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Research Article

An Analysis of Risk Factors Contributing to Nutritional Problems and Stress among Students at the "X" Islamic Boarding School, Sidoarjo

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ABSTRACT

Students at the "X" Islamic Boarding School in Sidoarjo face nutritional problems (deficiency or excess) and stress due to academic burden, strict rules, and adaptation to a new environment. This study investigated the multifaceted relationship between nutritional intake, physical activity, nutritional knowledge, social support, counseling guidance, coping strategies, and stress levels about the nutritional status of students aged 13–17 years (n = 91) using a cross-sectional design. Data were collected through a structured questionnaire that measured academic burden, social pressure, social support, counseling services, coping success, nutritional knowledge, peer support, self-efficacy in choosing food, eating patterns, and anthropometric measurements (weight, height, and BMI/Age). Bivariate analysis revealed that academic burden ($p < 0.001$), social support ($p = 0.035$), counseling guidance ($p = 0.011$), and coping ($p = 0.015$) were significantly associated with stress, while social pressure was not ($p = 0.611$). Stress significantly influenced nutritional status ($p=0.001$), while nutritional knowledge ($p=0.013$), peer support ($p=0.002$), self-efficacy ($p=0.014$), and dietary patterns ($p<0.001$) were significantly correlated with nutritional status. In conclusion, psychosocial factors and nutritional behavior simultaneously influence the physical and mental well-being of students, so a comprehensive strategy is needed to improve student well-being that includes academic management, strengthening social support, counseling services, increasing knowledge and coping, and dietary education.

Keywords*: students, nutritional problems, stress, Islamic boarding schools*

INTRODUCTION

Nutritional problems and stress in Islamic boarding school students are important issues to study. Islamic boarding schools, as one of the oldest educational institutions in Indonesia, provide a food service system in the dormitory to meet students' dietary needs. However, balanced nutrition practices have not been implemented optimally, including in the Islamic boarding school environment. (Kusumawati, 2019). Inadequate intake of macro- and micronutrients is evidenced by

the behavior of skipping meals in students. (Ekayanti & Kusumawati, 2020). In addition, adolescent students also experience problems with overnutrition and obesity. (Basuki et al., 2022). On the other hand, stress is also a problem that is often experienced by students. Some challenges that must be dealt with by students in Islamic boarding schools are busy routines, strict regulations, being far from parents, and demands for independence that can be stressful. (Hyoscyamina et al., 2023). This stress can also affect the nutritional status of students. For example, students with higher nutritional status have a habit of snacking quite intensely in large quantities. They are intentionally or unintentionally, often skipping one or two meal times, especially breakfast, and replacing them with snacks. (Hariati, 2021).

Many risk factors influence nutritional problems, including the high nutritional needs of adolescents that are not always met due to unbalanced food consumption patterns. Male students tend to be less fond of snacks, while female students meet their nutritional needs by buying snacks outside the boarding school, which may not always be healthy. Perceptions of ideal body weight differ between male and female students, affecting their eating behavior and physical activity. Female students tend to maintain their weight, while male students are more likely to experience thin nutritional status. (Khusniyati et al., 2016).

The high level of physical activity in Islamic boarding schools requires a higher intake of nutrients. However, dense activities and a lack of time or facilities for sports can affect nutritional status. Lack of sports facilities and limitations in doing physical activity, especially for female students, affect nutritional status. Students with an obese nutritional status have the motivation to exercise, but are limited by the available facilities. (Hariati, 2021).

Lack of knowledge about balanced nutrition and healthy living behaviors contributes to nutritional problems. Students with good nutritional knowledge are more likely to have better nutritional status (Nurwulan et al., 2017). The availability of healthy food in Islamic boarding schools and students' access to choose healthy foods are limited. This is exacerbated by the habit of skipping meal times due to being busy or a lack of interest in the food provided (Ekayanti & Kusumawati, 2020). Stress in students in Islamic boarding schools can occur due to physical and emotional changes. This includes changes in physical appearance, feelings, and relationships with others. (Hyoscyamina et al., 2023).

