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# **THE IMPACTS OF LIFESTYLE STUDY AND EATING BEHAVIOR QUALITY ON ACADEMIC PERFORMANCE AMONG UNIVERSITY STUDENTS**

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## TABLE OF CONTENTS

	PAGE
DECLARATION	i
ACKNOWLEDGEMENT	ii
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF SYMBOLS AND ABBREVIATIONS	viii
ABSTRACT	ix
ABSTRAK	x
<b>CHAPTER 1: INTRODUCTION</b>	
1.1 Introduction	1
1.2 Background of Study	1 – 3
1.3 Problem Statement	4
1.4 Research Objectives	7
1.5 Research Questions	8
1.6 Significance of the Study	8
1.7 Definition of Terms	9
1.7.1 Physical Activity	9
1.7.2 Academic Performance	10
1.7.3 Junk Food Consumption	11
1.7.4 Emotional Eating	11
1.7.5 Skipping Breakfast	12
1.7.6 Study Habits	12
1.7.7 Lifestyle	13
1.8 Summary	13
<b>CHAPTER 2: LITERATURE REVIEW</b>	
2.1 Introduction	15
2.2 Literature Review	16
2.2.1 Physical Activity Effects On Students’ Lifestyle	16 - 18
2.2.2 Study Habit Effects On Students’ Academic Achievement	19
2.2.3 Consequences Of Eating Habit	22 - 25
2.2.4 The Impacts Of Study Lifestyle And Eating Behavior Quality On Academic Performance	26 - 29
2.3 Research Hypothesis ( Non- Directional Hypothesis)	30
2.4 Conceptual Framework	30 - 31
2.5 Summary	31

**CHAPTER 3: RESEARCH METHODOLOGY**

<b>3.1 Introduction</b>	<b>33</b>
<b>3.2 Research Design</b>	<b>34 – 35</b>
<b>3.3 Population</b>	<b>35 – 36</b>
<b>3.4 Sampling Size</b>	<b>36 – 38</b>
<b>3.5 Sampling Method</b>	<b>39</b>
<b>3.6 Data Collection Methods</b>	<b>40</b>
<b>3.7 Research Instrument</b>	<b>40 – 42</b>
<b>3.8 Data Analysis</b>	<b>43</b>
<b>3.8.1 Descriptive Analysis</b>	<b>43</b>
<b>3.8.2 Pearson Correlation Analysis</b>	<b>44</b>
<b>3.8.3 Reliability Test</b>	<b>44 - 45</b>
<b>3.9 Summary</b>	<b>45</b>

**CHAPTER 4: RESULTS AND DISCUSSIONS**

<b>4.1 INTRODUCTION</b>	<b>46</b>
<b>4.2 RESULT OF DESCRIPTIVE ANALYSIS</b>	<b>46</b>
<b>4.2.1 Gender of Respondents</b>	<b>47</b>
<b>4.2.2 Year of Respondents</b>	<b>48</b>
<b>4.2.3 CGPA of Respondents</b>	<b>49 - 50</b>
<b>4.3 RESULT OF RELIABILITY TEST</b>	<b>50 - 51</b>
<b>4.4 RESULT OF INFERENCE ANALYSIS</b>	<b>52</b>
<b>4.4.1 Normality Test</b>	<b>52 - 54</b>
<b>4.4.2 Univariate Test</b>	<b>54</b>
<b>4.4.2.1 Descriptive Statistic</b>	<b>55 - 62</b>
<b>4.4.3 Pearson Correlation Analysis</b>	<b>62 - 63</b>
<b>4.5 DISCUSSION BASED ON RESEARCH OBJECTIVES</b>	<b>64</b>
<b>4.6 SUMMARY</b>	<b>65</b>

**CHAPTER 5 CONCLUSION**

<b>5.1 INTRODUCTION</b>	<b>66</b>
<b>5.2 RECAPITULATION OF THE FINDINGS</b>	<b>66</b>
<b>5.2.1 Physical Activity</b>	<b>66 - 67</b>
<b>5.2.2 Study Habit</b>	<b>68 – 69</b>
<b>5.2.3 Eating Habit</b>	<b>69 - 70</b>
<b>5.3 LIMITATIONS OF THE STUDY</b>	<b>70 - 71</b>
<b>5.4 RECOMMENDATIONS</b>	<b>71</b>
<b>5.4.1 Theoretical Recommendation for Future Research</b>	<b>71 – 72</b>
<b>5.4.2 Methodological Recommendation for Future Research</b>	<b>72</b>
<b>5.4.3 Practical Recommendation for Future Research</b>	<b>73 - 74</b>

<b>5.5</b>	<b>SUMMARY</b>	<b>74</b>
	<b>REFERENCES</b>	<b>75 - 80</b>
	<b>APPENDIX</b>	<b>81 - 93</b>



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## LIST OF TABLES

<b>TABLES</b>	<b>TITLE</b>	<b>PAGE</b>
Tables 3.1	The population of undergraduate students in public and private universities.	34
Tables 3.2	Cronbach Alpha On Reliability Test.	40
Table 4.1	The Gender of respondents.	42
Table 4.2	The Year of Study of Respondents.	43
Table 4.3	The CGPA of respondents.	44-45
Table 4.4	Cronbach's Alpha Coefficient Values.	46
Table 4.5	Results for Reliability Cronbach's Alpha for Variables.	46-47
Table 4.6	Descriptive Statistic of Physical Activity.	51-52
Table 4.7	Descriptive Statistic on Study Habit.	53
Table 4.8	Descriptive Statistic on Eating Habit.	55
Table 4.9	Descriptive Statistic on Academic Performance.	57
Table 4.10	Result of Pearson Correlation Analysis.	59
Table 4.11	Summary for Hypothesis Testing.	60

## LIST OF FIGURES

FIGURES	TITLE	PAGE
Figure 2.1	Breakfast frequency and grade point average (GPA). Orange line represents the mean GPA(3.37). The trend line is shown in red.	25
Figure 2.2	In a box and whisker graphic, respondents' self-reported current GPA vs. fast food ingestion rates.	26
Figure 2.3	Research Framework	28
Figure 3.1	Sample Size for a Given Population.	33
Figure 3.2	Sample Size Formula.	33
Figure 3.3	Research Instrument.	38
Figure 4.1	The Gender of Respondents.	43
Figure 4.2	The Year of Study of Respondents.	44
Figure 4.3	The CGPA of Respondents.	45
Figure 4.4	Normality Test on Physical Activity.	48
Figure 4.5	Normality Test on Study Habit.	49
Figure 4.6	Normality Test on Eating Habit.	49
Figure 4.7	Normality Test on Academic Performance.	50



## LIST OF SYMBOLS AND ABBREVIATIONS

<b>SYMBOLS</b>	<b>SPECIFIC NAME</b>
n	Frequency
N	Population
<	Less than
=	Equal
≥	Equal or More Than
%	Percent
r	Pearson Correlation

<b>ABBREVIATIONS</b>	<b>SPECIFIC NAME</b>
MOHE	Ministry of Higher Education
GPA	Grade Point Average
QOL	Quality of Life Over
SPSS	Statistical Package for Social Science
IBM	International Business Machines
PA	Physical Activity
SH	Study Habit
EH	Eating Habit
AP	Academic Performance
MFT	Managed file transfer

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## ABSTRACT

Academic performance is one of the important things among students to pass the graduation level and succeed upon graduation. 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. A quantitative research was conducted to achieve the research objective. Simple random sampling is used and responses from 384 respondents are targeted. To analyse the data of this research, descriptive analysis, reliability test and Pearson correlation are used. This research found that lifestyle study and eating behaviour have an impact on academic performance either positive or negative impact depending on their way in lifestyle study and eating behaviour. Poor eating behaviour and study lifestyle disruption variables were found to be significant predictors of college students' academic performance in this study. The findings also revealed gender inequalities in academic success among students.

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

## ABSTRAK

Prestasi akademik merupakan salah satu perkara penting dalam kalangan pelajar untuk melepasi peringkat tamat pengajian dan berjaya apabila tamat pengajian. Penyelidikan tertumpu kepada penentuan kesan kajian gaya hidup dan kualiti tingkah laku pemakanan terhadap prestasi akademik dalam kalangan pelajar universiti yang terdiri daripada aktiviti fizikal, tabiat belajar dan tabiat makan. Kajian kuantitatif telah dijalankan untuk mencapai objektif kajian ini. Persampelan rawak mudah digunakan dan respons daripada 384 responden disasarkan. Bagi menganalisis data kajian ini, analisis deskriptif, ujian kebolehpercayaan dan korelasi Pearson digunakan. Penyelidikan ini mendapati bahawa kajian gaya hidup dan tingkah laku pemakanan mempunyai kesan ke atas prestasi akademik sama ada kesan positif atau negatif bergantung kepada cara mereka dalam gaya hidup belajar dan tingkah laku pemakanan. Pembolehubah tingkah laku pemakanan yang tidak baik gangguan gaya hidup belajar didapati menjadi peramal yang signifikan terhadap prestasi akademik pelajar kolej dalam kajian ini. Penemuan juga mendedahkan ketidaksamaan jantina dalam kejayaan akademik dalam kalangan pelajar.

**Kata kunci:** *Prestasi akademik, aktiviti fizikal, tabiat belajar, tabiat makan, pelajar universiti.*

## CHAPTER 1

### INTRODUCTION

#### 1.0 INTRODUCTION

This chapter presents the background of study, problem statements, scope of study, research questions, research objectives and research questions. This is followed by the significance of the study and definition of terms. Summary is the last part in this chapter.

