health tend to have a better quality of life. Meanwhile, men's quality of life is associated with high socioeconomic conditions and good physical and psychosocial health.

Table 3
Results of quality of life based on gender

		Quality of Life	
Gender	mean	*u*	*p*
Male	93.44	4122.000	0.798
Female	91.44		

This study conducted a test of differences in loneliness variables based on batches of 2019 and 2020. The Mann Whitney U test shows that there was no significant difference between the quality of life in the class of 2019 and 2020 with *U* (184), 2043.000, $p = 0.070 > 0.05$ (Table 4).

Table 4
Results of loneliness based on batches

		Loneliness	
Class	mean	*u*	*p*
2019	95.88	2043.000	0.070
2020	77.59		

Moreover, this research conducted a test of differences in quality of life variables based on batches of 2019 and 2020. The Mann Whitney U test shows that there was no significant difference between the quality of life in the class of 2019 and 2020 with *U* (184), 2043.000, *p* = 0.094> 0.05 (Table 5).

Table 5
Results of quality of life based on batches

		Quality of Life	
Class	mean	*u*	*p*
2019	89.37	2043.000	0.094
2020	106.29		

The finding of the differences of loneliness and quality of life in terms of batches shows there is no significant difference between loneliness and quality of life for students in batches of 2019 and 2020. This result can be explained by Groarke et. al., (2020) and Rinaldi (2021) that students spend more time with their families during the pandemic, thus the experience of self-isolation with families does not cause loneliness for students in batches of 2019 and 2020.

Likewise, this study also conducted a difference test on loneliness variables based on the university of origin. The Mann-Whitney U test shows that there was no significant difference between the quality of life in students from public universities and students from private universities with *U* (184), 2792.500, *p* = 0.082 > 0.05 (Table 6).

Table 6
Results of loneliness based on university origin.

		Loneliness	
Class	mean	u	p
Public Univsity	81.35	2795.000	0.082
Private University	96.66		

This research conducted a test of differences in quality of life variables based on the university of origin. The Mann-Whitney U test shows that there was no significant difference between the quality of life in students from public universities and students from private universities with *U* (184), 3329.000, *p* = 0.948 > 0.05 (Table 7).

Table 7
Results of quality of life based on university origin.

		Quality of Life	
University Origin	mean	u	p
Public Univsity	92.08	3329.000	0.948
Private University	92.66		

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Finally, the finding of loneliness and quality of life in terms of differences in university origin shows no difference in loneliness and quality of life for students from private and public universities. According to Shafiq et al. (2021), students experience a similar situation with the condition of a pandemic and policies for conducting online learning in all private and public universities. These conditions resulted in no differences in the conditions of loneliness and the quality of life of students in all universities.

4. CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis, this study found that loneliness has a significant relationship between loneliness and quality of life in students with depression symptoms. Students with moderate and severe depression symptoms experience greater loneliness, which may substantially decrease their quality of life. Conversely, decreasing loneliness will improve the quality of life for students with depression symptoms. The relationship between loneliness and quality of life in college students with moderate and severe depressive symptoms is weak. Female students were found to be lonelier than males.

Hopefully, further research can include a larger and more representative sample of students across Indonesia regarding loneliness and quality of life. Further research is also needed to compare the conditions of students with depressive symptoms during a pandemic and normal conditions. Comparing students' conditions with depression will provide a more accurate picture of the conditions of students who experience symptoms of depression. This research suggests that students with depressive symptoms may find it helpful to engage with others, both online and offline, to overcome loneliness and prevent more serious depressive symptoms. This research suggests that students experiencing loneliness should be aware of the condition, as prolonged loneliness will affect mental and physical health. In addition, it is recommended that students experiencing loneliness should be more open to conversations with friends to get help at the right time.

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