Academic stress is stress experienced by students due to high academic pressure, including studying and memorizing religious material, as well as other school assignments. This stress can be exacerbated by a lack of time for rest. The different environment of the Islamic boarding school compared to home can be a source of stress.

This includes adjusting to the rules of the boarding school, interacting with other students, and adapting to the new learning environment. Lack of social support, both from peers and the Islamic boarding school staff, can increase stress levels. Social support can help students cope with those situations. The personality of a person might also affect their stress level. People who have high standards or are perfectionists may be more susceptible to stress. The hectic schedule of activities in Islamic boarding schools leads to fewer opportunities for students to rest. This can affect their mental and physical well-being and lead to increased stress levels (Rahmah et al., 2023).

The urgency of this research lies in the impact of nutritional problems and stress on students that not only affect physical health, but also mental well-being and academic achievement. This condition can lead to growth disorders and an increased risk of disease. Limited facilities, nutritional knowledge, and access to healthy food in Islamic boarding schools worsen the situation. Therefore, research to identify the primary risk factors is crucial to develop more targeted interventions.

Prior studies have shown inconsistent findings about the correlation between stress and nutritional status. Some have found no significant correlation, while others have confirmed that stress has influenced eating behaviour. Previous studies also tend to be fragmented, analyzing risk factors partially (e.g., diet or stress) without holistic integration.The novelty of this study lies in the simultaneous analysis of multifactorial factors (nutrient intake, physical activity, nutritional knowledge, and stress levels) and focusing on a specific population at the "X" Islamic boarding school in Sidoarjo that has not been explored. This approach fills the gap in the literature on the complex interactions of nutritional determinants-stress while offering solutions based on local context.

This research is important and urgent because of the high risk of nutritional problems and stress among students in Islamic boarding schools, that have an impact on their health and well-being. The novelty of this research lies in the comprehensive multifactor risk analysis and data collection in locations that have not been widely studied, so it is expected to provide a real contribution to efforts to improve nutritional status and stress management in Islamic boarding school environments.

MATERIAL AND METHODS

This study used a quantitative method with a cross-sectional design to analyze the relationship between various risk factors with nutritional status and stress levels in students at the "X" Sidoarjo Islamic Boarding School. The sample of this study consisted of 91 students living in dormitories, who were selected using a purposive sampling technique. The selection of samples is based on certain criteria to represent the targeted population. The inclusion criteria of this study were students living in dormitories, aged between 13 and 17 years, and who had agreed to participate after receiving an explanation and signing an informed consent. Meanwhile, the exclusion criteria were students who were not at the location when the data were collected or refused to participate in the study.The independent variables of this study were academic burden, social pressure, social support, counseling guidance, coping success, nutritional knowledge, peer support, self-confidence in choosing food, and eating patterns. The dependent variables were stress levels and nutritional status of the students. Data collection was carried out from June to August, coinciding with the end of the semester break, so many respondents were new students who had just returned to the Islamic boarding school. The research instruments used validated questionnaires to measure psychosocial factors, including eating patterns and stress levels. A direct measurement used to measure nutritional status by weighing and measuring the height of respondents to calculate the Body Mass Index by Age.

This research has been declared ethically sound by the Research Ethics Committee of Suherman Medika University with ethical approval number No:001868/UNIVERSITAS MEDIKA SUHERMAN/2025. The data collection process involved structured interviews and self-administered questionnaires by respondents with the assistance of researchers. The data collected were then analyzed statistically to identify the relationship between the variables studied. This study highlights the importance of a holistic approach as an effort to improve the physical and mental health of students, especially through academic load management, increasing social support, providing effective counseling services, and comprehensive nutrition education in the Islamic boarding school environment.