#### 1.1 BACKGROUND OF STUDY

Academic performance is an important measure used to assess the quality of university education, and is impacted by various factors. Students' lifestyle and eating behaviour has an impact on their academic progress. As we know, there are more factors that contribute to unhealthiest in students' lives. Because food sources vary and dietary issues grow, nutritional understanding becomes increasingly crucial. Students have the choice of selecting from a wide range of healthy and unhealthy dietary selections (Sogari et al., 2018). Particularly new university students,

are beginning to live on their own for the first time. Physical activity and eating habits among students are likely to evolve or change. Good eating habits should be developed throughout this period since these habits frequently last into adulthood and are difficult to modify once established (Abraham et al., 2018).

Unhealthy study lifestyle among university student and adolescents can lead to a serious health problem, and some studies have linked unhealthy lifestyle to reduced cognitive function and academic performance. While, individuals who maintained good lifestyle early in life are more likely to be able to endure potential health risks later in life (Jerre M et al., 2020). In other words, students who perform well academically use these talents more than those who perform poorly. Another impact that commonly happens when the students normalize their unhealthy eating habit is mental health. There are many issues which have been discussed and it's related to the impact on physical health (Rezaie et al., 2017).

Mental health is one of the impacts from the unhealthy eating habit by students and also others. As mentioned by Colantuoni et al., (2002), These eating habits could be linked to the brain's reward processes for stress management. Eating disorders are commonly associated with difficulty in managing emotional emotions. Furthermore, one of the consequences of an unhealthy eating habit, particularly among students, is poor academic performance. This effect is also related to the other effect because the unhealthy eating habits by the student may cause the physical and mental health not to be in a good condition. Indirectly, this may cause the student education disturbed and cause the performance of their academics to deteriorate.

Most students nowadays are unable to focus and do well in their studies, putting their academic performance at risk (Alsagaf et al., 2016). A poor dietary habit has often affected academic performance. Continuous evaluations and tests are used to

assess academic achievement (Uwannah et al., 2018). Academic performance may be considered as an issue when people are unable to meet their short- or long-term educational goals. When students do badly in university, it is frequently due to a lack of preparation for the exam or test, but 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 (Aremu et al., 2003).

With a growing focus on (GCPA) and academic performances, it's important to consider how lifestyle, as well as eating habits, may influence their success (Wengreen et al., 2009). As first year student adjusting to new university, a lack of parental supervision, and a new setting, their health behaviors are likely to shift. It is known that students will care more for their savings, when it comes to dietary (Wald et al., 2014). Dietary habits can be linked to poor academic achievement in some cases. Students engage in a variety of unhealthy eating behaviors on a regular basis, 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) Studies demonstrate that missing breakfast has a detrimental impact on academic success. (Burrow et al., 2017).

The study lifestyle and unhealthy eating habits may cause many various impacts on academic performance if the students can't control it by themselves. In literature review, we highlighted the diversified constructs of the impacts of lifestyle study and eating behavior quality on academic performance among university students by using a different dimension. We also utilized criteria based on comprehensiveness and parsimony to reduce and combine similar studies described with the titles.

## 1.2 PROBLEM STATEMENT

Lifestyle and eating behaviour among students are one of the common issues that always impact a student's lifestyle especially on their academic performance. The eating behaviour can affect their learning process depending on food intake whether healthy or unhealthy food. Nutrition has an indirect effect on academic achievement. During the pandemic, lifestyle variables were greatly influenced, with less healthy behaviour being linked to greater levels of despair and anxiety. Inattention was linked to processed meals and excessive screen time, whereas hyperactivity and impulsivity were linked to lack of sleep (Swansburg, et al., 2021). Unhealthy behaviour and lifestyle (physical activity, study habits, eating habits) among students can make students sick or cause headaches and stomach-aches, resulting in missed class time. With unhealthy nutrition and activity, it will affect students' thinking skills, behaviour, and health, and this will affect their academic performance if they are not prevented from the beginning.

According to the Ministry of Higher Education (MOHE) (2011), as cited in Shafiq and Noraini, (2018), the academic achievement of university students is a crucial element in Malaysia in the context of today's education-oriented life. Generally, students' academic performance is influenced by study habits. As mentioned by Arora, (2016), study habits can be defined as a different individual behaviour in relation to studying. Alimohamadi, Deghani and Saeide (2018), has asserted that academic performance is also influenced by several factors that also include study habits. The study habits that consists of time management, reading ability, writing skill and note taking are influenced on students' academic performance (Arora, 2016; Alsalem et al., 2017; Alzahrani et al., 2018; Jafari et al., 2019; Gilbert & Magulod, 2019). According

to Marzulina et al., (2019), the students' study habits contributed 42% to their academic achievement.

As mentioned by the researchers in a previous study, academic achievement is the common criterion for students' performance in tests or grades (Ahmed, Hossain & Rana, 2018). However, students with bad study habits have worse comprehension and confidence in their studies, which has a negative impact on their performance (Marzulina et al., 2018; Young et al., 2018). The study was conducted by the researchers towards 21 medical university students in Iran and found that 32% of them suffered due to lack of study skills and habits (Rezaie et al., 2017). Besides, study habits also influenced the levels of students' grade point average (GPA) (Alzahrani et al., 2018).

Poor eating habits will contribute to an unhealthy physique. The students have a big problem because of their poor eating habits and less exercise or extracurricular activities while at university that cause obesity (Yousif et al., 2019). By and large, college understudy requires an excess of exertion for contemplating without pondering their own sound. According to the findings, the overall prevalence of overweight and obesity among Malaysian university students is (21.2 %, 16.3 %), with specific prevalence rates of (23 %, 17.6 %) among Bachelor, (21.9 %, 14.3 %) Master, and (17.8 %, 18.4 %) PhD students, respectively. Malaysian university students are more likely to be overweight or obese than those in other nations (Wan Mohamed Radzi et al., 2019). This problem will affect their academic performance when they suffer from an unhealthy body, they will no longer come out with good results because disturbed by changes in their own bodies. The reason the academic performance is not good is from the heftiness issue among understudies and this is on the grounds that they are absent from physical activity.



Therefore, eating habits pattern knowledge is important to students to reach a good target in their academic performance. Never skipping breakfast is one of the ways to make the body stay healthy. Breakfast habits have been found to assist pupils in high school and college academic achievement (Adolphus et al., 2013). They will have a poor memory after eating a meal, which is likely linked to the accelerated glucose levels response after a meal; the reaction they receive depends on whether they ingest nutritious or unhealthy food for breakfast. However, students tend to eat large portions in addition to having a lot of unbalanced side dishes. Another bad eating habit of students in university is consuming too much unhealthy food. According to Hernandez et al., (2016) eating behaviours of University Students data was analysed using SPSS. Results: After attending university, 64% of students said their eating habits changed, and 59% of participants said they had an unhealthy eating pattern. Students frequently claim to be knowledgeable about good and bad foods, yet university students generally focus their eating selections on budget and fast foods. They don't know how to make healthy food choices, which might have a detrimental impact on their nutritional requirements and eating behaviours. Previous studies have found that university students do not ingest enough fruits and vegetables. Snacking behaviours, as well as fast food consumption, were more prevalent among university students. Students understand that eating habits (food selection) that meet nutritional demands, such as eating vegetables and fruits, can have a good impact (Ganasegeran et al., 2012). But on the other hand, unhealthy food can have a big different impact depending on food selection by the students such as fast food. If they do not take care of their eating habits, it will give them a negative result on their academic performance.

In conclusion, students are prone to disease due to unhealthy lifestyle and eating behaviour. The quality of lifestyle and eating behaviour is the most important

thing that students need to emphasize to make a better performance on their academics. As already stated by Brown et al., (2008), the admittance to sustenance, especially breakfast, has been displayed in investigations to further develop an understudy's psychosocial prosperity, limit animosity and school suspensions, and diminish discipline difficulties. This is closely related to the healthy lifestyle and eating behaviour among students for them to choose the best path in their academic performance. Sometimes, university students have to depend more on unhealthy food because of their busy lifestyle, unintentionally their academic performance will be disrupted. A mutual relationship on eating behaviour, study habits and physical activity to academic performance should be taken seriously to make a student come out with a good performance in the future.

### **1.3 RESEARCH OBJECTIVES**

- a. To identify the relationship between physical activity and academic performance among university students.
- b. To examine the relationship between study habits and academic performance among university students.
- c. To illustrate the relationship between eating habits and academic performance among university students.

#### **1.4 RESEARCH QUESTIONS**

- a. What is the relationship between physical activity and academic performance among university students?
- b. What is the relationship between study habits and academic performance among university students?
- c. What is the relationship between eating habits and academic performance among university students?

#### **1.5 SIGNIFICANCE OF THE STUDY**

University students are known to be confronted with a great amount of assignments, work, co-curriculum activity that is hard to arrange, and this demands the knowledge and implementation of good study techniques (Hashemian et al., 2014). Evidence reveals that students who didn't have adequate 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). In other words, students who perform well academically use these talents more than those who perform poorly. Another impact that happens when the students normalize their unhealthy eating habit is mental health. In this context, there are many issues which have been discussed and it was related to the impact on physical health (Rezaie et al., 2017).

This research finding will have a significant impact on society, especially among the students about awareness of the unhealthy eating habits and lifestyle can affect their academic performance. The study also shows that impacts on the students'

academic performance happens based on various issues and directly leads to the various negative impacts. The impacts are related to multiple issues in one context: physical activity, study habits and eating habits.

