

INFLUENCE OF LONELINESS ON PSYCHOLOGICAL WELLBEING AMONG UNDERGRADUATE STUDENTS OF NASARAWA STATE UNIVERSITY KEFFI, NIGERIA

Okaula Jennifer, Ekwegbo Nneoma Sandra & Akawu Monday
Department of Psychology, Nasarawa State University, Keffi
E-mail: jenokaula@gmail.com Tel: [+2347038617813](tel:+2347038617813)

ABSTRACT

Psychological well-being is a critical aspect of students' overall development. This study examined the influence of loneliness on the psychological well-being of undergraduates in Nasarawa State University Keffi. The research adopted a cross sectional study design using an expo-factor design. The sample consists of 392 (176 male and 216 female) selected using random sampling technique. Data was collected through copies of self-administered questionnaires. Two hypotheses were postulated and tested using regression analysis and independent sample t-test. The study found that loneliness has a significant negative influence on the psychological well-being [$F(1, 390) = 22.551$; $R^2 = .055$; $p < 0.05$]. There is no significant gender difference in the level of psychological wellbeing among undergraduates of Nasarawa state University Keffi. [$t(390) = .408$, $p > .05$]. It is concluded that loneliness have significant influence on psychological well-being among undergraduates of Nasarawa State University Keffi. The study recommends among others that the university should create more opportunities for social interaction among students in diverse ways which include organizing mentorship programs, peer support groups and social events that encourage students to build meaningful connections as this may help reduce feelings of isolation and promote a stronger sense of belonging among students.

Introduction

Psychological well-being is a major public health concern globally and an important issue among university students (Lisnyj et al., 2022). It refers to an individual's level of happiness, emotional stability, life satisfaction, and overall sense of purpose and fulfillment (Sari, 2017; Ahimie, 2021). Students with good psychological well-being are better able to manage stress, maintain positive relationships, and function effectively in their academic and social lives (Nurmaria & Risnawati, 2021). However, university life presents several challenges that may negatively affect students' psychological well-being. The transition into higher education often requires students to adjust to new academic demands, social environments, and increased independence, which may expose them to emotional and social difficulties (Roslan et al., 2017; Chaudhry et al., 2024).

Loneliness is one of the key factors influencing psychological well-being among young adults (Nurmaria & Risnawati, 2021; Mushtaq et al., 2014). It is defined as the gap between an individual's desired and actual level of social relationships (Ong et al., 2016). Loneliness occurs when individuals perceive their social connections as inadequate in quality or quantity, leading to feelings of isolation, dissatisfaction, and emotional distress (Balto, 2019). Importantly, loneliness is not merely being alone but the absence of

meaningful relationships that meet emotional and social needs (Mushtaq et al., 2014).

Loneliness is particularly prevalent among individuals aged 16 to 25, a group that includes most university students (Cigna, 2018; Barreto et al., 2021). This stage of life often involves major social transitions, such as forming new relationships, adapting to unfamiliar environments, and coping with separation from family (Özdemir & Tuncay, 2008). When these social needs are not adequately met, students may experience increased levels of loneliness.

Empirical studies have shown that loneliness has significant negative effects on psychological well-being. It has been linked to anxiety, depression, low life satisfaction, and emotional distress (Beutel et al., 2017; Stickley & Koyanagi, 2016). Persistent loneliness can also increase vulnerability to psychological problems and negatively affect overall functioning (Holt-Lunstad et al., 2015). Therefore, understanding the role of loneliness is essential in addressing psychological well-being among university students.

Statement of the Problem

Psychological well-being plays a crucial role in students' academic success and overall development. However, many university students experience psychological challenges such as stress, anxiety, and emotional distress, which can negatively affect their well-being (Chaudhry et al., 2024). In Nigeria, studies have reported a high prevalence of mental health problems

among students, including elevated levels of anxiety and depression (Adeleke et al., 2025; Isara et al., 2022).