RESULTS AND DISCUSSION

A. Respondent Characteristics

This research was conducted in June - August 2024, coinciding with the end of the semester break for students at school. Many students had just returned from their hometowns, and many of the respondents were new students. The age and gender of the respondents in the "X" Islamic Boarding School in Sidoarjo are shown in Tables 1 and 2.

Table 1. Age Frequency Distribution

Age (years)	n	Frequency (%)
12	10	11
13	30	33
14	4	4.4
16	15	16.5
17	32	35.2
Total	91	100
Mean	14.8	
Min	12	
Max	17	

Table 1 shows the results of the study based on age distribution. From the data obtained, it shows that the average age of respondents is 14,8 years. Most respondents are between the ages of 13 and 17. This is because the respondents in Islamic boarding schools are from junior to high school students.

Table 2. Gender

Gender	n	Frequency (%)
Men	32	35.2
Women	59	64.8
Total	91	100

Table 2 displays the research results based on distribution according to gender. The data obtained shows that the majority of respondents were female, 59 students (64.8%).

B. Bivariat Analysis

Stress level refers to the psychological condition experienced by students as a result of physical, emotional, or social pressures. Stress levels are measured using the validated Kessler Psychological Distress Scale (K10/KPDS), with results categorized as no stress, mild, moderate, severe, and very severe stress. (Anderson et al., 2013). Academic burden is defined as students' perception of the quantity of assignments, examinations, and learning demands that must be fulfilled in the Islamic boarding school (pondok pesantren). Measurement is conducted using a structured questionnaire, and the results are categorized as low, moderate, or high based on the total score. A high academic burden is associated with increased stress levels among students.(Barbayannis et al., 2022).

Table 3. Results of analysis academic load and stress

Variable		Stress					Total	p-value
		Normal	Light	Moderate	Heavy	Very heavy		
Academic load	Normal	11	8	9	1	1	30	0.001
	Light	4	17	3	0	0	24	
	Moderate	3	3	10	0	0	16	
	Heavy	6	5	2	0	0	13	
	Very heavy	4	1	1	0	2	8	
	Total	28	34	25	1	3	91	

The results of this study indicate a significant relationship between academic load and stress levels experienced by students. With a p-value <0.001, it can be concluded that academic load

affects the stress levels experienced by students. From the data obtained, the distribution of the number of respondents can be seen based on the category of academic load and stress level. Most respondents with a normal academic load tend to experience lower stress levels. Conversely, respondents with higher academic load tend to experience higher stress levels.

Research on academic stress in Islamic boarding school students (pesantren) shows a significant relationship between academic load and stress levels. Students with high academic loads tend to experience higher levels of stress compared to those with light academic loads. This is in line with the findings of a study that noted that heavy academic demands in Islamic boarding schools can cause stress and are related to students' level of engagement in learning. (Azmi et al., 2024). Other research also shows that a stressful academic environment, including parental expectations, can contribute to stress experienced by students. (Khafifah et al., 2023).

Social pressure refers to the pressure perceived by students as a result of interactions with peers, the environment, or social norms within the Islamic boarding school (pondok pesantren). This pressure is measured using a questionnaire and categorized as low, moderate, or high social pressure. However, several studies have found that social pressure does not always show a significant association with stress levels, as other factors such as social support and self-adjustment also play a substantial role (Nuryani, 2023).

Table 4. Results of analysis social pressure and stress

Variable		Stress					Total	p-value
		Normal	Light	Moderate	Heavy	Very heavy		
Social pressure	Normal	3	8	3	0	0	14	0.611
	Light	3	7	4	0	1	15	
	Moderate	9	9	7	0	1	26	
	Heavy	7	8	7	0	0	22	
	Very heavy	6	2	4	1	1	14	
	Total	28	34	25	1	3	91	

The results of this study show a relationship between social pressure and stress levels experienced by students. With a p-value of 0.611, there is no significant relationship between social pressure and stress levels, indicating that other factors may have a greater influence on the stress experienced by students. The importance of social support and communication with peers in the Islamic boarding school environment has also been highlighted in several studies, which show that this support plays an important role in reducing the levels of stress experienced (Sari et al., 2022).

