

Exploring the Relationship between Mental Well-being and Attendance among Nursing Students: Findings and Recommendations for Enhancing Student Mental Health and Engagement

I Made Raka¹, Alva Cherry Mustamu², Rizqi Alvian Fabanyo³,
Rolyn Frisca Djamanmona⁴, Yogik Setia Anggreini⁵, Jansen
Parlaungan⁶

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¹I Made Raka, Department of Nursing, Ministry of Health Polytechnic Sorong, West Papua, Indonesia. Basuki Rahmat Street, Km 11, Sorong City, West Papua Province, Indonesia. Postal Code: 98417. email : maderakamade@gmail.com

²Alva Cherry Mustamu, Department of Nursing, Ministry of Health Polytechnic Sorong, West Papua, Indonesia. Head of Quality Assurance and Education Development Center, Health Polytechnic of the Ministry of Health of the Republic of Indonesia. Basuki Rahmat Street, Km 11, Sorong City, West Papua Province, Indonesia. Postal Code: 98417. email : alvamustamu@gmail.com. ORCID id: 0000-0002-6682-514X

³Rizqi Alvian Fabanyo, Department of Nursing, Ministry of Health Polytechnic Sorong, West Papua, Indonesia. Basuki Rahmat Street, Km 11, Sorong City, West Papua Province, Indonesia. Postal Code: 98417. email : rizqifabanyo@poltekkessorong.ac.id

⁴Rolyn Frisca Djamanmona, Department of Nursing, Ministry of Health Polytechnic Sorong, West Papua, Indonesia. Basuki Rahmat Street, Km 11, Sorong City, West Papua Province, Indonesia. Postal Code: 98417. email : friscaolyn@gmail.com

⁵Yogik Setia Anggreini, Department of Nursing, Ministry of Health Polytechnic Sorong, West Papua, Indonesia. Basuki Rahmat Street, Km 11, Sorong City, West Papua Province, Indonesia. Postal Code: 98417. email : yogik.setia89@gmail.com

⁶Jansen Parlaungan, Department of Nursing, Ministry of Health Polytechnic Sorong, West Papua, Indonesia. Basuki Rahmat Street, Km 11, Sorong City, West Papua Province, Indonesia. Postal Code: 98417. email : jansenparlaungan@gmail.com

Abstract

Introduction: Nursing students' high pressure and psychological consequences during their studies make mental well-being crucial to their academic performance and engagement. Evidence shows that nursing and medical students often suffer from mental health issues such as burnout, stress, anxiety, and depression due to the demanding and complex curriculum, which can impact their attendance and performance in the classroom.

Objectives: This study explores the relationship between mental well-being and attendance among nursing students.

Methods: The study utilized a cross-sectional survey design, with participants consisting of first-semester nursing students who were actively involved in learning. Mental well-being was assessed using a mental well-being scale, while attendance was measured by the number of times students attended class.

Results: The study findings revealed that the correlation test between mental health and absenteeism among nursing program students yielded a p-value of 0.382. Furthermore, the test results for mental health levels between diploma and undergraduate nursing students produced a p-value of 0.080. The mental health difference test between Papuan and non-Papuan students showed a p-value of 0.741. Additionally, the mental health level test for students who met the administrative attendance requirements and those who did not yield a p-value of 0.907.

Conclusions: The study found no significant relationship between mental health and absenteeism among nursing students. Furthermore, there was no significant difference in mental health between diploma and bachelor's degree nursing students, nor between Papuan and non-Papuan ethnicities. Although there was a non-significant difference in mental health between students who met administrative attendance criteria and those who did not, no significant relationship was found between mental health and attendance. The study

recommends further research into the causes of mental health problems in nursing students, such as social pressure, dietary patterns, and sleep habits. Expanding research to include nursing students from different universities and regions can provide a broader understanding of mental health problems among nursing students and help develop more effective strategies to address these problems. Additionally, the study recommends conducting more focused research on interventions and programs to improve the mental well-being of nursing students and their involvement in learning. This research on interventions and programs can include mentoring programs, counseling services, and specific mental health promotion programs. Finally, the study suggests conducting in-depth research on the role of the campus and clinical practice environments in the mental well-being of nursing students and their attendance in learning.