This study will share about 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 if they continue to consume unhealthy lifestyle, and food choices. In addition, this study will help people, especially students, about awareness in preventing harmful eating behaviour. Besides, this study will be useful 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. Students will be more careful in terms of choosing their food choices and maintaining a healthy lifestyle.

In addition, future researchers will benefit from this study. Future researchers will be able to discover more about the impact of students' lifestyle and eating habits on their academic performance. As a consequence of this research study, future researchers will be able to improve the quality of their research.

## **1.7 DEFINITION OF TERMS**

### **1.7.1 PHYSICAL ACTIVITY**

Physical activity during school are huge consequences for routine dynamic work during the full scope of the adult life and, thusly, have

basic repercussions for short-and long stretch prosperity results (Andrew, 2020). Actual work is crucial to the improvement and upkeep of the prosperity and flourishing, things being what they are. Typical help in moderate to genuine real exercise will essentially decrease the justification for cardiovascular sickness and the risk of death (Rogers et al., 2018). Generally, 33% of the complete people don't appear to be related with dynamic work, which may construct prosperity and financial issues. A couple of organizations are available to engage proactive errands in fundamental, helper and tertiary establishments and it has become part of the instructive arrangement in the two schools and universities.

### **1.7.2 ACADEMIC PERFORMANCE**

Academic performance refers to the students' will and skills on how they will achieve their success. Depending on how well they maintain a healthy eating habit. Eating habits may be defined as a person's eating patterns, including what foods they consume, how much they eat, and when they eat (Collin,2016). 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 tend to eat late at night. They get exhausted, which has an impact on their sleeping patterns.

### 1.7.3 JUNK FOOD CONSUMPTION

Fast food, greasy meals, and sugary snacks are all risk factors for their QOL in the physical health sector. Consumption of sweet snacks has been shown to be harmful to one's health and the environment, whilst salting food before tasting it has been shown to be harmful to social interactions. If students take an excessive amount of junk food, it will lead to a bad influence on their health and academic performance.

### 1.7.4 EMOTIONAL EATING

The inability to define and recognize one's feelings made the person feel inept at managing negative affect, making him or her more prone to use emotional eating as a coping mechanism. Further research into the association between negative affect and eating has discovered that eating after a stressful event is linked to a reduction in negative affect among those who are suffering high levels of chronic stress. Emotional eating is when someone eats in reaction to a happy or bad feeling.

Emotional eating is most commonly described as "eating to deal with bad emotions."

### **1.7.5 SKIPPING BREAKFAST**

The body will suffer from a protein and carbohydrate shortage if the stomach is left empty for an extended period of time. Then occurs a decrease in blood sugar, followed by a mood change. There was a link between headache and meal skipping, particularly owing to inconsistent breakfast consumption. Breakfast is known as an important meal of the day since it supplies nutrients and energy (calories) for the rest of the day's activities.

### **1.7.6 STUDY HABIT**

The definition of study habit is the behaviour used when the students are preparing their tests or learning academic material. If the student who is likely to wait to study at the last minutes means that it can be an example that he or she has bad study habits. As mentioned by Arora (2016), study habits can be defined as a different individual behaviour in relation to studying. Besides, study habits are also a skill that can facilitate the students' learning (Sherafat & Murthy, 2016). Study habit also can refer to a combination of study method and skill (Kamoru & Ramon, 2017).

### **1.7.7 LIFESTYLE**

A student's lifestyle is an aspect of his or her life during the academic year. For example, school time and university and college education. Student life is the daily life of a student, usually involving social activities on an educational campus, or time spent with friends and teachers. The lifestyle of students is to prepare themselves for life by studying, building their health like participating in games and sports and so on. The university students also participate in games and sports and do regular physical exercise. During the lives of students, they acquire the values of honesty, loyalty, truthfulness and mutual feelings.

### **1.8 SUMMARY**

Overall, this chapter 1 discusses the subtopics conducted in the initial phase of the study. The first subtopic discussed in this chapter is about the background of the study related to the research topic stated in general. Other than that, this chapter also focuses on the problem statement where it refers to the main questions of the study to be conducted. Moreover, this subtopic is important for generating questions that can help researchers provide answers appropriate to the topic being studied. As an illustration, the topic highlighted by the researchers was on “The Impacts of Lifestyle Study and Eating Behavior Quality on Academic Performance among University Students”. The chapter also discusses physical activity, academic performance, junk



food consumption, emotional eating, skipping breakfast, study habits and lifestyle for university students. Therefore, the questions posed are core research questions on what are the effects of lifestyle and eating behavior quality on academic performance among university students. Besides, this core question will be focused by the researcher to provide the right answer that is the researcher's objective on the research topic conducted based on its effects on students' academic performance such as physical activity, study habits and eating habits. Then, subtopics on the definition of the term as well as the significance of the study are also stated in this chapter.

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## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 INTRODUCTION

The purpose of the study is to find out the impacts of study lifestyle and eating behaviour quality on academic performance among university students. With a greater emphasis on academic performance and (GPA) in the university, it is more vital than ever to look at how lifestyle variables, particularly eating habits, might affect students' academic success (Peter et al., 2020). Either good or bad study lifestyle and eating behaviour can influence students' academic performance.

Unhealthy snacking, high pricing of healthy food, and taking too much junk food are the common things to stop from a healthy lifestyle. A better food knowledge, meal planning, and physical activity, the engagement in food preparations, on the other hand, are all facilitators of healthy behaviour. Due to a lack of time and stress, students migrating from schools to universities find it difficult to maintain good eating habits, and often skip their meals, unhealthy snacking, and dining out (Sogari et al., 2018). There is a lack of understanding about healthy diet alternatives, which might have an unintended impact on eating habits and nutrition.

## 2.2 LITERATURE REVIEW

### 2.2.1 PHYSICAL ACTIVITY EFFECTS ON STUDENTS' ACADEMIC PERFORMANCE

Actual physical activity is critical for prosperity, security and ailment aversion. This genuine work is furthermore routinely performed by kids, youngsters, and adults. It also earnestly influences the strength of school understudies (Boreham & Roddoch, 2001; Pori et al., 2013) and diminishes the risk of getting various diseases (Hallal, Victora, Azevedo & Wells, 2006; Warburton, Nicol & Bredin, 2006). Regardless, school understudies are preferred to contribute more energy analysing than partaking. Dynamic work has been seen to help individuals, increase breaking point, and work on the overall individual fulfilment (Powell & Pratt, 1996). A concentrate by Zwolinsky et. al in 2016 saw that it is fundamental for advance, present and complete strong lifestyle programs and real games activities to target inactive school understudies among them in addition, being genuinely powerful works on real wellbeing just as deals with enthusiastic prosperity (Fuchs, 2015; Sullum et al., 2000; Weyerer and Kupfer, 1994) and decline signs of distress and disquiet (Paluska & Schwenk, 2011).

Physical activity is a very critical ally of 33% of overweight or fat adult people. 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 5 days out of each week, and

adolescents are moreover inactive. 81% to 85% of adults continue with a comparative illustration of genuine work they set up during their senior year of school. A normal 40 to 45% of understudies participate in wellbeing practices regularly ( $\geq 3$  days/week), (Hamilton, 2020). Real work for instance high-sway work out (e.g., determination exercises like walking, swimming, treadmill running and cycling) on mental and real prosperity markers using semi investigations between subjects (i.e., relationship of truly unique and fixed benchmark gatherings) and in-subject arrangement that is, an assessment of a comparable assembling already, then, at that point, afterward the action intervention). In any case, the power and term of action at which prosperity related exercise impacts achieve quantifiable significance were found to differ basically (i.e., patients versus strong individuals) and people of different ages and genders (Gerber & Pühse, 2009; Stoll & Ziemainz, 2012).

Thus, it shows that these proactive undertakings are wonderful among school understudies. An external obstacle to dynamic work is social assistance. It has as of late been set up as a huge variable to overview understudies' levels of dynamic work (Allison et al,1999, Leslie et al, 1999, Wallace et al., 2000, Bray, 2007). Complete spot-of-decision prompts and helpful signage around grounds to invigorate stairwell use, walking, and other self-filled transportation, characteristic-of-decision prompts are clear signals used to coordinate individuals in taking on strong practices. These prompts serve to join dynamic work into each day dwelling, build up a climate where choices to be dynamic are stimulated, and increase care about the upsides of genuine work. This methodology is appropriate for various masses and settings and has shown amazing in moving needed unique living practices. Putting point-of-

decision prompts at regions, for instance, lift banks, and stairways will help understudies with seeing signs and openings for dynamic work (Hamilton, 2020).

Encourage dynamic work openings, for instance, peer sponsorship, classes, and extracurricular clubs. Fabricating, building up and staying aware of causal associations is a fruitful system for growing real work and dealing with everyday genuine wellbeing (Hamilton, 2020). The usage of companion support and instinctive social occasions of individuals, similar to classes and clubs, can grow responsibility in dynamic work by offering understudies opportunities to connect with various understudies and staff, as such allowing them to screen their development and urge them to continue with their activities. Openings for this real work can in like manner reduce or take out specific checks to real work, for instance, prosperity concerns and nonappearance of motivation.

Build up the coordination of genuine work. Real work has been shown to additionally foster frontal cortex work and further foster direct errands during academic appearance time (Hamilton, 2020). Proactive assignments with learning can be reserved dynamic work breaks during instructive time, set out open entryways for understudies to be dynamic through torpid non-learning works out, give institutional affirmation to understudies' co-curricular health capacities and achievements and overhaul dynamic work based on courses for credit. By giving a learning environment in which dynamic work is joined, similarly impacts understudies 'lead towards present second and long stretch genuine work (Hamilton, 2020).