Loneliness has emerged as a significant psychological concern among university students. Research indicates that a substantial proportion of students experience loneliness, which may adversely affect their mental health (Dagnew & Dagne, 2019). Within the university environment, students often face difficulties in forming close social relationships and maintaining meaningful connections, which can lead to feelings of isolation. Loneliness has been associated with several negative psychological outcomes, including depression, anxiety, low self-esteem, and reduced academic engagement (Petitte et al., 2015). Students who experience loneliness may also withdraw socially, which can further worsen their psychological state. If not properly addressed, these challenges may affect students' academic performance and overall quality of life.

Despite growing awareness of mental health issues among university students, there is still limited empirical research focusing specifically on the influence of loneliness on psychological well-being among undergraduate students in Nasarawa State University. Therefore, this study seeks to examine the extent to which loneliness influences psychological well-being among undergraduate students of Nasarawa State University, Nasarawa State, Nigeria.

Hypotheses

- i. Loneliness will significantly influence psychological wellbeing among undergraduate students in Nasarawa State University Keffi.
- ii. There will be significant gender difference in the level of psychological wellbeing among undergraduate students in Nasarawa State University Keffi.

Empirical Review

This section reviews existing empirical studies related to loneliness and psychological well-being. It highlights current knowledge on the relationship between these two variables across different populations, with emphasis on students and young adults.

Loneliness and Psychological Well-being

Empirical evidence has consistently demonstrated a strong negative relationship between loneliness and psychological well-being across different populations. In a recent study, Suprayogi and Hamidah (2024) examined this relationship among young adults in Jakarta, Indonesia. Using the UCLA Loneliness Scale and Ryff's Psychological Well-Being Scale, the study reported a strong negative correlation ($r = -0.692$, $p < 0.05$), indicating that higher levels of loneliness are associated with lower psychological well-being.

Similarly, Doman and Le Roux (2011) investigated the relationship between loneliness and psychological well-being among university students. Their findings revealed a significant association between loneliness and key aspects of psychological well-being, particularly depression and positive well-being. These variables jointly accounted for a substantial proportion of the variance

in loneliness, suggesting that psychological factors play an important role in shaping students' experiences of loneliness and well-being.

Bhagchandani (2017) also found a significant negative relationship between loneliness and psychological well-being among college students. The study concluded that increased loneliness leads to a decline in overall well-being, regardless of gender differences.

Further supporting these findings, Ishaq et al. (2018) examined university students and found that loneliness significantly predicted lower psychological well-being. Their results emphasized that loneliness is an important psychological factor influencing students' mental health outcomes.

In another study, Çiçek (2021) reported that loneliness was negatively associated with psychological well-being among university students. The findings further confirmed that individuals with higher levels of loneliness tend to experience lower levels of well-being.

Longitudinal evidence also supports this relationship. Richardson et al. (2017) found that loneliness significantly predicted increased anxiety, stress, depression, and poorer general mental health among undergraduate students over time. This suggests that loneliness is not only associated with poor psychological well-being but may also contribute to its decline.

However, not all studies have reported significant relationships. For instance, Nurmaria and Risnawati (2021) found no significant relationship between

loneliness and psychological well-being among adolescents, suggesting that the relationship may vary depending on context and population.

Gender and Psychological Well-Being

Gender differences in psychological well-being have been widely studied, although findings remain inconsistent. Gürel (2009) noted that research on gender and psychological well-being often produces mixed results, with some studies reporting significant differences while others do not.

Olabamitan (2021) found that gender significantly influences psychological well-being among students, with male students reporting higher levels of well-being than female students. The study suggested that social and economic factors may contribute to these differences.

Similarly, Roothman et al. (2003) reported that men scored higher in several dimensions of psychological well-being, including cognitive and physical well-being, while women scored higher in emotional expression and spirituality. Overall, the study concluded that men had higher levels of psychological well-being.

Mills et al. (2012) also found that women reported lower psychological well-being compared to men, attributing this difference to factors such as family satisfaction and economic strain.

In contrast, some studies have found no significant gender differences. For example, Visani et al. (2011) reported no significant differences in

psychological well-being between male and female adolescents. Similarly, Kantariya (2017) found no significant gender differences among postgraduate students.