Keywords: Mental Well-Being, Nursing Students, Attendance, Absenteeism, Mental Health Problems

1. Introduction

Primary nursing students often experience pressure and significant psychological consequences, demanding academic and practical clinical skills. Mental well-being is crucial to the student's performance, academics, and engagement in the learning process. Additionally, students' presence is essential in evaluating effective teaching and learning in the classroom.

According to the World Health Organization (WHO), one out of four individuals will experience mental or neurological disorders at some point, with around 450 million currently suffering from such conditions. Depression is a common mental disorder worldwide, affecting more than 300 million people, according to WHO. In Indonesia, the prevalence of depression in individuals over 15 is 6.1%, while in households with members suffering from mental disorders, such as schizophrenia/psychosis, it is 6.7%. Data from the Indonesian Health Basic Research Survey in 2018 indicated a significant increase in the prevalence of emotional and mental disorders among individuals aged 15-24 from 2013 to 2018, with university students falling into this age group (1).

Moreover, a recent survey by the Indonesian Association of Psychiatrists (PDSKJI) showed that many respondents experienced psychological problems such as anxiety, depression, and trauma, with the highest prevalence among individuals aged 17-29 (2). This issue is not unique to Indonesia, as evidence from studies conducted in Hong Kong, Canada, and Korea has shown that nursing and medical students often experience psychological and emotional problems such as burnout, stress, anxiety, and depression due to the complex curriculum and pressure for professional performance (3).

Based on previous studies, there are several reasons why students experience mental health problems that can disturb their attendance in learning. These factors include academic stress, which nursing students often face due to the demands of complex study and preparation for strict exams, leading to stress and other mental disorders that affect their presence in learning (3-5). Additionally, the rigorous preparation for clinical practice can cause physical and mental fatigue and a lack of time for learning, further influencing their attendance in learning. Financial stress and other personal problems, such as family, relationships, or health issues, can also impact students' mental well-being and attendance. Lastly, adjusting to a new campus environment and different clinical settings can cause stress and anxiety that affects their presence in learning.

Despite the importance of mental well-being and student attendance in learning, there is still a need for further research on the connection between the two, especially among primary nursing students. Therefore, it is crucial to conduct research that focuses on the relationship between mental well-being and attendance among nursing students.

1. Objectives

The present study aims to explore this relationship by investigating whether there is a correlation between student's mental well-being and their attendance in class. Furthermore, the study seeks to identify strategies for promoting mental well-being that may enhance student attendance to measure mental well-being. A validated mental well-being scale will be utilized, while attendance will be calculated based on class participation records. The data will be collected through a survey of primary nursing students at a university.

The implications of this study are significant for enhancing student mental well-being and engagement in nursing education. With a better understanding of the relationship between mental well-being and attendance, educational institutions can develop more effective strategies and programs to support students and minimize the impact of mental health disorders on learning outcomes. Ultimately, this study can provide quality education in nursing majors and promote better mental health outcomes among nursing students.

2. Methods

Research design

Study this uses a cross-sectional design.

Participant research :

The study involved nursing students in their first semester of diploma and bachelor study programs who were actively engaged in learning and had sufficient time to complete the questionnaire. To be eligible to participate, respondents were required to have no medical history or documented medical conditions, as confirmed by a doctor's letter from government-owned hospitals or clinics. The credibility and consistency of the research outcomes, participants were chosen based on predetermined eligibility criteria using purposive sampling, whereby only those who met the predetermined criteria were selected to participate in the research.

Instruments and materials :

This study utilizes two types of questionnaires: a demographic questionnaire and a questionnaire on mental health. The demographic questionnaire assesses the participants' age, gender, ethnicity, and study program background. On the other hand, the mental health questionnaire comprises 27 statements rated on a Likert scale from 1 (strongly disagree) to 5 (strongly agree).

