Research Article

The Impacts of Lifestyle Study and Eating Behaviour Quality on Academic Performance among University Students

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ABSTRACT

Academic performance is one of the essential things among students to pass the graduation level and succeed upon graduation. A quantitative research was conducted to achieve this research objective. The research focused on the determined of the impacts of lifestyle study and eating behaviour quality on academic performance among university students that consists of physical activity, study habit and eating habit. The research questionnaire information was gathered from an online survey distributed via social media platforms such as WhatsApp, Instagram, and Telegram and managed to gather data from 399 respondents. The impact of study lifestyle and eating behaviour on academic performance was tested in first-year and last-year university students. According to the findings, physical activity, eating habits, and study habits all significantly impact academic achievement. Most students nowadays are unable to concentrate and do effectively in their studies, risking their academic performance, while regular physical activity, good practice of study habits and eating habits can lead to better academic performance.

Keywords: Academic performance, university students, physical activity, study habit, eating habit

INTRODUCTION

Academic performance is the outcome of how well the students put their efforts in their studies. Various factors influence students' academic performance (Patwary et al., 2022). The overall average grades and marks from the preceding semesters are used to evaluate academic performance. The researcher determined which variables have a favourable or unfavourable influence on students' academic performance. Academically, positive self-esteem and self-confidence are essential components of academic achievement. Individuals that are more organised, prepared, and have an organisational strategy and planner perform better in school

and will do so in their careers. Academic performance is achieved by time management, priority, attention, and motivation (Regier, 2011).

A poor dietary habit has often affected academic performance. Academic performance may be considered an issue when people cannot meet their short- or long-term educational goals. When students do poorly in university, it is frequently due to a lack of preparation for the exam or test. Still, it may also be due to a lack of attention in class, a poor memory, a lack of capacity to follow through on issues, and a lack of coordination in class (Patwary & Rashid, 2016).

With a growing focus on (GCPA) and academic performances, it is important to consider how lifestyle and eating habits may influence their success (Reuter et al., 2020). Dietary habits can be linked to poor academic achievement in some cases. Students engage in a variety of unhealthy eating behaviours regularly, including skip breakfast, snacking at night, drinking less water, consuming large amounts of food, and eating while engaged in activities are all bad habits (Sogari et al., 2018). The purpose of this study is to investigate the impact of lifestyle study and eating behaviour quality on academic performance among first-year and final-year university students. The research contained three objectives:

1. To identify the relationship between physical activity and academic performance among university students.
2. To examine the relationship between study habits and academic performance among university students.
3. To illustrate the relationship between eating habits and academic performance among university students.

SIGNIFICANCE OF THE STUDY

In this study, several stakeholders will get the benefit as follows:

Researcher

This study aimed to give better information and enlighten new researchers about the entire extent of available data. Future researchers will benefit from this study. Future researchers will be able to discover more about the impact of students' lifestyles and eating habits on their academic performance. As a result, this research study will help future researchers improve their work quality.

University Students

This study will share the impacts of lifestyle and eating behaviour quality on academic performance among university students. With that, the new norms of food choice among students will happen after knowing the bad effect of consuming unhealthy lifestyles and food choices. University students are known to be confronted with a significant amount of assignments, work, and co-curriculum activity that is hard to arrange. This demands the knowledge and implementation of good study techniques (Jafari et al., 2019). Evidence reveals

that students with inadequate knowledge for study methods will not obtain a good and consistent learning and, as a result, do not achieve the desired degree of academic performance (Arora, 2016).

Society

This research finding will have a significant impact on society, especially among the students, about awareness of unhealthy eating habits and lifestyles that can affect their academic performance. The study also shows that impacts on the students' academic performance happen based on various issues and directly lead to various negative impacts. The impacts are related to multiple issues in one context: physical activity, study, and eating habits. In addition, this study will help people, especially students, with awareness in preventing harmful eating behaviour. Besides, this study will be helpful to the community, either adults and children or workers and students, to know the information and knowledge of the impact of unhealthy eating habits and lifestyles.