## 2.2.2 STUDY HABIT EFFECTS ON STUDENTS' ACADEMIC ACHIEVEMENT

Study habits can bring a host of advantages or disadvantages especially on students' academic performances that depend on how good or bad that university students applied in their university's life. Arora, (2016), has mentioned that study habits can be defined as a different individual behaviour in relation to studying. In fact, study habits can have a good or bad impact on students' academic performance (Ahmed, Hossain & Rana, 2018). As the researchers mentioned, there are several types that study habits can be assessed through students' reports, examinations, rating scales and others. According to Mohammadreza & Alireza (2014), as cited in Jafari et al., (2019), the study habits included behaviours and skills are important to increase students' motivation and make the process of study become more effective as well as improve the learning. As mentioned by Marzulina et al., (2019); Young et al., (2018), poor study habits also make the students have low comprehension and confidence in study as well as affect their academic performance.

The study has shown that good study habits influence the students' achievement especially in academics (Marzulina et al., 2019). According to Alsalem et al., (2017), the students who are practicing their time management skills deserve to get a better academic achievement. In fact, there are many studies asserting that management of time can determine the students' ability in tests and examinations (Jafari et al., 2019; Gilbert & Magulod, 2019). The study conducted on university students in the Philippines has found that the

students who have good time management also could organize their own duties based on their academic priorities (Gilbert & Magulod, 2019). The evidence came out by the study conducted and found the most important area of study habits that is applied by the students is at 27.3% of time management (Jafari et al., 2019). As mentioned by Alimohamadi, Dehghani and Saeide (2018) academic performance also can be influenced by several factors which also include study habits including time management. The previous study has illustrated that study habits can help to improve the students' motivation. So, it means that the students who are taking their study habits seriously, especially in time management, have the possibility to have a better academic performance. Otherwise, the students had more difficulties in achieving better results if they could not manage their time wisely.

Other than that, writing skill is also one of the categories that can influence students' academic performance. This kind of study habits can be related to the students' ability in study skills. According to Gilbert and Magulod, (2019), the study conducted on university students in Lasam, Philippines found that writing skills is also one of the study habits. This is because the researchers found that there is a positive connection between writing skill and academic achievement of the students since the study habits can also improve their academic performance. Next, reading ability is the most preferred among students with as many as 81.4% of them who were in the middle of desirable levels (Jafari et al., 2019). As mentioned by Ahmed, Hossain and Rana (2018), the study habits also can determine the conditions of their way of study whether systematic and efficient or not. In fact, Jafari et al., (2019) has asserted that the utilization of study skills and habits play a good

role in increasing the students' academic performance. As mentioned by Marzulina et al., (2019), every student has their own study habits. A previous study found that the creativity styles of students in writing skill depends on their emotion and learning environment (Magulod, 2017).

Next, Jafari et al, 2019 has conducted a study on medical students in Iran and has found that 50.2% of the students were not taking and were at an undesirable level. This shows that the students who were at an undesirable level had problems in note taking technique as their preparation on tests or examinations. These poor study habits need to be improved by the students in order to have a good result on the test and examination. students' academic performance. In contrast, note taking among students is preferred in the middle range of desirable level that contributes 37% (Jafari et al., 2019). As stated by Gilbert and Magulod, (2019), the study conducted on university students in the Philippines has found that the most of students were in the moderate level of writing down notes as their study habits. According to Jafari et al., (2019), has mentioned that the students who were at an undesirable level can improve their academic performance by using the proper skills and study habits especially in note taking as well as can prevent them from the emergence of education problems such as dropping on academic units or credits and others. The students also have to know how to make the right note taking in order to have a good students' academic performance.

In conclusion, university students have to know the best method or technique, especially in their study habits, in order to achieve academic achievement. Marzulina et al., (2019), has stated that 42% of students' academic achievement is contributed by their study habits. In contrast, poor



study habits cannot help the students to be successful in their studies (Bhat & Khandai, 2016). Thus, the application of study habits among students is important in determine their condition of study skills and habits whether poor or good as well as their academic achievements (GPA) on test and examination (Alzahrani et al., 2018; Jafari et al., 2019; Marzulina et al., 2019). Hence, the students have to assure that their study habits can help them to get better achievement in academics as well as prevent them from any circumstances on their academics' unit or credits and others (Jafari et al., 2019).

### **2.2.3 CONSEQUENCES OF EATING HABIT**

Nowadays, students are experiencing various problems related to food selection. Most of the students get less exposure to the pros and cons of the food consumed. There are many students who consume enough nutrition with healthy foods, however negative attitudes towards healthy eating behaviors are also common among students. Eating habits may be defined as a person's eating patterns, including what foods they consume, how much they eat, and when they eat (Collin, 2016). Good eating habits such as the pattern of eating time or complete nutritional intake may bring a positive impact on 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 tend to

eat late at night. They get exhausted, which has an impact on their sleeping patterns. All this eating pattern may lead to different results of their health.

In the study, self-reported GPA was linked to daily or virtually daily breakfast eating. On the other side, consumption of fast food is connected to a worse self-reported GPA. The findings are similar, indicating that college students' diets typically fall short of expectations. The research subjects, on the other hand, showed no signs of malnutrition or food insecurity. It's important to remember that nutritional choices on campus are typically impacted by variables like cost, whether or not students have a food plan, and what alternatives they have (Wald & O'Connell, 2014). According to Peter et al., (2020) students who consumed seven or more glasses of milk in the previous seven days had a higher self-reported GPA than individuals who did not drink any milk or drank less than four cups. However, the p-value did not simply significance due to the small percentage of individuals who drank seven cups or more (3.6 percent, n 14 19).

Breakfast is one of the important habits that everyone needs to be normalized. There are many issues that can contribute to the health of the body and mental health if skipping meals or breakfast are often done. Breakfast habits have been shown to help students attain academic success in high school and college (Adolphus et al., 2013). This demonstrates that breakfast is one of the elements determining academic achievement. Students who ate breakfast five days a week or more had a considerably better current GPA than those who skipped breakfast only three times per week (Philips, 2005). Some of the research that looked at this group of students analysed glucose levels and college students' performance on memory or basic skills tests (Gagnard,

1986; Deije, Heemstra, & Orlebeke, 1989; Benton & Parker, 1998; & Benton & Sargent, 1992). This proves that breakfast is one of the important eating habits patterns that influence academic performance. By assessing the performance of university students who ate breakfast on the day of examinations, this longitudinal research hopes to add to the body of knowledge on the association between academic performance and eating habits (Philips, 2005). In this issue, skipping meals or breakfast can influence academic performance if not taken seriously.

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). Nutrition has an indirect effect on academic achievement. Poor nutrition can make students sick or cause headaches and stomach-aches, resulting in missed undergraduate studies (Brown, Beardslee & Prothrow-Stith, 2008). This means, eating healthy food can make sure that our body and brain works well. Nutrition that collaborate with enzymes provide significant advantages to biological activities, including energy production. Minerals aid in the formation of bone, blood, and the proper functioning of bodily cells (Khalid, 2020). As a result, by eating more veggies and fruits, we will feel more refreshed and energized while studying and this also affects academic performance if healthy eating habits are frequent.

On the other hand, unhealthy food eating habits have become a challenge to most students, as almost all tasty, delicious, and interesting foods

are malnourished and unhealthy foods. Fast food intake has been associated with decreased academic performance. Deliens 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. Farahbakhsh et al. (2017) also discovered that unhealthy eating habits, such as consuming fast food, lead to decreased academic success. This means that unhealthy eating habits, for example the consumption of fast food every day, are not good for students to achieve a better academic performance in student's college.

In conclusion, eating habits among students has become a common issue. They have their own choice in choosing food either healthy or unhealthy. More than half of those polled (65.3 %) stated they consume processed foods on a daily or frequent basis. 89.3 %, on the other hand, agree or strongly agree that consuming processed foods is unhealthy. This evidence reveals that many students are aware of the dangers of processed foods, but still continue to consume large quantities of processed foods on a regular basis (Abraham et al., 2018). This shows, students have their own eating habits that prefer to eat unhealthy food rather than healthy food even though they already know the disadvantages they will suffer in the future.

#### 2.2.4 THE IMPACTS OF STUDY LIFESTYLE AND EATING BEHAVIOR QUALITY ON ACADEMIC PERFORMANCE

As we learned in this study, if students don't eat a proper meal, and maintain their study lifestyle properly, it will have an impact on their academic performance. Such as, a negative effect of bad lifestyle and unhealthy eating habits among university students are the consequences of academic performance.

Since, the brain is known to controls physical and mental to our human body, it is important to maintain brain health throughout one's life. Disorders and ideal structure and function are reflected in brain health, which is assessed in terms of lifestyle and daily function. Students performed better on a variety of cognitive assessments after participating in a physical exercise programmed (Tomprowski, 2003). When physical exercise is used as a break from academic study time, post-engagement effects include enhanced focus (Grieco et al., 2009) increased on-task behaviours (Donnelly & Lambourne, 2011) and improved academic performance (Mahar et al., 2006).