On the other hand, some students experience higher levels of stress, including moderate, severe, and very severe. Although small in number, the data shows that one student experienced severe stress and three students were in the very severe category. This indicates that not all students are in good health, and certain factors need to be considered to help those in more severe conditions. Research shows that academic stress, environmental factors, and social support are significant factors that can influence stress levels in students (Sari et al., 2022).

Social support is defined as the level of emotional, informational, or material assistance received by students from peers, family, or boarding school staff. Social support is measured using a validated questionnaire and categorized as low, moderate, or high. High levels of social support have been shown to reduce students' stress levels and enhance their adaptive capacity within the boarding school environment.

Table 5. Results of social support and stress

Variable		Stress					Total	p-value
		Normal	Light	Moderate	Heavy	Very heavy		
Social support	High	8	8	13	1	0	30	0.035
	Medium	3	12	5	0	2	22	
	Low	17	14	7	0	1	39	
	Total	28	34	25	1	3	91	

The results of this study indicate a relationship between social support and stress levels experienced by students. With a p-value of 0.035, there is evidence that social support has a significant effect on the level of stress experienced, where the higher the social support, the lower the level of stress felt by students. A study by Nuraini & Fitriani (2023) found that there was a significant influence between social support and academic stress among vocational high school students. This study noted that students who received high social support tended to experience decreased levels of academic stress. This finding supports the results of current research, which shows the importance of social support in managing stress.

Counseling guidance comprises structured support services to help students address academic and psychological challenges. Research of Daulay et al., (2022), which categorized participants based on counseling access, with service frequency and perceived quality as key metrics, identified a significant correlation between counseling participation and reduced self-reported academic stress, alongside improved coping strategies.

Table 6. Results of counselling guidance and stress

Variable		Stress					Total	p-value
		Normal	Light	Moderate	Heavy	Very heavy		
Counseling guidance	Yes	18	9	9	1	0	37	0.011
	No	10	25	16	0	3	54	
	Total	28	34	25	1	3	91	

The results of this study indicate a significant relationship between counseling guidance and stress levels experienced by students. With a p-value of 0.011, this study indicates that students who receive counseling guidance experience lower stress levels compared to those who do not receive such guidance. These results indicate that counseling guidance plays an important role in reducing stress levels experienced by students. Counseling guidance services have a positive impact on reducing academic stress among students (Daulay et al., 2022). They found that various techniques in counseling guidance, such as individual and group counseling, can help students overcome their academic and emotional problems. This is in line with the findings of this study, which show that students who receive counseling guidance tend to have lower stress levels.

Counseling guidance in Islamic boarding schools can help students manage stress through spiritual and psychological approaches (Wahyuningtyas, 2019). The study showed that students who actively participated in counseling guidance sessions experienced an increase in their mental well-being. These findings support the results of the current study, which show the importance of support from counseling guidance.

Support from guidance and counseling not only lowers stress but also helps students build more effective coping mechanisms (PUTRI, 2024). The effective guidance and counseling programs can provide students with the capabilities to deal with academic and social challenges.
Coping success refers to students' ability to manage and overcome the stress or pressures they face. Coping success is measured using a coping strategy questionnaire and categorized as successful or

unsuccessful based on specific scores. Students who are successful in coping tend to experience lower levels of stress.