Procedure :

The study utilized Google Forms to create a questionnaire distributed through WhatsApp. Participants were requested to complete the questionnaire before the conclusion of their Anatomy and Physiology for Health exam. Before the study, the researchers sought permission from the Health Polytechnic Ethics Committee under the Ministry of Health Sorong and selected an appropriate sample based on predetermined criteria.

The questionnaire utilized a Likert scale as a measuring tool to collect the participants' perspectives and opinions. The collected data were analyzed using the Jamovi statistical program, with validity and reliability tests conducted. Before analyzing the difference in mental health between undergraduate and diploma students, as well as Papuans and non-Papuans, using the Spearman rank test, the normality of the data was assessed.

Participant recruitment occurred between September and December 2022, and data collection occurred in April 2022. After data collection, the researchers processed the data using the Jamovi statistical program and conducted validity and reliability tests. They then analyzed the difference in mental health between relevant groups. The variable analyzed in this study is mental health, a quantitative variable measured using a 27-statement Likert scale questionnaire.

The Likert scale responses ranged from 1 (strongly disagree) to 5 (strongly agree). All statistical methods in this study to control for confounding variables were selected based on their suitability with the research questions and data characteristics. These methods included descriptive statistics to summarize participants' demographic characteristics and inferential statistics to test hypotheses regarding differences in mental health between different groups, with control for potential confounding variables.

In the case of missing data, there are several ways to handle it, depending on the amount and reason for its absence. One approach involves removing incomplete cases or participants with missing data, which may decrease the sample size but still produce valid results. Another approach involves imputing the missing data by estimating or replacing values based on available data or a statistical model. The imputation method employed should be appropriate for the type and amount of missing data, and sensitivity analyses should be conducted to verify the robustness of the results.

Regardless, reporting the extent and patterns of missing data and the methods employed to handle them in the research paper is crucial to ensure transparency and replicability. The study's outcomes were presented in research paper format, comprising an introduction, methodology, results, and discussion sections.

Consent

Before completing the study questionnaire, the participants explicitly gave consent by selecting the "willing" option on the Informed Consent statement within the Google Form. This consent was meticulously documented on the research ethics committee form and subsequently approved by the ethics committee. Such action indicates that the participant's involvement in this study was carried out knowingly and voluntarily and satisfied all essential ethical prerequisites to safeguard their rights and interests.

Ethics study

Researchers must ensure the privacy and confidentiality of each respondent's data in the data collection process. All data collected will be securely stored and used exclusively for research purposes. It is worth noting that this study has obtained ethical clearance from the Committee of Ethics of the Ministry of Health Polytechnic Sorong. This approval has been granted under the supervision of the Ministry of Health of the Republic of Indonesia, and it bears the approval number DM.03.05/6/050/2022.

3. Results

Fifty-one respondents who met the established criteria participated in this study. Analysis of the results revealed that the average age of the respondents was 18.9 years, with a standard deviation of 1.44. More than 80% of the respondents were women, while the remainder were men. Additionally, the majority of respondents, twenty-three individuals (66.7%), were from the Papuan tribe, while the remainder (33.3%) were non-Papuan. Regarding the study program, 37.3% of the respondents were nursing diploma program students, with the remaining 62.7% pursuing other programs. The research also showed that the average lecture absenteeism was 2.04, with a standard deviation of 2.15, and this information is presented in Table 1.