The findings of different research on study habits varied depending on whatever precise study habits were examined. Schuman et.al, (1985), looked at group studying, cramming, note-taking, reviewing previous tests, and going over readings twice, but they had concluded that none of these factors had a direct impact on grades. Positive outcomes, on the other hand, were observed when a mix of study habits were employed, such as attendance, homework handed in, and usage of a study guide, as well as previous preparation for the

class, participation in class, and arriving on time (Gracia, 2003; Shaftel, 2005; Wooten, 1998). Students' deep learning method may improve as a result of group learning activities, which has been shown to boost analytical thinking (Hall, 2004). Attendance and note-taking, according to Williams & Worth (2002), predict performance.

Time spent studying, according to some scholars, is another factor that influences academic achievement. When it comes to the link between study time and academic success, it's not just how much time a student spends studying that matters, but also how effectively that time is used (Nonis, 2006).

Next, eating habits such as breakfast intake has also been featured to help students achieve school -level progress up to the university (Adolphus et al., 2013). It reveals that students who do eat breakfast will perform better on exams compared to students who skip their breakfast. Students who had not skipped their breakfast for five days or more in a row had a current GPA that was nearly identical to students who had taken their breakfast for three days or less in a row (Philips, 2005).

Breakfast has a critical impact on academic performance. By analysing the exhibits of college students who ate breakfast during assessment arrival, this longitudinal review is expected to add information about the relationship between scholastic implementation and eating patterns. The inclusion of breakfast may be just another signal of a tendency shared by students that is sure to have an amazing effect, and there are different qualities that are more appropriate. Students who wake up early are also bound to take breakfast, which may affect their academic presentation. Interestingly, the inclusion of cheap food has been linked to a decline in scientific implementation. Deliens

et al., 2013 found that students who ate more types of fast food, especially fries and burgers, had a more regrettable GPA and were less likely to go to the test.

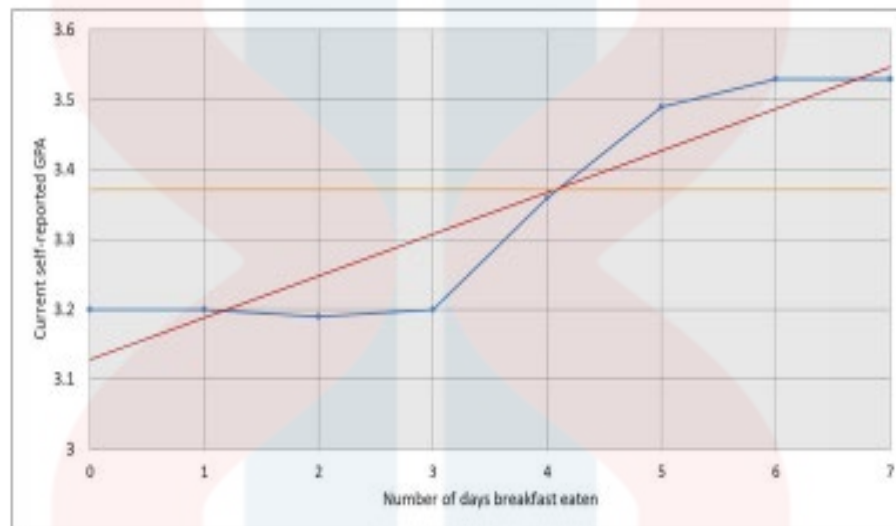


Figure 2.1: Breakfast frequency and grade point average (GPA). Orange line represents the mean GPA (3.37). The trend line is shown in red.

Based on the figure above, breakfast intake has been shown to help students attain academic performance at university. Students who ate breakfast performed significantly better on examinations than those who did not. In first-year students, Trockel et al., 2000 reported that, there is a link between eating breakfast and GPA.

Other than that, fast food has a negative impact on academic achievement. These foods are well-known for their low nutritional content, and they frequently fail to satisfy nutrient requirements. Furthermore, more than half of fast food meals surpass salt standards, and just 25% of these meals meet trans-fat guidelines. Only around a 1/3 of fast food had enough calcium, and only about 20% had enough vitamin A.

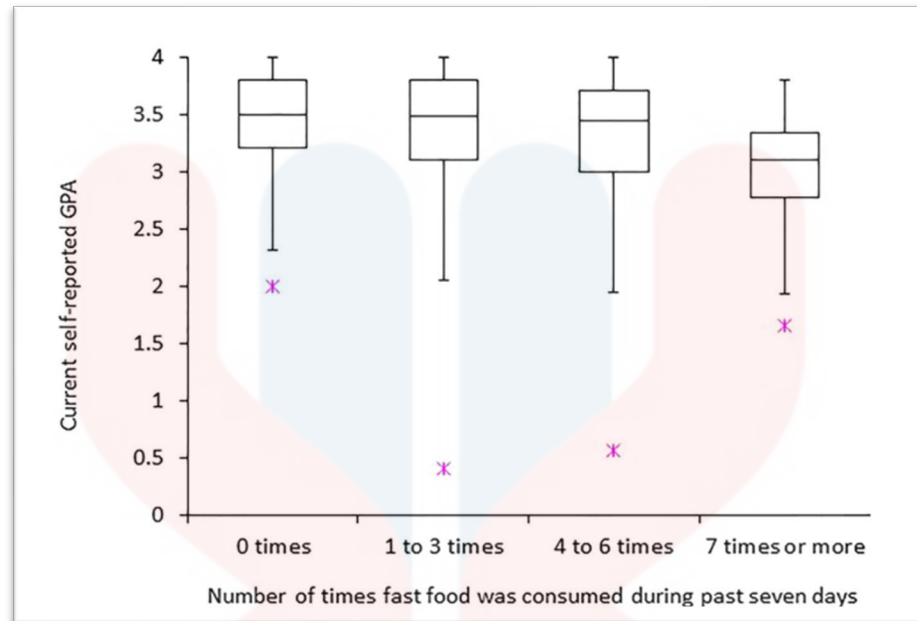


Figure 2.2: In a box and whisker graphic, respondents' self-reported current GPA vs. fast food ingestion rates. Outliers are findings that fall outside of 1.5 times the interquartile range.

Based on the figure above, fast food intake has been associated with decreased academic performance. As a consequence, the findings are consistent with past research. Deliens T et al., 2013, found that students who ate more fast food, specifically French fries, had a worse GPA and were less likely to show up for tests. In addition, Kobayashi 2009 and Farahbakhsh et al., 2017 discovered that poor eating behaviours, such as consuming fast food, lead to worse academic performance.

MALAYSIA  
KELANTAN



## 2.3 RESEARCH HYPOTHESIS (NON-DIRECTIONAL 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 hypothesis that used had relationships between dependent variables and independent variables from the research. Below is the following of hypothesis that the study has concerned;

- 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.

## 2.4 CONCEPTUAL FRAMEWORK

Figure 2.3 shows the independent variable (IV) and dependent variable (DV) of this research. The independent variables are the impacts of lifestyle and eating behaviour quality on academic performance. However, the dependent variable is the lifestyle and eating behaviour quality of academic performance among University students. Figure 2.3 indicates the relationship between physical activity (Hamilton, 2021), study habit (Marzulina et al., 2019) and eating habit (Collin, 2016) and lifestyle

study and eating behaviour quality on academic performance among University students.

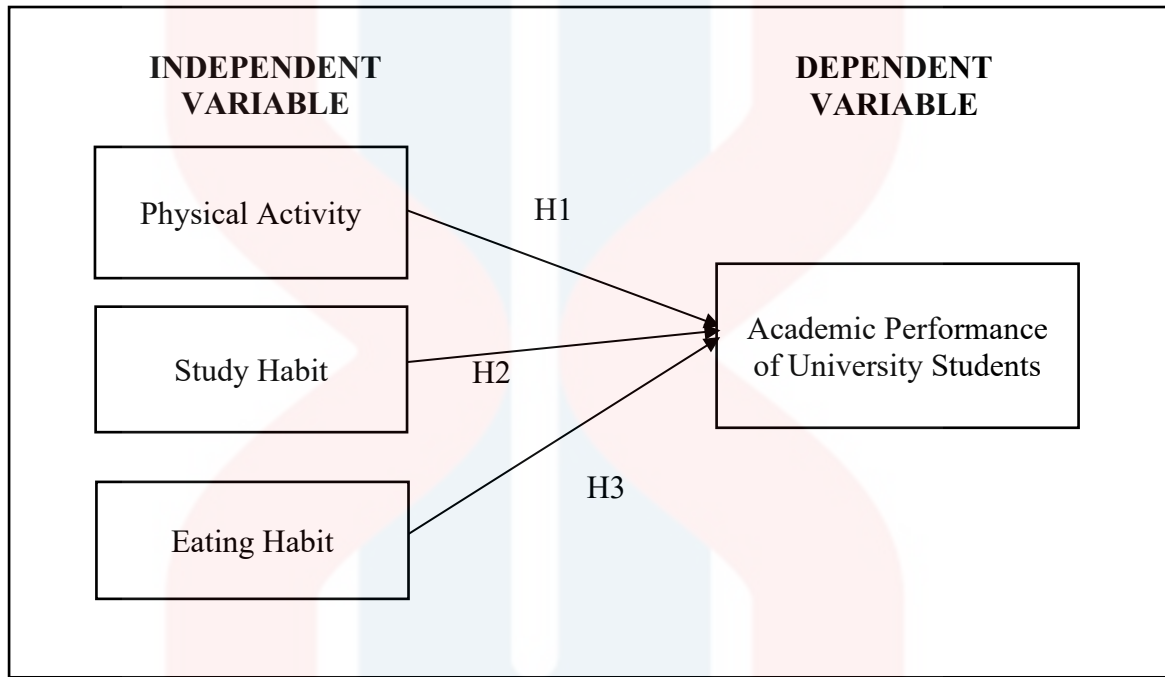


Figure 2.3 : Research Framework

## 2.5 SUMMARY

Overall, the second chapter discusses the subtopics conducted in the initial phase of the study. The first subtopic discussed in this chapter is literature review. Other than that, this chapter also focuses on the impacts of lifestyle study and eating behaviour quality on academic performance among University students where it refers to the subtopic that is important for generating questions that can help researchers to answer appropriately to the topic being studied. A literature review is a critical review of the literature relevant to a research topic. The literature review of this study is related

to “The Impacts of Lifestyle Study and Eating Behaviour Quality on Academic Performance among University Students”. This literature review began with the effects that occur on university students if they prefer a good or bad lifestyle and eating habits among which are physical activity, study habits and eating habits.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 INTRODUCTION

This chapter discusses the preferred methods used for the purpose of collecting data to conduct this research. The methodology of the study consists of procedures and actions taken in collecting and processing data related to this study which is the impacts of lifestyle study and eating behaviour quality on academic performance among university students. According to Denscombe, (2021), this chapter also covers research design, data collection methods, research population, sample size, sampling techniques, development of research instruments, measurement of variables and data analysis procedures.