Table 7. Results of coping status and stress

Variable		Stress					Total	p-value
		Normal	Light	Moderate	Heavy	Very heavy		
Coping status	Success	20	10	12	1	2	45	
	Fail	8	24	13	0	1	46	0.015
	Total	28	34	25	1	3	91	

The results show the relationship between coping status (successful/unsuccessful) and stress levels (normal, mild, moderate, severe, or extremely severe) among 91 respondents. It appears that individuals with successful coping tend to have lower stress levels, with the largest proportion in the normal and mild stress categories. Conversely, individuals with unsuccessful coping were more likely to have mild and moderate stress levels. A statistical test showed a p-value of 0.015, indicating a significant relationship between coping status and stress levels.

This finding aligns with recent research demonstrating that good coping skills play a crucial role in reducing stress levels. A study by Gloria et al., (2024) on college students found that 51% of respondents with good coping tended to have lower stress levels, and most respondents experienced moderate stress when coping was less than optimal. Furthermore, research by Bondarchuk et al., (2024) confirmed that inappropriate coping strategies, such as avoidance or denial, are associated with increased emotional exhaustion and stress, while adaptive coping, such as positive reappraisal, can significantly reduce stress levels.

According to a different study by Ling et al., (2024), individuals who can identify problems and take concrete steps to address them tend to experience reduced biological stress, such as lower cortisol levels. This highlighted the importance of problem-focused coping strategies. However, the context and source of the stress also have a significant impact on coping effectiveness. Hence, it is recommended to develop a variety of coping skills. Overall, the findings of the current and earlier studies confirm that coping success significantly determines the level of stress experienced by an individual. Interventions to improve coping skills, particularly problem-focused strategies and positive reappraisal, are crucial to reduce stress and maintain mental health.

Nutritional status is a health condition that reflects the balance between nutrient intake and the body's needs. Nutritional status can be measured objectively by assessing weight and height, then calculating the body mass index for age (BMI) according to WHO standards. Based on the WHO classification, nutritional status categories into severely underweight, underweight, normal weight, overweight, and obese (World Health Organization, 2007).

Table 8. Results of stress and nutritional status

Variable		Nutritional status		Total	p-value
		Normal	Abnormal		
Stress	Normal	20	8	28	0.001
	Light	6	28	34	
	Moderate	12	13	25	
	Heavy	0	1	1	
	Very heavy	2	1	3	
	Total	40	51	91	

The result indicated a significant correlation between stress levels and nutritional status ($p = 0.001$). Despite the small number of subjects in the mild and extremely severe stress categories (6 and 3, respectively), the proportion of abnormal nutritional status reached 33.3%. In moderate stress,

the category with the second largest number of subjects (n = 25), the proportion of abnormal nutritional status increased dramatically to 52.0%. This indicates that moderate stress poses a higher risk of impaired nutritional status. The severe stress category only had one subject, who also experienced abnormal nutritional status, confirming that increased stress levels contribute to the risk of malnutrition. This phenomenon aligns with the findings of Hidayat et al., (2023), who reported a positive correlation between stress levels and nutritional status in high school adolescents. Academic stress causes changes in energy, protein, and carbohydrate intake, thus affecting body mass index.

Mardiyah et al., (2024) showed that emotional stress triggers unhealthy eating patterns, consumption of high-fat and high-sugar snacks, resulting in an increased prevalence of obesity and multiple malnutrition in adolescents. Furthermore, (Sustrami et al., 2025) demonstrated the effectiveness of stress management interventions using relaxation techniques in improving the nutritional status of college students. A decrease in stress scores was accompanied by a significant increase in the proportion of normal BMI (pre-test post-test p = 0.002). Overall, the data indicate that increased stress levels, particularly in the moderate to severe category, are closely associated with abnormal nutritional status. An integrated intervention approach combining psychological and nutritional counseling is needed to restore balance between nutritional intake and mental well-being in individuals across age groups.

Nutritional knowledge refers to students' level of understanding regarding balanced nutrition concepts, healthy foods, and their impact on health. This knowledge is measured using a nutritional knowledge questionnaire and categorized as low, moderate, or high. Good nutritional knowledge contributes to better nutritional status and healthier eating behaviors. (Nafilla et al., 2022).