Table 1. Characteristics respondent

Variable	n	%
Age, years (Mean, SD)	(18.9,1.44)	
Type sex		
Man	9	17.6 %
Woman	42	82.4 %
Ethnic group		
Non Papua	17	33.3 %
Papuan	34	66.7 %
Study program		
Diploma III in Nursing	19	37.3 %
Bachelor Nursing	32	62.7 %
Absence in lecture (times) (mean, SD)	(2.04,2.15)	

Table 2. Validity and reliability test

No	Question	Validity test	Cronbach's α
1	I sometimes feel people talking to me.	0.427	0.910
2	I sometimes feel that other people secretly notice me.	0.567	

3	While on campus / in class, I often feel that other people noticed me.	0.511	
4	I sometimes worry if a friend I no truly loyal to or can trusted	0.685	
5	I often must be careful that others do not utilize me.	0.664	
6	No one can be " close " to other people.	0.401	
7	I feel difficult for near in a manner emotional with other people.	0.493	
8	I am a rare laugh and smile.	0.459	
9	I do not smartly disclose feeling the real me through the method I speak and look.	0.694	
10	Other people see me as a little eccentric (odd).	0.650	
11	I am weird, and I am not normal.	0.413	
12	I have several eccentric habits (odd).	0.677	
13	People sometimes comment on my behavior and habits I do not usually.	0.595	
14	I often feel the flustered moment in the middle group of people I do not know.	0.668	
15	I am tense moment the first time meeting people.	0.671	
16	I am not comfortable in situations of social engagement involving foreigners.	0.658	
17	Sometimes I avoid going to lots of places the person because I am worried.	0.607	
18	I believe in telepathy (reading the mind).	0.540	
19	I believe in clairvoyance (power psychic, fortune telling).	0.314	
20	I sometimes jump fast from one topic to another topic when talking.	0.609	
21	I deviate from the topic talk moment talk.	0.488	
22	I often babble too lot moment talk.	0.483	
23	Sometimes I need to remember what I want to say.	0.566	
24	I often hear speaking voices though loud.	0.579	
25	The moment I see somebody or myself in the mirror, i.e., once I see a changed face, I right up-front eye myself in the mirror. That	0.416	
26	Thought I sometimes so strong that I almost could hear it?	0.387	
27	Sometimes I see objects daily looked outside normal big or small?	0.444	

Based on Table 2, validity and reliability tests were conducted to ensure the accuracy and dependability of the mental health questionnaire, which comprised 27 statements on a Likert scale. The validity test results showed scores ranging from 0.314 to 0.694, indicating sufficient instrument validity. As a result, the questionnaire can be considered reliable for measuring the mental health variable among nursing college students. Furthermore, the reliability test produced a score of 0.910, demonstrating the excellent reliability of the instrument. The mental health questionnaire is highly consistent in simultaneously measuring the same variable with different measures. In other words, it can be relied upon for measuring the mental health variable among nursing college students.

Table 3. Relationships between mental health and absence in learning

		Mental health	Absence
Mental health	Spearman's rho	—	
	p-values	—	
Absence	Spearman's rho	0.125	—
	p-values	0.382	—

Based on Table 3, the test results indicate that Spearman's rho value is 0.125, with a p-value of 0.382. Therefore, there is no significant correlation between mental health and absenteeism in lectures among students studying nursing programs. Furthermore, based on the normality test results obtained from Table 4, using the Shapiro-Wilk test with a W value of 0.950 and a p-value of 0.033, it can be concluded that the data utilized in this study follows a normal distribution. This outcome concludes that the data collected for this study is standard.

Table 4. Normality Test (Shapiro-Wilk)

	W	p
Total	0.950	0.033

Table 5. Differences in the mental health of diploma and undergraduate study program students

Group	N	Means	Median	SD	SE	Statistics	df	p
Diploma	19	62.9	69.0	22.3	5.11	-1.79	49	0.080
Bachelor	32	74.0	75.0	20.9	0.17			

Table 5 exhibits the outcomes of the analysis of the variation in mental health levels between two categories of students: those enrolled in the Diploma study program and those in the Undergraduate study program. The Diploma group consisted of 19 respondents whose average mental health score was 62.9, the median score was 69, and the standard deviation was 22.3. On the other hand, the Undergraduate group had 32 respondents; their mean mental health score was 74, the median was 75, and the standard deviation was 20.9, as shown in Figure 1. The statistical findings reveal a t-value of -1.79 with degrees of freedom (df) of 49 and a significance value (p) of 0.080. This value indicates no significant difference in mental health levels between the two groups.