These mixed findings suggest that gender may influence psychological well-being, but its effects are not consistent across different populations and contexts. This indicates the need for further research, particularly among undergraduate students in specific settings such as Nasarawa State University.

Theoretical Framework

The study is built on the evolutionary theory of loneliness. The evolutionary theory of loneliness explains loneliness as an adaptive mechanism that promotes social connection, which is essential for human survival (Cacioppo & Cacioppo, 2018). According to this theory, humans are naturally social beings, and social isolation triggers psychological discomfort as a way of encouraging reconnection. In early human societies, survival depended heavily on group living, cooperation, and mutual support (Cacioppo et al., 2006). Individuals who were socially connected had better chances of survival, while those who were isolated were more vulnerable to environmental threats. As a result, loneliness developed as a biological warning signal, similar to hunger or pain, alerting individuals to the risks associated with social disconnection (Cacioppo & Hawkley, 2009). The theory further explains that loneliness is linked to psychological distress because it

activates stress responses associated with perceived social threats. Prolonged loneliness can therefore lead to negative psychological outcomes such as anxiety, depression, and reduced well-being (Hawkley & Cacioppo, 2010; Holt-Lunstad et al., 2015).

This evolutionary model of loneliness may be relevant in explaining the link between loneliness and psychological wellbeing. The theory views loneliness as a biological warning system that signals a lack of social connection. Just as hunger motivates individuals to seek food, loneliness motivates them to reconnect with others (Cacioppo & Hawkley, 2009). When individuals feel socially isolated, their psychological well-being is threatened because they experience stress and anxiety, which are linked to the evolutionary need for group protection and they may develop depressive symptoms due to the perceived absence of social support (Hawkley & Cacioppo, 2010). In the context of university students, this theory suggests that when students experience loneliness due to weak social connections or lack of support, their psychological well-being is negatively affected. Thus, loneliness serves as both a signal of unmet social needs and a contributing factor to poor psychological health.

Research Design

This study adopted a cross-sectional research design. This design allows for the collection of data from a large population at a single point in time and is suitable for examining relationships between variables. It was therefore

considered appropriate for assessing the influence of loneliness on psychological well-being among undergraduate students.

Population, Sample and Sampling Technique

The study targeted male and female undergraduate students across different academic levels and departments at Nasarawa State University, Keffi. The university, located in Keffi, Nasarawa State, comprises seven faculties: Administration, Arts, Education, Environmental Sciences, Law, Natural and Applied Sciences, and Social Sciences. According to information available on the university's official website, the institution has an estimated student population of about 35,000.

The sample size for the study was determined using Taro Yamane's formula for sample size determination:

$$n = \frac{N}{1 + N(e^2)}$$
 Where N is total population; 35,000 and e is tolerable error 0.5%

This yielded a sample size of approximately 395.4, which was rounded up to 400 participants.

A multistage sampling technique was employed in selecting participants. In the first stage, the main campus at Keffi was selected using convenience sampling due to its accessibility and large student population. In the second stage, four faculties were selected using simple random sampling through balloting. The selected faculties were Faculty of Natural and Applied

Sciences, Faculty of Arts, Faculty of Education, and Faculty of Administration. In the final stage, participants were selected using simple random sampling, with 100 students drawn from each of the four selected faculties, making a total of 400 participants.

Method of Data Collection

Data for this study were collected using self-administered questionnaires. The questionnaire consisted of two sections: one capturing demographic information of the respondents and the other comprising standardized instruments used to measure psychological well-being and loneliness.

Ryff Psychological Well-Being Scale

Psychological well-being was measured using the 18-item Ryff Psychological Well-Being Scale (Ryff et al., 2007). The scale assesses six dimensions of well-being: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Responses are rated on a 5-point Likert scale ranging from strongly disagree to strongly agree. Higher scores indicate higher levels of psychological well-being.

The scale has demonstrated acceptable reliability. Gao and McLellan (2018) reported Cronbach's alpha values ranging from 0.52 to 0.80 across the subscales. Similarly, Aboh et al. (2019) reported an overall reliability coefficient of 0.82 among Nigerian undergraduate students.

