

NOURISHING MINDS: INVESTIGATING THE CONNECTION BETWEEN BREAKFAST HABITS AND ACADEMIC ACHIEVEMENT IN VOCATIONAL NURSING STUDENTS

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ABSTRAK

Background: Breakfast is one of the internal factors that can affect the learning process and also affect academic achievement. Students who skip breakfast have negative effects such as fatigue, slow reaction time, and cognitive decline. The frequency of breakfast has a significant impact on the physiological health and activation of brain function, which is correlated with academic achievement. **Objective:** This study aimed to identify the relationship between breakfast habits and academic achievement in second-year vocational nursing students. **Methods:** This study used cross sectional design. The respondents recruited with a total sampling. Data were collected in November 2021. A total of 45 were participated in this study with inclusion criteria second year students, could fill google form and willing to participated in this study. **Results:** Eleven students (24%) had breakfast every day. There is no relationship between breakfast habits and academic achievement in second-year vocational nursing students ($p > 0.05$). But the grade point average is slightly higher in students who take breakfast regularly (mean = 3.50). **Conclusion:** There is no relationship between breakfast habits and academic achievement in second-year vocational nursing students.

Keywords: Breakfast Habits, Academic Achievement, Vocational Nursing Students, Nutrition and Academic Performance, Student Nutrition

INTRODUCTION

Breakfast is recommended as a component of a balanced diet since it is associated with healthier macronutrient and micronutrient consumptions, BMI, and lifestyle choices ((Affinita et al.,

2013). Breakfast helps individu meet their dietary needs (Suja et al., n.d.). In the past, researchers have found a connection between regular breakfast consumption and better academic achievement among young people.

According to a meta-analysis conducted by (Burrows et al., 2017), having breakfast daily is correlated with better performance in school. Maintaining a consistent eating schedule provides the brain with the food it needs to function optimally (Murakami & Livingstone, 2016).

Because to the global spread of the Covid-19 epidemic, traditional classroom settings have given way to online learning. Universities have also embraced online education at a quick pace (Lee et al., 2021). In March 2020, as the Covid-19 outbreak spread in Indonesia, Ministry of Health issued a regulation to implement learning from home (Megatsari et al., 2020). As the online teaching and learning being adapted, some health problems also emerge. An international online survey reported the unhealthier eating behavior in food and meal consumption rise during Covid-19 pandemic (Ammar et al., 2020). (Chusak et al., 2022) found more than 70% of the university students skipping breakfast ≥ 3 times/week.

Based on the initial survey conducted across three study programs at a private school, it was found that second-year vocational nursing students exhibited significantly lower breakfast frequency compared to students from other study programs. Specifically, the survey revealed that 48.1% of vocational

nursing students were not in the habit of having breakfast, particularly during the pandemic. This trend could potentially have a negative impact on their ability to concentrate during lessons and exams, which might lead to academic difficulties such as failed exams, course withdrawals, and ultimately, a decrease in overall academic performance. Consequently, the purpose of this study was to investigate the relationship between breakfast habits and academic achievement among second-year vocational nursing students. By exploring this relationship, the study aims to provide insights into how improving breakfast habits could potentially enhance academic outcomes and contribute to better student performance in nursing education.

METHOD

Study design

A cross sectional study was conducted on 45 respondents, using a total sampling technique among second-year vocational nursing student.

Inclusions and Exclusions Criteria

The inclusion criteria were complete 4 semester credit, has a device such as computer, laptop, smartphone, could assess google form.

Data collection

Information gathered using a Google form beginning in November of 2021.

This online survey was made available to students in their final semester of school. The researchers lay out the research protocol and goals on the first page of the Google form. After deciding to take part, students filled out a consent form. Students' involvement in the study was entirely voluntary, and they could withdraw at any time without repercussions.

The online survey consisted of questions regarding demographic information, such as gender and age, and number of days of breakfast in a week as breakfast habits. Grade point average obtained from the academic unit.

Data Analysis

Data analysis carried out using the Statistical Package for the Social Sciences (SPSS) Version 23.0 for Windows. The relationship between breakfast habits and academic achievement calculated with Mann Whitney test with $p < 0.05$ being statistically significant.

RESULTS

Respondents' characteristic

Table 1. Characteristic of the Respondents

N=45			
Variables	Category	n	Percentage(%)
Gender	Man	6	13.33
	Woman	39	86.67
Breakfast frequency	7 times a week	10	22.2
	< 7 times a week	35	77.8

Variables	Mean (SD)	Min	Max
Age	20.76 (1.22)	19	27

Table 1 displays the respondents' demographic information. The vast majority of those who took part were female (86.67%). The median age of those who participated was 20. Meanwhile, over 70% of people polled admitted to skipping breakfast on a daily basis.

Relationship between breakfast habits and academic achievement

Table 2. Relationship between breakfast habits and academic achievement

	n	Median (min-max)	p
GPA in group 7 times a week	10	3.50 (3.15-3.96)	0.477*
GPA in group < 7 times a week	35	3.45 (2.82-3.89)	

*Mann-Whitney test

Results of the Mann-Whitney test showed that breakfast habits and GPA was not significantly correlated ($p > 0.05$). But the GPA in group which take breakfast regularly was slightly higher compare with group which not take breakfast regularly.

DISCUSSIONS

This is the first cross-sectional study to examine the effects of the COVID-19 ban on the eating habits of

vocational nursing students, and it was conducted entirely online. The majority of vocational nursing students (78.2%) skipped breakfast at least once each week, as measured by the assessment.

This study's findings are consistent with those of others showing that more than half of the undergraduate students questioned skipped breakfast while studying online during the COVID-19 pandemic (Chusak et al., 2022). Lack of time, a late start, and exhaustion are the most common reasons why people skip breakfast (Argun & ZANLIER, 2021). The reason of the respondents who skipped breakfast in this study were lack of time, live in rent house, and used not to take breakfast. Other study stated students' who skipping meals during the lockdown may be explained by the difficulty in obtaining food from physical outlets (Powell et al., 2021).

From the results of the research, it was found that there was no relationship between breakfast habits and academic achievement. This result different from previous study which stated having regular breakfast have positive effects on GPA scores (Ünal et al., 2017). This happens because there were many factors that may affect academic achievement apart from breakfast habits, including psychological, social factors, and situational factors at school which were not examined in this study. Nonetheless, (Giusti et al., 2021)

discovered an adverse effect of online learning on impairment in concentration and learning, and rising depressive symptoms recognized as the strongest predictors of poor academic performances during the Covid-19 outbreak. When asked about the drawbacks of online education, students most commonly cited a loss of "face-to-face" interaction with lecturers, challenges connecting with instructors during online sessions, and more distractions when studying at home.

CONCLUSION

In conclusion, this study found that regular breakfast habits do not have a significant correlation with academic achievement among second-year vocational nursing students. While breakfast is widely recognized as an important factor for overall health and well-being, it appears that other variables may play a more substantial role in influencing academic performance, especially during the challenges posed by the COVID-19 pandemic. Factors such as online learning challenges, mental health, study environment, and social distractions during the pandemic could all potentially contribute to changes in academic outcomes. Therefore, further research is needed to explore these other influencing factors in greater detail to better understand the complexities of

academic achievement during this period.

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