LITERATURE REVIEW

Physical Activity Effects on Students' Lifestyle

Actual physical activity is critical for prosperity, security and ailment aversion. This genuine work is routinely performed by kids, youngsters, and adults. Regardless, school understudies are preferred to contribute more energy analysing than partaking. Busy work has been seen to help individuals, increase breaking points, and work on overall individual fulfilment (Alom et al., 2019). Physical activity is a critical ally of 33% of overweight or fat adults. The pace of heaviness in the U.S. school people has extended from 12% in 1991 to 36% in 2004. Only 45% of adults get the proposed 30 minutes of genuine work on something like five days out of each week, and adolescents are inactive. 81% to 85% of adults continue with a comparative illustration of genuine work they set up during their senior year of school. A standard of 40 to 45% of understudies participate in wellbeing practices regularly (≥3 days/week) (Nobles et al., 2020). Honest work, for instance, high-sway work out (e.g., determination exercises like walking, swimming, treadmill running, and cycling) on mental and actual prosperity markers using semi-investigations between subjects (i.e., the relationship of genuinely unique and fixed benchmark gatherings) and in-subject arrangement that is, an assessment of a comparable assembling already, then, at that point, afterwards the action intervention).

Study Habits Effects on Student's Academic Achievement

Study habits can bring many advantages or disadvantages, especially on students' academic performances that depend on how good or bad university students applied in their university's life. Arora (2016) has mentioned that study habits can be defined as different individual behaviour about studying. As the researchers mentioned, several types of study habits can be assessed through students' reports, examinations, rating scales and others. The study has shown that good study habits influence the students' achievement especially in academics (Mukminin et al., 2019). As mentioned by Mukminin et al., (2019) poor study habits also make the students have low comprehension and confidence in study as well as affect their academic performance.

Consequences of Eating Habits

Nowadays, students are experiencing various problems related to food selection. Most students get less exposure to the pros and cons of the food consumed. Many students consume enough nutrition with healthy foods, however, negative attitudes toward healthy eating behaviours are also common among students. Good eating habits such as the pattern of eating time or complete nutritional intake may positively impact them especially for their body and mental health. However, poor eating habits, such as missing breakfast, can lead to students dozing in class or failing to participate at all. Because they had a long and stressful day, students tended to eat late at night. They get exhausted, which has an impact on their sleeping patterns. All these eating patterns may lead to different results for their health.

Breakfast habits have been shown to help students attain academic success in high school and college (Patwary et al., 2020). Besides, eating fruits and vegetables is one of the best solutions to this issue. Vitamins, vitamins C and A, minerals, such as electrolytes, and, more recently, phytochemicals, such as antioxidants, have all been implicated in fruits and veggies. Dietary fibre can also be obtained from fruits and vegetables (Slavin & Lloyd, 2012). On the other hand, unhealthy food eating habits have become a challenge to most students, as almost all tasty, delicious, and exciting foods are malnourished and unhealthy foods. Fast food intake has been associated with decreased academic performance. De Vleminck et al. (2013) found that students who ate more fast food, specifically French fries and burgers, had a worse GPA and were less likely to show up for tests. Respondents' self-reported current GPA based on their fast food intake habits.

The Impact of Study Lifestyle and Eating Behaviour Quality on Academic Performance

If students do not eat a proper meal and maintain their study lifestyle properly, it will impact their academic performance. Such as an adverse effect of a bad lifestyle and unhealthy eating habits among university students are the consequences of academic performance. Different research findings on study habits varied depending on the precise study habits examined. Schuman et al. (1985) looked at group studying, cramming, note-taking, reviewing previous tests, and going over readings twice. Still, they had concluded that none of these factors directly impacted grades. Positive outcomes, on the other hand, were observed when a mix of study habits was employed, such as attendance, homework handed in, and usage of a study guide, as well as previous preparation for the class, class participation, and arriving on time (Gracia et al., 2003). Besides, eating habits such as breakfast intake has also been featured to help students achieve school-level progress up to university (Patwary, 2022). It reveals that students who eat breakfast will perform better on exams than those who skip breakfast.

Research Hypothesis

The hypothesis in the study constructs a non-directional hypothesis. This hypothesis is related to the dependent variable and independent variable. It shows the research's hypothesis that used had relationships between dependent and independent variables. Below is the following hypothesis that the study concerned;

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H₁	There is a significant relationship between physical activity and academic performance among university students
H₂	There is a significant relationship between study habits and academic performance among university students.
H₃	There is a significant relationship between eating habits and academic performance among university students.