UCLA Loneliness Scale

Loneliness was measured using the UCLA Loneliness Scale (ULS-8) developed by Russell et al. (1978). The scale consists of 8 items designed to assess subjective feelings of loneliness and social isolation. Respondents rate each item on a 4-point Likert scale ranging from “Never” to “Always,” with higher scores indicating greater levels of loneliness.

The UCLA Loneliness Scale has been widely validated across different populations. Russell (1996) reported Cronbach’s alpha coefficients above 0.85, indicating strong internal consistency. Xu et al. (2018) also reported good psychometric properties, with a Cronbach’s alpha of 0.815 and a test-retest reliability coefficient of 0.663.

Procedure

An official letter of introduction was obtained from the Head of the Department of Psychology, Nasarawa State University, Keffi, to facilitate access to participants. The researcher visited selected classes at scheduled times to administer the questionnaires with minimal disruption to academic activities. Participants were informed about the purpose of the study and assured of confidentiality and voluntary participation. After providing necessary instructions and clarifications, the questionnaires were distributed and participants were given sufficient time to complete them. The completed questionnaires were collected immediately after completion to ensure a high response rate and reduce the risk of data loss. Participants were appreciated for their cooperation at the end of the exercise.

Technique for Data Analyses

Data for the study were analysed using the Statistical package for social science, SPSS version 24.0. Frequency, mean and percentage were used for the descriptive analyses of participants' data. Regression analysis was used to test hypotheses.

RESULTS

The researcher administered 400 questionnaires to the students selected to participate in the study and 397 of these were successfully retrieved. This high return rate was made possible as a result of the researcher and the research assistants were on ground to retrieve the questionnaires after administering and the respondents filled them. However, only 392 were included in the final analyses of data as five were found to be unusable. The demographic characteristics of these final 376 respondents are presented in Table 1.

Table 1: Demographic Characteristics of the Respondents

Variable	Group	Frequency	Percentage
Age (Mean = 21.55; SD = 3.27)	16-20 years	260	66.3
	21-25 years	121	30.9
	26-30 years	9	2.3
	31-35 years	2	.5
	Total	392	100.0
Sex	Male	176	44.9

	Female	216	55.1
	Total	392	100.0
Level of Study	100 Level	95	24.2
	200 Level	112	28.6
	300 Level	91	23.2
	400 Level	94	24.0
	Total	392	100.0

The demographic characteristics of the respondents indicates that the mean age was 21.55 years (SD = 3.27). A majority of the students (66.3%) were within the 16–20 years age range, followed by 30.9 percent who were between 21 and 25 years, 2.3% who between 26 and 30 years and 0.5 percent between 31 and 35 years. With respect to sex, the sample consisted of 176 male students (44.9 %) and 216 female students (55.1%). In terms of level of study, students in 200 level constituted 28.6%, those in 100 level were 24.2%, 400 level constituted 24.0% and 300 level were 23.2%.

Test of Hypotheses

This section presents results of analysis of the hypothesis that were postulated to guide the study.

Hypothesis 1

Loneliness will significantly predict the level of psychological wellbeing among undergraduate students in Nasarawa State University Keffi. The hypothesis was tested using linear regression analysis.

Table 2: Summary of linear regression analysis showing the influence of Loneliness on psychological wellbeing

Variables	β	t	df	R	R ²	F	Sig.
(Constant)		51.26 9	1, 390	.234	.055	22.515	.000
Loneliness	-.234	-4.745					

a. Dependent Variable: Psychological Wellbeing

b. Predictors: (Constant), Loneliness

The analysis in Table 2 shows that loneliness has a significant negative influence on the psychological well-being of undergraduate students at Nasarawa State University, Keffi [$F(1, 390) = 22.551$; $R^2 = .055$; $p < 0.05$]. This result demonstrates that as loneliness increases, students' psychological well-being declines, thereby supporting the study's hypothesis.

Hypothesis 2

There will be significant gender difference in the level of psychological wellbeing of undergraduate students in Nasarawa State University Keffi. Independent sample t-tests was employed to test this hypothesis.