The method used to collect data is quantitative data which can generate statistics based on the use of large-scale survey research. The quantitative method is applied when starting with a hypothesis and looking for confirmation or disbelief of that theory. Quantitative data stresses objective measurement, and the data is statistically assessed mathematical or numerical accumulated through questionnaire and surveys in order to survey the related information on the impacts of lifestyle study and eating behavior quality on academic performance among university students.

### 3.2 RESEARCH DESIGN

Basically, research design is the study planning that provides the specification of procedures as a guideline for the researchers to achieve research objectives or the hypothesis' test that has been formulated for their studies (Daniel & Gates, 1999). As mentioned by Vaus, (2013), research design is crucial in order to make sure that the data that generated from the study would be able to answer the research question based on the evidence confident and convincing. In fact, a quantitative approach has been applied in this research study. Thus, the survey was conducted by the questionnaire which is an internet survey. The questionnaire can be distributed as mail messages based on attachment or posted as World Wide Web (WWW) forms on the internet or distributed via publicly available computers in high-traffic areas. 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. The sample chosen in this study consisted of university students who were on the degree level which are from Year 1 and Year 4.

This research is based on quantitative in descriptive study design. According to Kumar, (2013), descriptive studies can be described on something that can be a phenomenon, a current situation or a characteristic of an organizational group, people and others. This research design can refer to cross-sectional where we are decided to describe the relationship between both variables in our research topic. It can be linked to the descriptiveness of this study which is the effects of lifestyle study and eating habits on academics among university students. In addition, quantitative data methods can refer to questionnaires that contain demographic sections with multiple

options. Respondents had to choose the determinant option based on their agreement on the answer given. In the section on attitudes, perceptions and expectations, Likert Scale was used to determine the level of agreement of students' academic performance and its impact among university students. The choice was made according to the range scale between the left side which is 1 to the right side which is 5. It has started from 1 who strongly disagrees to 5 who strongly agree.

Besides, all data analysis used Statistical Package for Social Science (SPSS). SPSS is software for evaluating, modifying and processing feature patterns between different data variables (Jason, 2018). The researcher also mentioned that the output can be obtained from the graphic's illustration that represents the study so in order to make the users easy to understand. In this study, SPSS software was used to generate results from the data collections based on the questionnaires distributed to the respondents.

### **3.3 POPULATION**

Population refers to the entire group of people, events or things of interest that researchers wish to investigate (Kumar, 2013). The population in a research unit possesses certain features, which are of the awareness of researchers' study. From the meaning, population can be stated as the targeted society or group of citizens which is implicated or chosen for the research. The population in this study are the university students with a degree level of education which are from Year 1 and Year 4.

In 2019, around 291.53 thousand male understudies and 415.02 thousand female understudies were joined up with public higher establishments. While the

quantity of male understudies enlisted had consistently diminished starting around 2016, there was as yet an altogether bigger number of females than male understudies in 2019. This mirrored the overall pattern of a greater number of ladies entering advanced education than men (Hirschmann, 2021).

The improvement shows that the greatness of female understudies in training is truly estimable as far as amount and quality. This is a demonstration of the accomplishment of the public authority's endeavours to engage ladies in Malaysia who can be glad for so they can keep on rivalling men in creating and propelling this country. Albeit the issue apparently arises during admission to state funded colleges, yet the ramifications are enormous to the design of society and the socio - economy of the country later on (Batris, 2021).

### **3.4 SAMPLING SIZE**

According to Taherdoost (2017) any empirical study in which the purpose is to make conclusions about a population from a sample must consider sample size. To generalize from a random sample and avoid sampling mistakes or biases, it must be sufficiently large. This sample size also used a fixed measure to survey a large population of respondents because the survey process involved many students. Therefore, it is useful to take a random sample of individuals representing the population as a whole (Chang et al., 2019).

The sample for this study would be the lifestyle study and eating behaviour quality among students. When conducting the questionnaires, the table shown below

can be used to determine sample size based on the given population. As this study has a large population of students that have a variety of lifestyle study and eating behaviour, a minimum target of 384 samples have been decided to be collected in this study.

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size  
"S" is sample size.

Source: Krejcie & Morgan, 1970

Figure 3.1: Sample Size for a Given Population

$$n = \frac{X^2 N p (1 - p)}{e^2 (N - 1) + X^2 p (1 - p)}$$

n = sample size  
N = population size  
e = acceptable sampling error  
X<sup>2</sup> = chi-square of degree of freedom 1 and confidence 95% = 3.841  
p = proportion of population (if unknown, 0.5)

Figure 3.2: The formula used by Krejcie and Morgan to determine the sample size for a given population shown in Figure 3.1.

According to the Ministry of Higher Education (2020), the number of undergraduate students in universities which are divided into public and private universities in Malaysia is 470,413 and 341,378 students respectively. The population



and number of students at these two categories of universities are used to calculate the true population count in this study. Table below is the population and number of students shown by the Ministry of Higher Education (2020).

Table 3.1: The population of undergraduate students in public and private universities.

<b>Universities</b>	<b>Number of undergraduate students</b>
Public university	470,413
Private university	341,378
<b>Sum</b>	<b>811,791</b>

Source: Ministry of Higher Education, 2020

The number of the students for both categories of universities is used to determine the sample size. According to the number of undergraduate students of both public and private universities, the study sum shows the largest number of students which are 811,791 students in Malaysia. Therefore, the sample size that will be used is 384 using formulas by Krejcie and Morgan. The sample size of 384 students is acceptable for use according to the large number of respondents able to cover the whole population in this study area. The number of the students for both categories of universities is used to determine the sample size. According to the number of undergraduate students of both public and private universities, the study sum shows the largest number of students which are 811,791 students in Malaysia. Therefore, the sample size that will be used is 384 using formulas by Krejcie and Morgan. The sample size of 384 students is acceptable for use according to the large number of respondents able to cover the whole population in this study area.

### 3.5 SAMPLING METHOD

The sampling method is a way for picking a suitable number of rudiments from a population. According to Acharya et al (2013), instead of analyzing each individual, sampling is a strategy for acquiring information about a population based on the findings of a subset of the population. A sample analysis and comprehension of its attributes or explanation will simplify the properties or characteristics of the population's rudiments for researchers. In the sampling procedure, researchers choose particular demographic rudiments as study participants. The two types of sampling procedures are probability sampling and non-probability sampling.

The technique of probability random sampling and the method of non-probability random sampling are the two sorts of sampling methods. The random type is chosen using probability random sampling, whereas the non-selection type is chosen using non-probability random sampling. Non-probability sampling is a form of sampling that does not give any basis for estimating the likelihood that components from the universe will be included in the study sample (Etikan, 2017). A non-probability sampling method is chosen for this study. This method can facilitate the researcher to choose any of their preferable respondents who are available instead of selecting from the entire population (Hair, 2015). The convenience of using this method in this study is the researcher could save time and cost while collecting data. This is the reason for selecting this non-probability method technique as the respondents of the questionnaire were related to lifestyle study and eating behavior among university students.

### **3.6 DATA COLLECTION METHODS**

According to Bryman, (2016), the researchers need to set the knowledge required to answer each research question for the purpose of the research project and design the questions in the questionnaire as well as enable the data collected to answer the research question. In fact, there are various methods of data collection in terms of research management. As a teammate of this research, we have discussed using the primary data as the data collection methods. Primary data is one of the methods to collect the data that works directly for those researchers based on their chosen sources such as interviews, surveys and others. So, it can be shown that this kind of method is one of the greatest data's can be obtained in research as we decided to use a survey method. The survey technique is a means of gathering standardized information from individuals through the use of a questionnaire. Google form is the medium to succeed in our research in order to get a high response rate, cost saving and be able to distribute the survey without geographical boundaries.

### **3.7 RESEARCH INSTRUMENT**

The researcher have decided to ask the respondents by using a close-ended form in the questionnaire. According to QuestionPro (2021), close-ended questions can be defined as one of the question types that need respondents to choose an answer option that is provided by the researcher in a simple form for example yes or no or any

other multiple choices question. Besides, this close-ended question is often used in order to collect the respondents' information based on a quantitative data approach. Close-ended questions may come in many forms, but the respondents still have their own option to choose and answer the questions given without hesitating. There is a lot of advantage of doing this close ended form in the questionnaire as it is very easy for the respondents because it did not require much time to answer, and easy to compare responses made by the respondents. The answer is also much easier to analyze on the computer and the response choices make questions clear and easy to replicate the study. Thus, the researcher have completed the questionnaire that is related to the journal article that was also mentioned by the researchers in the previous study in order to collect all the important information from the respondent later. The researcher also prepare this questionnaire in duo basic languages such as English and Malay language that are often to be used in Malaysia so that there will be no issues occurring that consist of comprehension of language that makes it hard for respondents to answer the questions later.