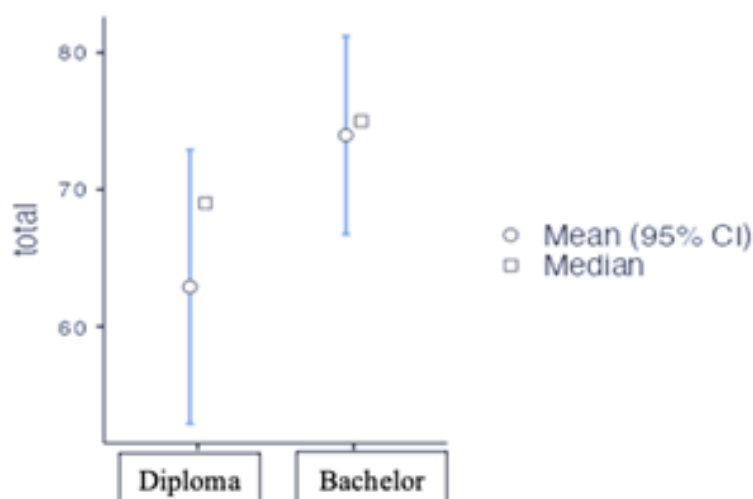


Figure 1 Differences in the mental health of diploma and undergraduate study program students

Table 6. Differences in mental health between ethnic groups

Group	N	Means	Median	SD	SE	Statistics	df	p
NON-PAPUA	17	71.3	70.0	15.3	3.71	0.230	49.0	0.741
PAPUA	34	69.1	71.5	24.7	4.23			

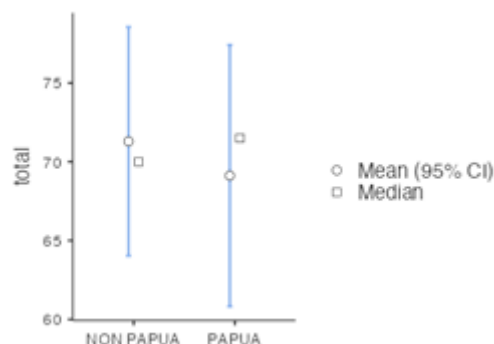


Figure 2 Differences in mental health between ethnic group

Table 6 illustrates the contrast in mental health between the non-Papuan and Papuan tribes. The non-Papuan tribe comprises 17 respondents, with a mean of 71.3 and a median of 70. Conversely, the Papuan ethnic group includes 34 respondents, with a mean of 69.1 and a median of 71.5. The non-Papuan tribe group's standard deviation (SD) is 15.3, and the standard error (SE) is 3.71. On the other hand, the Papuan ethnic group's SD is 24.7, and the SE is 4.23. Based on the statistical outcomes, the t-value is 0.230, with 49 degrees of freedom and a p-value of 0.741, as shown in Figure 2. A p-value higher than 0.05 suggests no significant difference exists between the mental health of non-Papuan and Papuan tribe students. Therefore, it can be concluded that the ethnic group factor does not affect the mental health of students enrolled in the nursing program, based on the findings of this study.

Table 7 Differences in mental health based on the absence

Group	N	Means	Median	SD	SE	Statistics	df	p
fulfill	33	69.6	71.0	19.8	3.44	-0.117	49.0	0.907
No, fulfill	18	70.3	80.5	25.9	6.10			

Table 7 analyses the variations in mental health-related absences during lectures. The study comprises two groups: one group meets the administrative/appropriate rule criteria, with an attendance percentage greater than 75% (n=33), while the other group does not meet the criteria, with an attendance percentage less than 75% (n=18). The mean score for mental health in the first group was 69.6, with a median of 71, a standard deviation (SD) of 19.8, and a standard error (SE) of 3.44. In contrast, the second group had a mean score of 70.3, with a median of 80.5, an SD of 25.9, and an SE of 6.10. The resulting statistical value is -0.117, with a degree of freedom (df) of 49 and a p-value of 0.907, as depicted in Figure 3. These findings suggest no significant difference in mental health between the second group and the respondents. Moreover, the p-value of > 0.05 indicates no notable difference between the group that fulfills the administrative condition and those that do not.