Table 3: Summary t-test Results of Gender Difference in psychological wellbeing

Gender	n	$\bar{x}$	SD	df	t	p
Male	176	58.715 9	13.15 4	390	.408	.683
Female	216	58.166 7	13.31 7			

The results of independent sample t-test conducted to examine gender differences in psychological well-being among undergraduate students at

Nasarawa State University, Keffi, showed that male participants ($M = 58.72$, $SD = 13.15$) scored slightly higher on the psychological well-being scale than female participants ($M = 58.17$, $SD = 13.32$). However, this difference was not statistically significant [$t(390) = .408$, $p > .05$]. Therefore, the stated hypothesis was not supported in this study.

Discussion of Findings

Findings from the analysis showed that loneliness have a significant negative influence on psychological wellbeing among undergraduate students of Nasarawa State University Keffi. In simpler words, it can be inferred from this finding that as feelings of loneliness increase, students experience a corresponding decline in their overall mental health, including aspects such as emotional stability, life satisfaction, and a sense of purpose. This finding is similar to reports from related studies conducted among students as well as other diverse populations (Bhagchandani, 2017; Mishra et al., 2023; Suprayogi & Hamidah, 2024). This finding aligns closely with the Evolutionary Theory of Loneliness, which posits that loneliness is an adaptive mechanism signaling a lack of social connection, prompting individuals to seek social bonds to enhance survival and well-being. Hence, experiencing loneliness over time can result in poor physiological and psychological health and its effects can be mitigated by interpersonal connections that function similarly to that of other basic human needs such as hunger and thirst (Adib & Sabharwal, 2024). The finding can be explained by several reasons. First,

loneliness, which often comes from feeling isolated or disconnected from others, makes students more vulnerable to stress, sadness, and worry. This reduces their ability to cope with challenges which in turn lowers their overall psychological well-being. Also, for many undergraduates, university life is a time of change and adjustment. Students leave the familiar environment of home, parents, and close friends and enter a new space where they must build fresh relationships. If they are unable to form these connections, feelings of loneliness may set in. Such loneliness can affect self-esteem, limit motivation to study, and even interfere with academic performance, all of which contribute to poorer mental health outcomes. On the other hand, students who maintain strong social bonds with friends or classmates may be better able to manage stress and maintain a positive outlook. These supportive relationships give them encouragement, belonging, and opportunities to express their emotions, which strengthens psychological well-being.

The study found that there is no significant gender difference in the level of psychological wellbeing among undergraduates in Nasarawa State University Keffi. this finding means that male and female students experience similar levels of mental and emotional health. In other words, being male or female does not appear to make a meaningful difference in how students feel about their overall psychological well-being. This finding is consistent with the findings of Visani et al. (2011) who found no significant gender differences in psychological well-being and distress during adolescence. In the same way,

Kantariya (2017) reported insignificant gender differences in psychological well-being among postgraduate students, while Olabimitan (2021) found a similar pattern among secondary school students. This result suggests that both male and female undergraduates face similar academic pressures, social challenges, and personal adjustments within the university environment. The shared experiences of lectures, examinations, financial struggles, and the need to build social connections may affect students equally, regardless of gender. As a result, their levels of stress, coping ability, and general well-being are more alike than different. However, this finding contrasts with the report of Mills et al. (2012), who found that male students had significantly higher psychological well-being.

Conclusion

This study examined the influence of loneliness on the psychological well-being of undergraduates in Nasarawa State University Keffi. Based on the results of the data collected and the discussion of findings, the study concludes that loneliness have significant negative influence on psychological wellbeing. The study also concludes that there is no significant gender difference in the level of psychological wellbeing of undergraduate students in Nasarawa State University Keffi.

Recommendations

Based on the findings of this study, the following recommendations are made to improve the psychological well-being of undergraduates in Nasarawa State University Keffi:

First, the university should create more opportunities for social interaction among students in diverse ways which include organizing mentorship programs, peer support groups and social events that encourage students to build meaningful connections as this may help reduce feelings of isolation and promote a stronger sense of belonging among students.