Research Framework
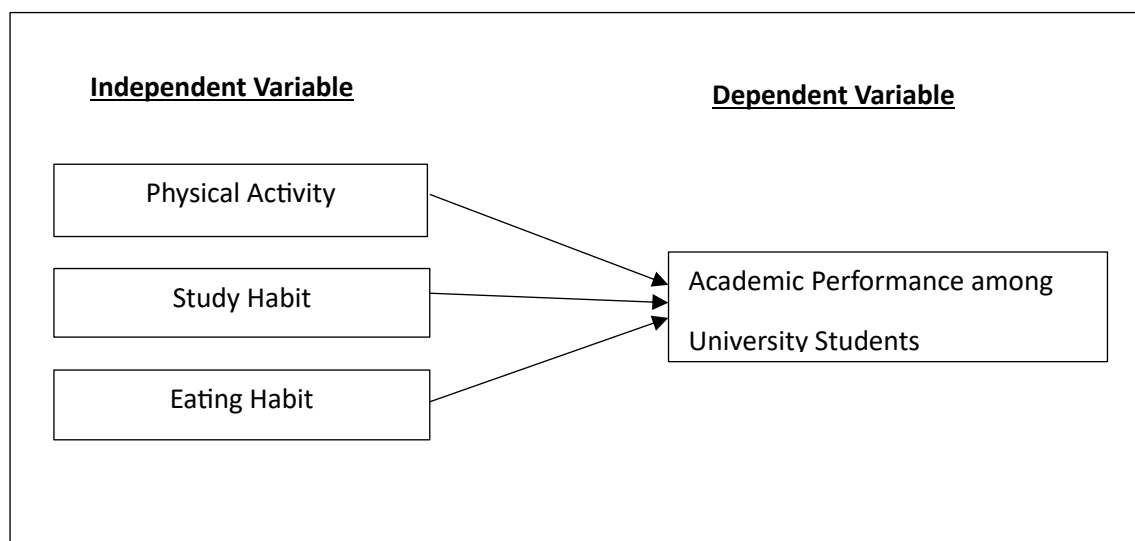
Figure 5: Research Framework

METHODOLOGY

Research Design

This study used the quantitative method where the questionnaire was dispensed to 399 respondents who are university students in Malaysia. In this study, the target populations chosen were on the degree level, which consists of Year 1 and Year 4. This research is based on a quantitative descriptive study design. Besides, it can be linked to the descriptiveness of this study that consists of physical activity, study habits and eating habits that affect academic performance among university students. In addition, a set of questionnaires has used to collect the data from the respondents. There are five sections in the survey: demographic profile of the respondents such as gender, year of study and CGPA in Section A, academic performance in Section B, physical activity in Section C, study habits in Section D and eating habits in Section E. Also, the questionnaires used the format of multiple choices and 5-point Likert scales of agreement.

Data Collection

The study has decided to use a survey method where this study involves online platforms such as Google form where the questionnaire would be shared on other social media such as

Facebook, WhatsApp and Telegram due to pandemic outbreak, cost saving and ability to keep ethical considerations such as their personal information at the same time.

Sampling

The convenience sampling method was chosen in this study since it was non-probability sampling. This study uses this method because the questionnaire forms are prepared and distributed online or posted to social sites to obtain information from the respondents. Questionnaires were also distributed to respondents on the impact of lifestyle study and eating behaviour quality on academic performance among university students on social media.

$$n = \frac{x^2 \mathrm{Np}\,(1-\mathrm{p})}{e^2(N-1) + x^2 p(1-p)}$$

n = sample size

N = population size

e = acceptable sampling error

x^2 = chi square of degree of freedom 1 and confidence 95% = 3.841

P = proportion of population (if unknown 0.5)

Table 3: The population of undergraduate students in public and private universities.

Universities	Number of undergraduate students
Public university	470,413
Private university	341,378
Sum	**811,791**

Source: Ministry of Higher Education, 2020

Data Analysis

This study consists of four types of analysis: frequency analysis, descriptive analysis, reliability analysis and Pearson correlation analysis. The researchers used the SPSS version to investigate the statistical data analysis in this study.