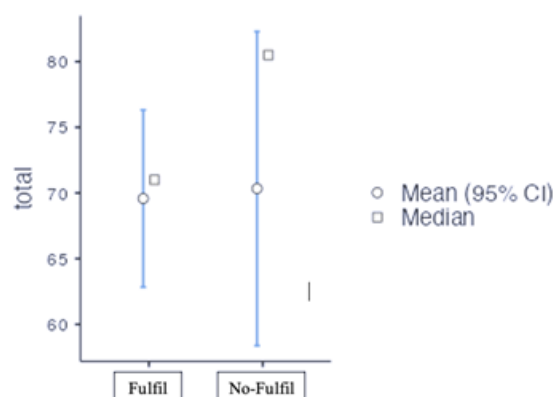


Figure 3 Differences in mental health based on the absence

4. Discussion

The research findings indicate no significant correlation between mental health and absenteeism among nursing students in lecture-based study programs. Additionally, there is no notable difference in mental health between students enrolled in undergraduate and diploma nursing programs or between Papuan and non-Papuan students. Nevertheless, there is a negligible variance in mental health between students who meet the attendance requirements and those who do not.

Several potential reasons exist for the research's failure to uncover a meaningful relationship between mental health and absenteeism in nursing lectures among students. One possibility is that other variables should have been considered in the study. Prior research has indicated that various factors, such as support, social conditions, health, physique, and experience, can influence mental health and student attendance in learning (6–9). If absenteeism in lectures were factored into the research, it might reveal a connection between mental health and absenteeism.

The internal mental health study utilized only a scale to measure possible mental well-being, and a comprehensive measure of all mental well-being remains incomplete. Furthermore, student attendance in learning is solely measured based on the number of classroom sessions attended, which may not accurately reflect students' engagement in learning. These factors could influence the research results and make it difficult to establish a connection between mental health and lecture absenteeism. The study only involves primary student nursing from one university. This result can make the study results challenging to generalize to a population of students more nursing broad and can make the connection between mental health and absenteeism in lectures difficult.

After researching the relationship between mental health and absenteeism in learning, it can be used as a reference for further explanation. One study by Amini et al. discovered a significant correlation between mental health and absenteeism in medical students in Iran (10). However, another study by Yun et al. found no such connection among medical students in South Korea (11).

Similarly, Aedh et al. conducted research in Pakistan and found no notable difference in stress levels between diploma and nursing bachelor's degree students. These studies indicate that academic, prep, clinical, and environmental campus demands can affect students' stress levels and mental well-being and are not related to their level of education (12).

In addition, Islam et al. conducted a study in Malaysia. They discovered no significant difference in the level of depression and anxiety between undergraduate and diploma study program students in nursing. These studies suggest that factors such as job satisfaction, social support, and environmental factors can impact students' mental well-being and are not associated with their level of education (13).

The study conducted by Habtamu et al. on mental health in college students of Amhara and Tigre ethnicities in Ethiopia showed no significant difference in mental health between both groups of students. The researchers concluded that ethnicity did not significantly influence student mental health (14). Another study that can be used as a reference is the research conducted by Lee et al. in South Korea, which found no significant difference in mental health between students from various ethnic backgrounds. The researchers concluded that ethnicity did not significantly affect student mental health. Earlier studies have also shown no significant difference in mental health between students from different ethnic groups. These findings may be due to factors such as the environment, culture, and lifestyle habits influenced by factors other than ethnicity (15).