The university management should encourage and support participation in clubs, associations, and volunteer groups by providing resources and spaces for interaction, as such activities foster belonging and reduce loneliness.

It is important to provide counselling services and workshops that teach students how to manage social fears and build self-confidence. The university can also train academic staff to create more supportive classroom environments where students feel safe to ask questions, participate in discussions, and interact freely without fear of embarrassment.

REFERENCES

- Aboh, U. J., Nwankwo, N. I., Okoye, C. A. F., Oraetue, H., Agu, S., & Ogonwa, H. (2019). Stigma, personality and social support as predictors of psychological well-being among undergraduate students. *Enugu State University of Science & Technology Journal of Social Sciences*, 4(2), 298-317.
- Adeleke, O. T., Opadola, O. A., Rufai, M. M., Samuel, Y. A., Adeleke, O. V., & Adedeji, A. S. (2025). A cross-sectional study of anxiety and depression in a cohort of Nigerian undergraduates. *Annals of Health Research*, 11, 20-28. <https://doi.org/10.30442/ahr.1101-03-267>

- Adib, N. A., & Sabharwal, J. K. (2024). Experience of loneliness on well-being among young individuals: A systematic scoping review. *Current Psychology*, 43, 1965–1985. <https://doi.org/10.1007/s12144-023-04567-2>
- Ahimie, B. (2021). Mental health and psychological well-being of students in Nigerian universities in the midst of Covid-19 pandemic. In A. O. Ekong, S. M. Usen, & E. N. Essien (Eds.), *Developing alternative teaching continuity plans to move classrooms online at Covid-19 era in Nigeria*. Benchmark Educational Services.
- Balto, J. M., Pilutti, L. A., & Motl, R. W. (2019). Loneliness in multiple sclerosis: Possible antecedents and correlates. *Rehabilitation Nursing Journal*, 44(1), 52–59. <https://doi.org/10.1097/RNJ.0000000000000129>
- Barreto, M., Victor, C., Hammond, C., Eccles, A., Richins, M. T., & Qualter, P. (2021). Loneliness around the world: Age, gender, and cultural differences in loneliness. *Personality and Individual Differences*, 169, Article 110066. <https://doi.org/10.1016/j.paid.2020.110066>
- Beutel, M. E., Klein, E. M., Brähler, E., Reiner, I., Jünger, C., Michal, M., Wiltink, J., Wild, P. S., Münzel, T., Lackner, K. J., & Tibubos, A. N. (2017). Loneliness in the general population: Prevalence, determinants, and relations to mental health. *BMC Psychiatry*, 17, Article 97. <https://doi.org/10.1186/s12888-017-1262-x>
- Bhagchandani, R. (2017). Effect of loneliness on the psychological well-being of college students. *International Journal of Social Science and Humanity*, 7(2), 83–87. <https://doi.org/10.18178/ijssh.2017.V7.796>
- Cacioppo, J. T., & Cacioppo, S. (2018). The growing problem of loneliness. *The Lancet*, 391(10119), 426. [https://doi.org/10.1016/S0140-6736\(18\)30142-9](https://doi.org/10.1016/S0140-6736(18)30142-9)
- Cacioppo, J. T., & Hawkley, L. C. (2009). Perceived social isolation and cognition. *Trends in Cognitive Sciences*, 13(10), 447–454. <https://doi.org/10.1016/j.tics.2009.06.005>
- Cacioppo, J. T., Hughes, M. E., Waite, L. J., Hawkley, L. C., & Thisted, R. A. (2006). Loneliness as a specific risk factor for depressive symptoms: Cross-sectional and longitudinal analyses. *Psychology and Aging*, 21(1), 140–151. <https://doi.org/10.1037/0882-7974.21.1.140>
- Chaudhry, S., Tandon, A., Shinde, S., & Bhattacharya, A. (2024). Student psychological well-being in higher education: The role of internal team environment, institutional, friends and family support, and