FINDINGS

Result of Frequency Analysis

Table 2: Frequency Analysis

Characteristics	Frequency	Percentage
Gender		
Male	109	27

Female	290	73
Year		
1st Year	260	65
4th Year	139	35
CGPA		
2.5 & below	4	1
2.5 & above	41	10
3.0 – 3.5	231	58
3.5 – 4.0	123	31

There are 399 university students has been participated in this study is 73% (n=290) were female respondents, and 27% (n=109) were male respondents. Most of the university students were in the first year of study, 65% (n=260) and 35% (n=139) were in the last year of study. Also, the majority of university students who were on 3.0 to 3.5 at 58% (n=231), 3.5 to 4.0 at 31% (n=123), 2.5 and above at10% (n=41) and 2.5 and below were only 1% (n=4).

Result of Descriptive Analysis

Table 3: Descriptive Analysis

Variable	Items	Mean Score	Standard Deviation
Physical Activity	Do you regularly exercise for less than 3 days/week?	3.43	1.034
	Are you categorized in the active group in the university?	3.46	0.912
	Do you often do physical activities such as walking/ swimming/ running on a treadmill or cycling on a campus?	3.63	1.019
	Do you often get involved in clubs at university?	3.60	0.938
	Do you agree that involvement in physical activity will have a positive impact on the academic achievement of a university student?	4.20	0.778
	Do you agree that students should get involved in games and sports activities at university?	4.23	0.690
Study Habit	I read all the questions before answering the test questions.	4.39	0.762
	I take notes while reading the text that is related to the subject.	4.20	0.693
	Do you agree that note taking techniques are important study skills?	4.38	0.706
	Do you agree that writing skills are important study skills?	4.32	0.666
	I prefer to study within a week before the final exam.	3.71	1.068
	I prefer to study within two weeks before the final exam.	3.84	0.983
	Do you agree that study skills can be improved by reading and repeating the text?	4.21	0.784
Eating Habit	Do you agree that breakfast intake is important?	4.44	0.688
	Do you agree that academic performance has to do with breakfast?	4.06	0.869
	Do you agree that breakfast leads to the quality of student education?	4.15	0.800
	Do you agree that nutritional food intake will have a good effect on the student academic performance?	4.37	0.699
	Do you agree that students with higher grades have healthier eating habits?	3.87	0.919
	Do you agree that students' performance develops well if they consume good nutrition?	4.18	0.733

	As a student, do you agree that unhealthy food will have a negative effect on the student's academic performance?	3.99	0.899
Academic Performance	Improving my grades every semester is my biggest goal in university.	4.56	0.827
	I know how to manage my time to maintain good grades.	3.99	0.797
	I set the deadlines for myself for completing my assignments.	4.12	0.912
	I believe that I can improve my academic performance if I manage my time wisely.	4.54	0.714
	I enjoy doing assignments and outdoor activities because they help me to improve my skills in every subject.	4.23	0.809
	I actively participate in every discussion. (group discussion, etc..)	4.25	0.751

The highest mean score of students' physical activity was 4.23 for the item "Do you agree that students should get involved in games and sports activities at university?" followed by the item "Do you agree that involvement in physical activity will have a positive impact on the academic achievement of a university student?" (4.20), "Do you often do physical activities such as walking/ swimming/ running on a treadmill or cycling on a campus?" (3.63), "Do you often get involved in clubs at university?" (3.60), "Are you categorized in the active group in the university?" (3.46), and "Do you regularly exercise for less than three days/week?" (3.43). Next, the highest mean score of students' study habit was 4.39 for the item "I read all the questions before answering the test questions." followed by the item "Do you agree that note-taking techniques are important to study skills?" (4.38), "Do you agree that writing skills are important to study skills?" (4.32), "Do you agree that study skills can be improved by reading and repeating the text?" (4.21), "I take notes while reading the text that is related to the subject." (4.20), "I prefer to study within two weeks before the final exam" (3.84) and "I prefer to study within a week before the final exam." (3.71).

Also, the highest mean score of students' eating habit was 4.44 for the item "Do you agree that breakfast intake is important?" followed by the item "Do you agree that nutritional food intake will have a good effect on the student's academic performance?" (4.37), "Do you agree that students 'performance develops well if they consume good nutrition?" (4.18), "Do you agree that breakfast leads to the quality of student education?" (4.15), "Do you agree that academic performance has to do with breakfast?" (4.06), "As a student, do you agree that unhealthy food will harm the student's academic performance?" (3.99) and "Do you agree that students with higher grades have healthier eating habits?" (3.87).Besides, the highest mean score of students' academic performance was 4.56 for the item "Improving my grades every semester is my biggest goal in university" followed by the item "I believe that I can improve my academic performance if I manage my time wisely" (4.54), "I actively participate in every discussion (group discussion, etc.)." (4.25), "I enjoy doing assignments and outdoor activities because they help me to improve my skills in every subject." (4.23), "I set the deadlines for myself for completing my assignments." (4.12) and "I know how to manage my time to maintain good grades." (3.99).