Table 9. Results of Healthy food knowledge and nutritional status

Variable		Nutritional status		Total	p-value
		Normal	Abnormal		
Healthy food knowledge	High	28	21	49	0.013
	Medium	7	23	30	
	Low	5	7	12	
	Total	40	51	91	

The results of this study indicate a significant relationship between knowledge about healthy food and the nutritional status experienced by students. With a p-value of 0.013, these data indicate that students with high knowledge about healthy food tend to have better nutritional status compared to those with moderate or low knowledge. These results indicate that good knowledge about healthy food contributes to better nutritional status among students. Nafilla et al., (2022) in their study found that the level of nutritional knowledge affects the eating patterns and nutritional status of students at school. The study showed that students with good nutritional knowledge tend to choose healthier foods and have better nutritional status. This is in line with the findings in this study, which showed that students with high knowledge about healthy food had a more normal nutritional status compared to those with low knowledge.

Nicholaus et al., (2020) also noted that increasing nutritional knowledge among boarding school students can help overcome the nutritional challenges they face. This study recommends collaboration between the government, schools, and parents to improve the food system and provide nutrition education to students so that they can make better food choices. Almansour et al., (2020) emphasized the importance of nutrition education in forming healthy eating habits among college

students. The study found that students with higher nutrition knowledge tend to have better eating habits, although the effect is considered weak. However, nutrition education is still considered important to increase awareness of the importance of healthy eating patterns. Peer support in choosing healthy foods refers to the positive influence of peers in selecting and consuming healthy foods. This support is measured using a questionnaire and categorized as low, moderate, and high. High peer support has been shown to improve students' nutritional status and promote healthy eating behaviors (Bastami et al., 2021).

Table 10. Results of Friends support in choosing healthy food and nutritional status

Variable		Nutritional status		Total	p-value
		Normal	Abnormal		
Friends support in choosing healthy food	High	21	9	30	0.002
	Medium	14	30	44	
	Low	5	12	17	
	Total	40	51	91	

The results of this study indicate a significant relationship between peer support in choosing healthy food and the nutritional status experienced by students. With a p-value of 0.002, these data indicate that students who receive high support from their friends in choosing healthy food tend to have better nutritional status compared to those who receive moderate or low support. These results indicate that support from friends in choosing healthy food contributes to better nutritional status among students. Bastami et al., (2021) stated that the influence of peers on adolescent eating behavior is very significant. This study shows that adolescents who receive support from their friends to consume healthy food tend to have better eating patterns. Social support from friends can motivate individuals to make healthier food choices, especially among adolescents who are highly influenced by social norms.

Haidar et al., (2019) found that social support from peers is positively related to diet quality in adolescents. This study emphasizes the importance of peer support in forming healthy eating habits and shows that adolescents with high support from friends tend to have better nutritious food intake. Alqahtani (2020) also noted that peer pressure can influence food choices, both positively and negatively. In this context, support for choosing healthy foods can help reduce unhealthy food consumption among adolescents, thereby contributing to better nutritional status. Sharma et al. (2019) explained that knowledge about nutrition and social support plays an important role in determining adolescent eating behavior. The study showed that adolescents who have good knowledge about nutrition and receive support from friends tend to make healthier food choices. Self-confidence in choosing healthy foods refers to students' belief in their ability to independently select healthy foods. This self-confidence is measured using a self-efficacy questionnaire and categorized as low, moderate, or high. Students with a high level of self-confidence in choosing healthy foods tend to have better nutritional status. (Steeves et al., 2016).