- academic engagement. *PLOS ONE*, 19(1), Article e0297508.
<https://doi.org/10.1371/journal.pone.0297508>
- Çiçek, İ. (2021). Mediating role of self-esteem in the association between loneliness and psychological and subjective well-being in university students. *International Journal of Contemporary Educational Research*, 8(2), 83–97. <https://doi.org/10.33200/ijcer.817660>
- Cigna. (2018). *Cigna U.S. loneliness index*.
<https://www.cigna.com/assets/docs/newsroom/loneliness-survey-2018-fullreport.pdf>
- Dagnew, B., & Dagne, H. (2019). Year of study as a predictor of loneliness among students of University of Gondar. *BMC Research Notes*, 12(1), Article 427. <https://doi.org/10.1186/s13104-019-4274-4>
- Doman, L. C. H., & Le Roux, A. (2012). The relationship between loneliness and psychological well-being among third-year students: A cross-cultural investigation. *International Journal of Culture and Mental Health*, 5(3), 153–168. <https://doi.org/10.1080/17542863.2011.579389>
- Gao, J., & McLellan, R. (2018). Using Ryff's scales of psychological well-being in adolescents in mainland China. *BMC Psychology*, 6(1), Article 17. <https://doi.org/10.1186/s40359-018-0231-6>
- Gürel, A.G. (2009). *Effects of thinking styles and gender on psychological well-being*. Unpublished Masters Thesis, Middle East Technical University.
- Gürel, N. A. (2009). *Effects of thinking styles and gender on psychological well-being* [Unpublished master's thesis]. Middle East Technical University.
- Hawkey, L. C., & Cacioppo, J. T. (2010). Loneliness matters: A theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine*, 40(2), 218–227. <https://doi.org/10.1007/s12160-010-9210-8>
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: A meta-analytic review. *Perspectives on Psychological Science*, 10(2), 227–237. <https://doi.org/10.1177/1745691614568352>
- Isara, A. R., Nwokoye, O. I., & Odaman, A. O. (2022). Prevalence and risk factors of depression among undergraduate medical students in a Nigerian university. *Ghana Medical Journal*, 56(4), 303–310.
<https://doi.org/10.4314/gmj.v56i4.9>

- Ishaq, G., Malik, N. I., & Asif, M. (2018). Relationship of loneliness and psychological well-being among university hostels students: Moderating role of self-esteem. *Journal of Research in Social Sciences*, 6(2), 242-255.
- Kantariya, A. S. (2017). Impact of gender on psychological well-being among post-graduate students. *Psychology and Behavioral Science International Journal*, 2(1), 1-4.
<https://doi.org/10.19080/PBSIJ.2017.02.555578>
- Kantariya, A. S. (2017). Impact of Gender on Psychological Well-Being among Post-Graduate Students. *Psychology and Behavioral Science International Journal*, 29(1)
- Lisnyj, K., Pearl, D. L., McWhirter, J. E., & Papadopoulos, A. (2022). Examining the influence of human and psychological capital variables on post-secondary students' academic stress. *Studies in Higher Education*, 47(12), 2508-2522.
<https://doi.org/10.1080/03075079.2022.2053950>
- Mills, R. J., Grasmick, H. G., Morgan, C. S., & Wenk, D. (2012). The effects of gender, family satisfaction, and economic strain on psychological well-being. *Family Relations*, 41 (4), 440-445.
- Mills, S. D., Fox, R. S., Malcarne, V. L., Roesch, S. C., & Sadler, G. R. (2012). The Psychological Well-Being Scale: Testing measurement invariance across Chinese American and European American women. *Cultural Diversity and Ethnic Minority Psychology*, 18(3), 314-319.
<https://doi.org/10.1037/a0028710>
- Mishra, B., Pradhan, J., & Dhaka, S. (2023). Identifying the impact of social isolation and loneliness on psychological well-being among the elderly in old-age homes of India: The mediating role of gender, marital status, and education. *BMC Geriatrics*, 23, Article 684.
<https://doi.org/10.1186/s12877-023-04384-1>
- Mushtaq, R., Shoib, S., Shah, T., & Mushtaq, S. (2014). Relationship between loneliness, psychiatric disorders, and physical health: A review on the psychological aspects of loneliness. *Journal of Clinical and Diagnostic Research*, 8(9), WE01-WE04.
<https://doi.org/10.7860/JCDR/2014/10077.4828>
- Nurmaria, H., & Risnawati, E. (2021). The relationship of loneliness and internet addiction to psychological well-being in adolescents. *Biopsikososial*, 5(2), 1-10.