The researchers had assumed that the average mean for physical activity is 3.76, and it shows the majority of respondents agree that physical activity is vital for students in university to make sure that they have a good performance in academics. The average mean for academic performance is 4.28 and it shows the majority of respondents are strongly agree that improving

and maintaining their performance is important for students to gain a good achievement. The average mean for study habits is 4.15, and it also shows the majority of respondents agree that study habit is important essential for students in university to make sure that they have a good performance on in academics. Moreover, the average mean for eating habits is 4.15, and it shows that the majority of respondents believe in the importance of eating habits when it comes to the effectiveness on academic performance among students in the university.

Result of Reliability Analysis

Table 4: Reliability Analysis

Variable	Number of Items	Cronbach Alpha
Physical Activity	6	0.823
Study Habit	7	0.775
Eating Habit	7	0.895
Academic Performance	6	0.809

Table 4 shows the total result of the reliability analysis of variables, which comprises the independent and dependent variables. The dependability of Cronbach's Alpha was used to examine the reliability of three independent variables such as physical activity was discovered to be very good in terms of consistency (6 items; = 0.823), study habit (7 items; = 0.775), also has a good correlation in reliability while eating habit and academic performance, both had stated (7 items; = 0.895), (6 items: = 0.809) which were very good in the strength of correlation.

Result of Pearson Correlation Analysis

Table 5: Pearson Correlation Analysis

Hypothesis	P-Value	Result (Supported / Not Supported)
H_1 There is a significant relationship between physical activity and academic performance among university students.	$r = 0.563, p < 0.01$	H_1 is supported.
H_2 There is a significant relationship between study habits and academic performance among university students.	$r = 0.601, p < 0.01$	H_2 is supported.
H_3 There is a significant relationship between eating habits and academic performance among university students.	$r = 0.386, p < 0.01$	H_3 is supported.

Based on Table 5, Pearson's correlation analysis shows that physical activity and study habits has moderate positive correlation on academic performance among university students ($r = 0.563, p < 0.01$) and ($r = 0.601, p < 0.01$) respectively while eating habits has a weak positive correlation on academic performance among university students ($r = 0.386, p = < 0.01$).

DISCUSSIONS AND RECOMMENDATIONS

Discussions are focused on the problem solution towards the questions and directing hypothesis as referred to in the first chapter of this study. Overall, this study has considered the impacts of lifestyle study and eating behaviour quality on academic performance among university students. Based on the study's findings, the recent study would illustrate various

recommendations for future researchers that allow the university students to realize their involvements as the students in order to achieve a good academic performance as well as enhancement that can be made in future studies. Reading ability in study habits had the highest benefaction among university students, improving their academic performance. In fact, this study habit is commonly used by them during the examination because it can make it easier for students to get excellent performance in academics by understanding the questions related to the subjects. Besides, physical activity and eating habits are also crucial for students' academic performance and to develop future result based on the recent study.

Other than that, future researchers can conduct a study related to the student's academic performance based on the variable question that the previous researchers have been done, which is reading ability in study habit as one of the keys in study to make sure the students have good performance in academic. Another essential variable which is physical activity such as sports activity and eating habits such as breakfast intake, can give positive impacts on students' academic performance. Moreover, it has advocated that future researchers must maintain the utilisation of quantitative methods in future research. Hence, it advocates at future researchers conduct the study by using all of the methods for data collection purposes among the respondents. This is because the results would become more realistic and applicable to a larger population, and it is very suitable for an online survey such as Google form. Therefore, future research would be advised to do this method because of the well-informed questionnaire in the survey and validated by the result of finding.

CONCLUSION

In conclusion, this research aimed to determine the impacts of lifestyle study and eating behaviour quality on academic performance among university students. Three independent variables, which were physical activity, study habits and eating habits had, were decided to investigate their relationships to the dependent variable, which is academic performance. The study managed to gain 399 respondents from first-year and final-year university students. Finally, based on Pearson's correlation analysis, physical activity had stated 0.563** in value, study habit had a 0.601** value, and eating habit stated 0.386**.

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