Table 11. Results of Self-confidence in choosing healthy foods and nutritional status

Variable		Nutritional status		Total	p-value
		Normal	Abnormal		
Self-confidence in choosing healthy foods	High	17	8	25	0.014
	Medium	14	30	44	
	Low	9	13	22	
	Total	40	51	91	

The results of this study indicate a significant relationship between self-confidence in choosing healthy food and the nutritional status experienced by students. With a p-value of 0.014, these data indicate that students who have high self-confidence in choosing healthy food tend to have

better nutritional status compared to those who have moderate or low self-confidence. These results indicate that high self-confidence in choosing healthy food contributes to better nutritional status among students. Steeves et al. (2016) found that there is a positive relationship between knowledge about nutrition and self-confidence in making healthy food choices. This study shows that increasing nutritional knowledge can increase an individual's self-confidence in choosing the right food, which in turn contributes to better nutritional status. This is in line with the findings of this study, which show that students with high self-confidence tend to have normal nutritional status.

Salahshouri et al. (2018) emphasized the importance of interventions to increase self-confidence related to choosing healthy food as part of a nutrition education program. The study showed that successful interventions can increase an individual's self-efficacy in making healthy food choices, thus having a positive impact on their nutritional status. Alqahtani (2020) noted that social and environmental support also play an important role in increasing adolescents' self-confidence in choosing healthy foods. This study shows that adolescents who receive support from friends and family tend to be more confident in making healthy food choices, thus contributing to their nutritional status. Eating patterns refer to daily eating habits, including the frequency, types, and amounts of foods consumed. Eating patterns are assessed using food recall or an eating behavior questionnaire and categorized as good, adequate, or poor. Good eating patterns contribute to normal nutritional status and reduce the risk of health disorders. (Nafilla et al., 2022).

Table 12. Results of dietary habits and nutritional status

Variable		Nutritional status		Total	p-value
		Normal	Abnormal		
Dietary habit	Good	25	11	36	0.000
	Adequate	9	22	31	
	Poor	6	18	24	
	Total	40	51	91	

The results of this study indicate a very significant relationship between diet and nutritional status experienced by students. With a p-value of 0.000, these data indicate that students who have a good diet tend to have normal nutritional status, while those who have a sufficient or poor diet are more likely to experience abnormal nutritional status. These results indicate that a good diet contributes significantly to better nutritional status among students.

Nafilla et al. (2022) in their study found that a good diet is positively related to nutritional status in adolescents. The study showed that adolescents who consume a balanced, nutritious diet tend to have better nutritional status. This finding is in line with the results of this study, which showed that students with a good diet tend to have normal nutritional status. Khoiroh (2022) noted that adequate nutritional intake is very important for the growth and development of students. This study shows that students with poor diets tend to experience nutritional problems, including being underweight or overweight, which their health.

Muzdalifah (2021) explained that the quality of diet has a direct effect on an individual's physical and mental health. This study concluded that a poor diet can lead to long-term health problems, including mental disorders such as stress and anxiety. Mustikaningsih et al. (2019) emphasized the importance of education about healthy eating patterns in increasing awareness of the importance of nutrition among adolescents. The study showed that nutrition education can help adolescents make better food choices, thus having a positive impact on their nutritional status.

CONCLUSION AND SUGGESTION

Conclusion

The results of this study revealed several factors that influence the stress level and nutritional status of students in Islamic boarding schools. Academic burden, social support, counseling guidance, and coping success have a significant relationship with the stress level of students, while social pressure does not show a significant relationship. Regarding nutritional status, it was found that stress levels, knowledge about healthy food, support from friends in choosing healthy food, self-confidence in choosing healthy food, and eating patterns have a significant relationship with the nutritional status of students. This study emphasizes the importance of a holistic approach in supporting the welfare of students, including academic load management, increasing social support, providing effective counseling guidance services, and comprehensive nutritional education. By considering these factors, it is hoped that educational institutions can play an active role in improving the physical and mental health of students as a whole.

Suggestion

These results emphasize the importance of a holistic approach in supporting the well-being of students, including academic load management, increasing social support, providing effective guidance and counseling services, and comprehensive nutritional education. By considering these factors, it is hoped that educational institutions can improve the physical and mental health of students as a whole.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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