- Olabimitan, B.A. (2021). Influence of perceived social support and self esteem on psychological wellbeing of civil servants in Lagos State. *Academic Research Journal of Psychology and Counseling*, 2(1): 8-16.
- Olabimitan, B.A. (2021). Influence of perceived social support and self esteem on psychological wellbeing of civil servants in Lagos State. *Academic Research Journal of Psychology and Counseling*, 2(1): 8-16.
- Ong, A. D., Uchino, B. N., & Wethington, E. (2016). Loneliness and health in older adults: A mini-review and synthesis. *Gerontology*, 62(4), 443-449. <https://doi.org/10.1159/000441651>
- Özdemir, U., & Tuncay, T. (2008). Correlates of loneliness among university students. *Child and Adolescent Psychiatry and Mental Health*, 2(1), Article 29. <https://doi.org/10.1186/1753-2000-2-29>
- Petitte, T., Mallow, J., Barnes, E., Petrone, A., Barr, T., & Theeke, L. (2015). A systematic review of loneliness and common chronic physical conditions in adults. *Open Psychology Journal*, 8, 113-132. <https://doi.org/10.2174/1874350101508010113>
- Richardson, T., Elliott, P., & Roberts, R. (2017). Relationship between loneliness and mental health in students. *Journal of Public Mental Health*, 16(2), 48-54. <https://doi.org/10.1108/JPMH-03-2016-0013>
- Roothman, B., Kirsten, D. K., & Wissing, M. P. (2003). Gender differences in aspects of psychological well-being. *South African Journal of Psychology*, 33(4), 212-218. <https://doi.org/10.1177/008124630303300403>
- Roothman, B., Kirsten, D., & Wissing, M. (2003). Gender differences in aspects of psychological well-being. *South African Journal of Psychology*, 33(4), 212- 218.
- Roslan, S., Ahmad, N., Nabilla, N., & Ghiami, Z. (2017). Psychological well-being among postgraduate students. *Acta Medica Bulgarica*, 44(1), 35-41. <https://doi.org/10.1515/amb-2017-0006>
- Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment*, 66(1), 20-40. https://doi.org/10.1207/s15327752jpa6601_2
- Sari, I. E. S. (2017). Hubungan antara dukungan sosial teman sebaya dengan resiliensi akademik pada mahasiswa tingkat akhir jurusan X fakultas teknik Universitas Diponegoro. *Empati*, 5, 177-182.
- Stickley, A., & Koyanagi, A. (2016). Loneliness, common mental disorders, and suicidal behavior: Findings from a general population survey.

Journal of Affective Disorders, 197, 81-87.
<https://doi.org/10.1016/j.jad.2016.02.054>

Suprayogi, M. N., & Hamidah, L. N. (2024). Loneliness and psychological well-being in early adulthood. *Engineering Proceedings*, 74(1), Article 42. <https://doi.org/10.3390/engproc2024074042>

Visani, A., Albieri, E., Offidani, E., Ottolini, F., Tomba, E., & Ruini, C. (2011). Gender differences in psychological well-being and distress during adolescence. *The Journal of Happiness and Well-Being*, 1(2), 1-11.

Visani, D., Albieri, E., Offidani, E., Ottolini, F., Tomba, E., & Ruini, C. (2011). Gender differences in psychological well-being and distress during adolescence. *The Human Pursuit of Well-Being*, 21(2), 65-70.

Xu, S., Qiu, D., Hahne, J., Zhao, M., & Hu, M. (2018). Psychometric properties of the short-form UCLA Loneliness Scale (ULS-8) among Chinese adolescents. *Medicine*, 97(38), Article e12373.
<https://doi.org/10.1097/MD.00000000000012373>

Yamane, T. (1967). *Elementary sampling theory*. Prentice-Hall.