In this research, the researcher are going to use a questionnaire method where there is one type for demographic profiles of respondents that can be included in Section A. Also, there are four sections for Section B, Section C, Section D and Section E. Firstly, the researcher are going to discuss about the respondent demographic question that consists of gender, year and CGPA in Section A. The researcher are going to put a simple multiple choice question where the respondents have to choose the answer based on their experience in study. Secondly, the researcher are going to ask a question that are related to their academic performance in Section B, study lifestyle on physical activity in Section C, study habits in Section D and eating habits in Section E. Thus, the researcher are providing a few questions based on their own opinion through

the answers given about the physical activity, preference towards their study habits as well as total healthy and unhealthy foods intake on a weekly basis. Since the researcher are taking information on levels of agreement by the respondent, the researcher have decided to use Likert Scale method to make it easier for Section B, Section C, Section D and Section E. The question is focus on the understanding of the respondents on the discussed topic, eating habits that impacts on students' academic performance. The question is about the influence impacts from the topic that lead them to prefer their own physical activity and study habits as well as food choices in their study's life.

Based on the questionnaire that referred to the attitude, the researcher are using Likert scale in order to obtain a better accurate result. According to Dr. Saul McLeod (2019), Likert scale is one of the measuring methods that have a variety option rating scale to directly measure attitude as it allows the respondents to express their own agreeableness such as agree and disagree with a particular statement. The range of the five points of Likert started from the left side which is 1 until the right side which is 5. The range has stated that it consists of 1 (Strongly Disagree), 2 (Disagree), 3 (Either Disagree or Agree), 4 (Agree) and 5 (Strongly Agree). Below is the following of the example for these points of Likert scale;

Figure 3.3: Research Instrument

1	2	3	4	5
Strongly Disagree	Disagree	Either Agree or Disagree	Agree	Strongly Agree

## **3.8 DATA ANALYSIS**

Data analysis is the method of analysing each element of the data obtained or given using logical and analytical reasoning. It applies to some of the stages that go into conducting a research study. The researcher uses the SPSS version to investigate the statistical data analysis in this study. SPSS is a program-based data entry and analysis window that lets you make tables and pie charts. The researcher collects data and does descriptive analysis, correlation analysis, and reliability analysis for this study.

### **3.8.1 DESCRIPTIVE ANALYSIS**

Descriptive analysis was used to define the study's data's fundamental characteristics. It provides a basic virtual depiction of any quantitative data analysis using this simple graph analysis approach. To make descriptive analysis easier, we've supplied age, gender and status, based on our research studies. To keep things simple, we'll generate our sample in Google Forms and then send it to our respondents, who will answer the questions and give the necessary data.

### **3.8.2 PEARSON CORRELATION ANALYSIS**

Pearson Correlation Coefficient analysis is used to examine the given data. The Pearson Correlation Coefficient analysis is an important method for determining the strength of the linear relationship between the independent variables (IV) and the dependent variable (DV). The purpose of this study is to see if there are any relationships between the independent variables (IV), which are physical activities, study habits, and eating habits, and the dependent variable (DV) is university student academic performance. Researchers will examine the degree and direction between the (IV) and (DV) if a correlation exists.

### **3.8.3 RELIABILITY TEST**

Reliability test is the degree to which a test is consistent and stable. Simply defined, a test is dependable if it is consistent within itself and across time. This strategy was utilized to ensure that the outcomes of our investigation will be reliable. Cronbach's alpha is a statistic for measuring internal consistency or reliability of set scale or test items. In other words, measurement dependability relates to how constant a measurement is in measuring a concept,

and Cronbach's alpha is the method for establishing how strong that consistency is, as shown in Table 3.2 below.

Table 3.2: Cronbach Alpha in Reliability Test

Alpha Coefficient Range	Strength of Association
$< 0.6$	Poor
$0.6 < 0.7$	Moderate
$0.7 < 0.8$	Good
$0.8 < 0.9$	Very Good
$0.9$	Excellent

Table 3.2 shows Cronbach's Alpha rules of thumb. The strength of connection is poor when the coefficients are less than 0.6. When the numbers are between 0.6 and 0.7, the amount of connection is moderate. When the figures are 0.7 or less than 0.8, the relationship is considered good. A score of 0.8 or less than 0.9 indicates very good. The final number is 0.9, which stands for excellent.

### 3.9 SUMMARY

This chapter provides a deeper insight of how to employ the research design and function in the research, as well as other components such as the target population, sample size, sampling method, data collecting, research tools, and data analysis. In this chapter, it is also described how the questionnaire was created and how it might be used in this research.



## CHAPTER 4

### RESULTS AND DISCUSSIONS

#### 4.1 INTRODUCTION

This chapter discussed about the results of data analysis that has been conducted on 399 respondents. The study was based on information gathered from on-line survey, before distributed by Google form via social media platforms such as WhatsApp, Instagram, and Telegram. The data from the questionnaire was analysed by IBM Statistical Package for Social Sciences (SPSS) version 26. Thus, the results are based on descriptive analysis, inferential analysis, reliability test and Pearson's correlation test.

#### 4.2 RESULT OF DESCRIPTIVE ANALYSIS

Descriptive analysis was conducted based on the data collected from the 399 respondents on Section A for background information summaries in respondents' demographic profile.

#### 4.2.1 Gender of Respondents

Table 4.1 presents the gender distribution of a total of 399 respondents collected from the data collection.

Table 4.1: The Gender of respondents.

Gender	Frequency (n)	Percentage (%)
Male	109	27
Female	290	73
Total	399	100

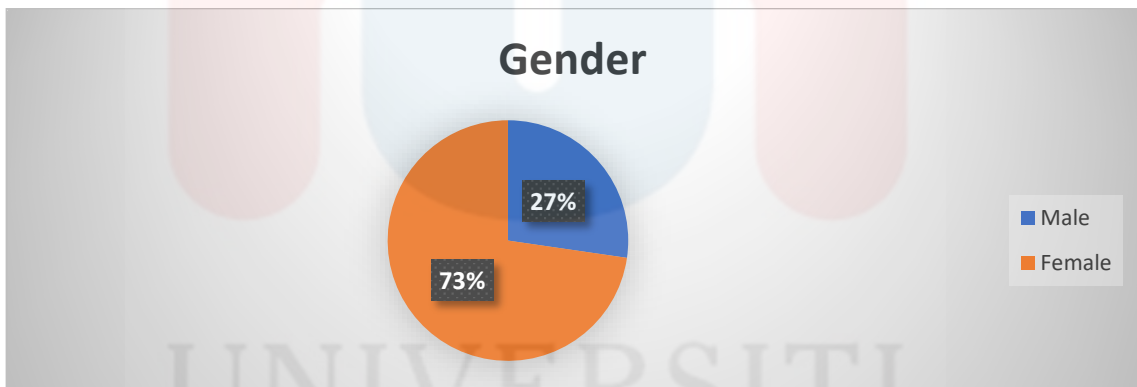


Figure 4.1: The Gender of Respondents.

The pie chart displays the gender distribution of a total of 399 respondents based on Figure 4.1 above. The pie chart above plainly demonstrates that there were 73 % (n=290) more female respondents than male respondents, who made up just 27 % (n=109).

#### 4.2.2 Year of Respondents

A total of 399 respondents were gathered from the data collection, and their year of study is shown in Table 4.2.

Table 4.2: The Year of Study of Respondents.

Year	Frequency (n)	Percentage (%)
1 <sup>st</sup> year	260	65
4 <sup>th</sup> year	139	35
Total	399	100

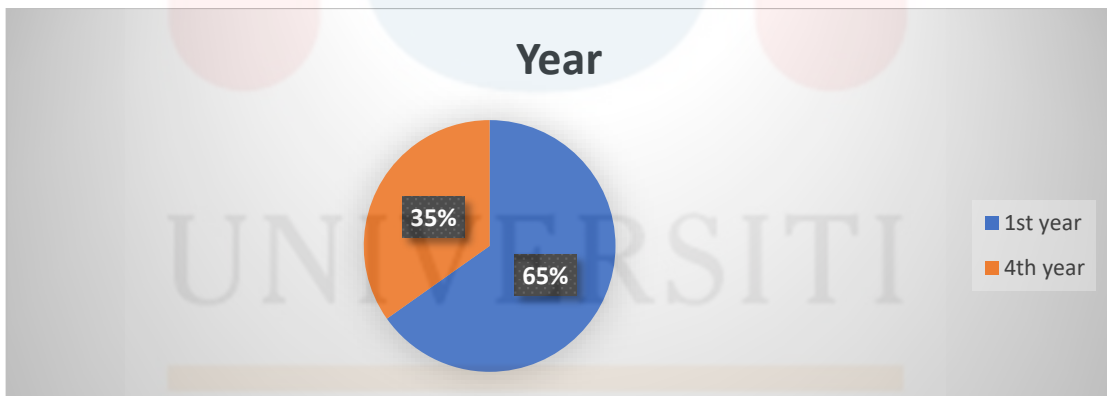


Figure 4.2: The Year of Study of Respondents.