However, a study has found that the Papuan or Melanesian race has better mental health in a significant manner compared to other ethnic groups. Nevertheless, individual mental health is influenced by multiple factors, including genetic factors, environment, culture, and experiences.

The study also revealed that pressure from culture and political violence could contribute to mental health problems among Papuans. For example, a study conducted by Tay et al. found that conflict in politics and violence in Papua had caused trauma and significant mental health issues among the public (16). Studies have also shown that a lack of access to mental health and social support worsens mental health among the Papuan people (17).

It is important to note that every individual is unique, and generalizations cannot be made based on factors such as ethnic group or race. When evaluating one's mental health, it is crucial to consider the context and individual factors. In a general context, several possible factors can influence the connection between attendance in

learning and mental health, such as type, gender, age, social and environmental factors, as well as the characteristics of individuals. Furthermore, influencing variables can vary depending on the context or population studied.

Suppose the group of students who meet the attendance conditions set by the administration has a higher attendance rate than those who do not. In that case, this does not significantly influence their mental health. Other influencing factors of mental health, such as the level of academic stress, social support, or physical health condition, were not considered in the study and are likely the cause of the difference. Moreover, there are no significant statistical differences due to the small sample size or inaccurate measurement method of mental health.

A recent study by Dachew et al. revealed that the prevalence of mental distress among university students is high. Almost four out of ten (39.6%) students experience mental distress. Several significant factors related to mental distress among university students were identified, including being female, having low social support, receiving news related to students, conflicts with friends, financial problems, having a family history of mental disorders, lower values, arguments with instructors, and field of study. Therefore, the study's results emphasize the need for particular focus and proper corrective actions at the right time by policymakers, university officials, and stakeholders interested in addressing mental distress (18).

The characteristics of respondents, such as their student status, age, gender, educational background, and clinical experience, do not necessarily influence the research results. However, other factors, such as academic stress, clinical preparation difficulties, financial issues, personal problems, and adaptation to the campus environment, can significantly affect students' mental well-being and attendance in the learning process.

These factors should be carefully considered to understand the factors influencing mental health among nursing students fully. Additionally, they can provide valuable insight into the relationship between mental health and absenteeism in education. The results of this study can be of great value to nursing faculty and educational institutions, as they can develop more effective strategies to address mental health issues among nursing students. The study can also serve as a basis for nursing students to improve their mental health by developing an appropriate strategy.

Furthermore, these findings can serve as a foundation for educational institutions to develop more comprehensive policies supporting nursing students' mental health. For example, institutions can provide affordable and empirically-tested mental health programs to ensure students receive the necessary support.

CONCLUSION

Based on the research results, there appears to be no significant correlation between mental health and absenteeism among nursing students in study programs. Furthermore, there is no significant distinction in mental health between undergraduate and diploma program nursing students, nor between Papuan and non-Papuan students. Despite this, there is no noteworthy difference in mental health between groups of students who meet administrative and regulatory attendance requirements and those who do not. Nevertheless, this study can significantly contribute to advancing nursing as a scientific discipline and professional practice, specifically by enhancing nursing students' quality of education and mental well-being. The study also provides several suggestions for future research, including exploring the underlying factors of mental health issues among nursing students in greater depth, expanding the study to encompass nursing student populations from various colleges in diverse areas, and conducting more research aimed at developing interventions and programs to enhance the mental well-being of nursing students. Although the study has limitations, its findings can aid colleges in developing more effective programs to assist nursing students in adapting to campus life and diverse clinical practice settings.

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authorship contribution :

The following contribution was allocated to:

1. Conceived and designed the survey (Alva Cherry Mustamu, Rizqi Alvian Fabanyo, Rolyn Frisca Djamanmon, Yogik Setia Anggreini, and Jansen Parlaungan).
2. Performed the experiments (N/A).
3. Analyzed and interpreted the data (Alva Cherry Mustamu).
4. Contributed to analysis (all authors).
5. Wrote paper (Alva Cherry Mustamu, but all authors were involved and reviewed the paper several times).

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