The pie chart in Figure 4.2 above depicts the year distribution of 399 respondents. The pie chart above clearly illustrates that first-year respondents outnumbered second-year respondents by 65 percent (n=260) to 35 percent (n=139).

### 4.2.3 CGPA of Respondents

The distribution of CGPA for all 399 respondents included in the data collection is shown in Table 4.3.

Table 4.3: The CGPA of respondents.

CGPA	Frequency (n)	Percentage (%)
2.5 & below	4	1
2.5 & above	41	10
3.0 – 3.5	231	58
3.6 – 4.0	123	31
Total	399	100

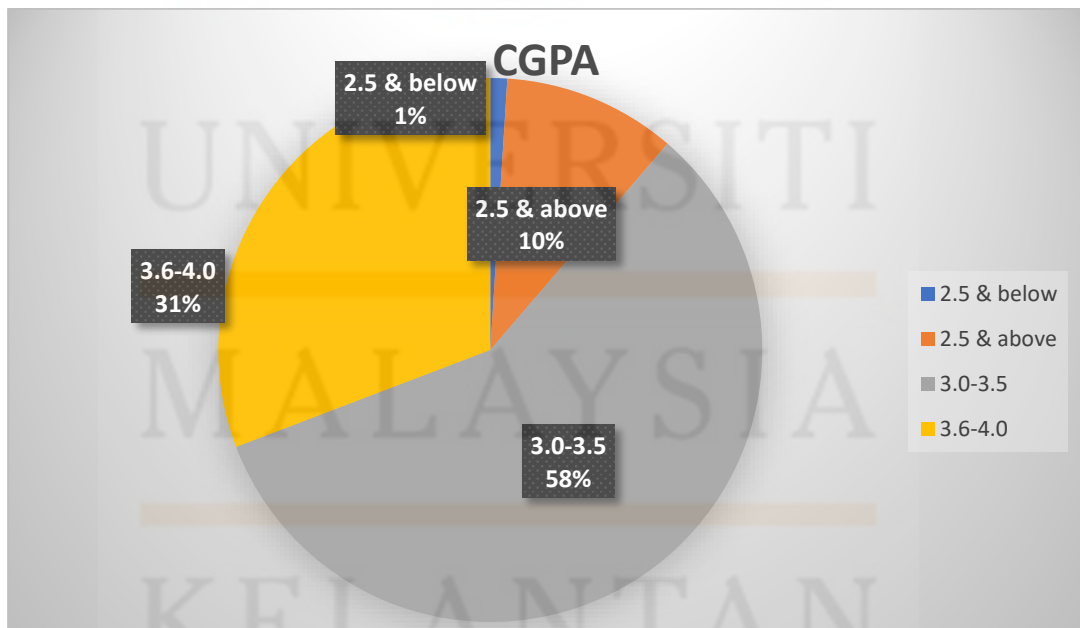


Figure 4.3: The CGPA of Respondents.

Figure 4.3 above displays the respondents' average CGPA as a percentage. The respondents that have a 3.0 to 3.5 CGPA are the most respondents that have CGPA on 3.0 to 3.5 were 58% (n=231), 3.6-4.0 were 31% (n=123) respondents and 2.5 & above were 10% (n=41). Meanwhile, the respondents at 2.5 & below had the lowest CGPA at 1% (n=4).

### 4.3 RESULT OF RELIABILITY TEST

The term "reliability" refers to a measurement of a specific spectacle that is steady and produces consistent results. It is also linked to the occurrences of repeatability. If repeated measurements with consistent variables yield the same findings, a test or research is called dependable. Cronbach's alpha was utilised to assess the study's reliability. Cronbach's alpha is a numerical internal consistency measurement which is ranges from 0 to 1. This approach may be used to confirm the study's questionnaire's validity and reliability.

Table 4.4: Cronbach's Alpha Coefficient Values.

Alpha Coefficient Range	Strength of Association
< 0.6	Poor
0.6 < 0.7	Moderate
0.7 < 0.8	Good
0.8 < 0.9	Very Good
0.9	Excellent

Cronbach's alpha coefficient values are shown in Table 4.4. When the score is 0.9 or higher, with a maximum value of 1, internal consistency is considered extremely good. Cronbach's alpha less than 0.5, on the other hand, is considered inadequate.

Table 4.5: Results for Reliability Cronbach's Alpha for Variables.

Variables	Number of items	Cronbach's Alpha
Physical Activity	6	0.823
Study Habit	7	0.775
Eating Habit	7	0.895
Academic Performance	6	0.809

Table 4.5 shows the overall result of the variable reliability analysis, which comprises the independent variables and the dependent variable. It demonstrates that the questionnaire's Cronbach's Alpha scores fell between the low acceptability level (0.5) and the high acceptability level range (0.9). The reliability of three independent variables was investigated using the dependability of Cronbach's Alpha. The first independent variable, Physical Activity was discovered to be very good in terms of consistency (6 items; = 0.823). Next, the level of correlation of Study Habit had stated good in reliability (7 items; = 0.775). Followed by Eating Habit and Academic Performance, both had stated (7 items; = 0.895), (6 items: = 0.809) which were very good in strength of correlation.

As a result, all three variables had the result above in Cronbach's Alpha result. Thus, the questionnaire employed in this study is trustworthy, and the information gathered can be used.

#### 4.4 RESULT OF INFERENTIAL ANALYSIS

Finding differences or connections between variables typically involves using inferential statistics in research and studies. Performance expectations, social influence, and perceived trust are independent factors, whereas consumer acceptance is the dependent variable. Pearson Correlation In this study, the coefficient will be utilised to evaluate the strength of the relationship between the independent and dependent variables As a guideline, the table below shows the coefficient correlations and the strength of the link based on their values.

##### 4.4.1 Normality Test

The data normality was evaluated using a Q-Q plot visual approach. According to Figure 4.4, the standard Q-Q plot for each variable and each data point was almost exactly aligned with the diagonal. Thus, this suggests that the data were dispersed properly.

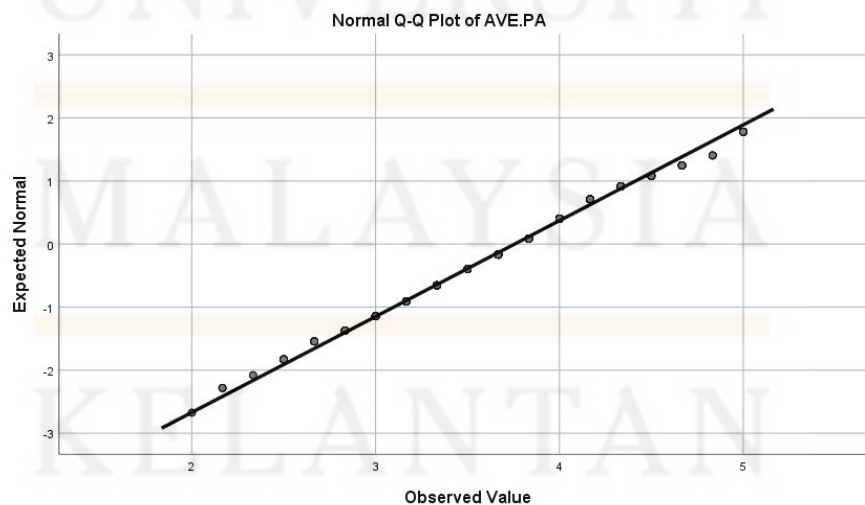


Figure 4.4: Normality Test on Physical Activity

The relationship between the independent variable of physical activity and the dependent variable of academic performance among university students is depicted in

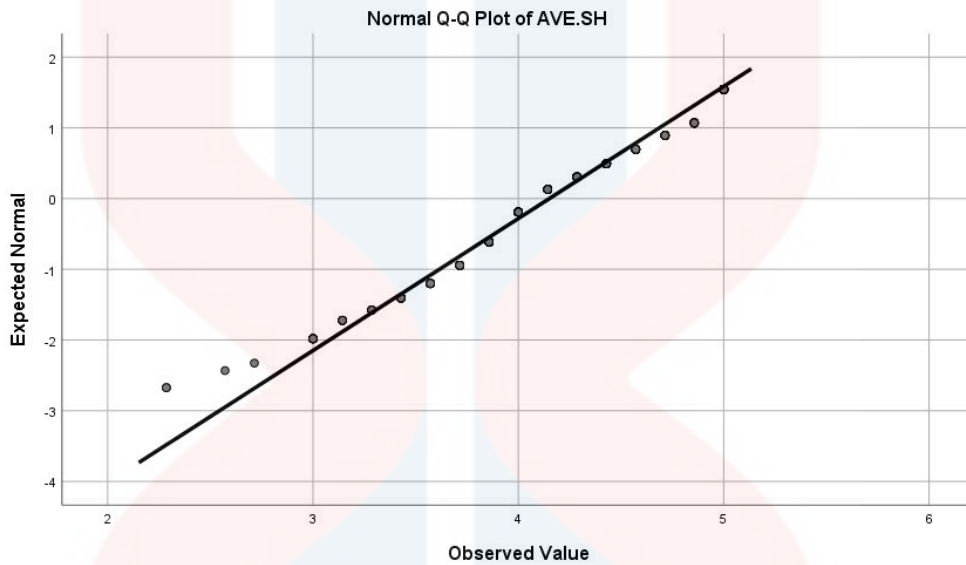


Figure 4.5: Normality Test on Study Habit

The Figure 4.5 shows The Relationship between Independent Variable of Study Habit and Dependent Variable of Academic Performance among University Students.

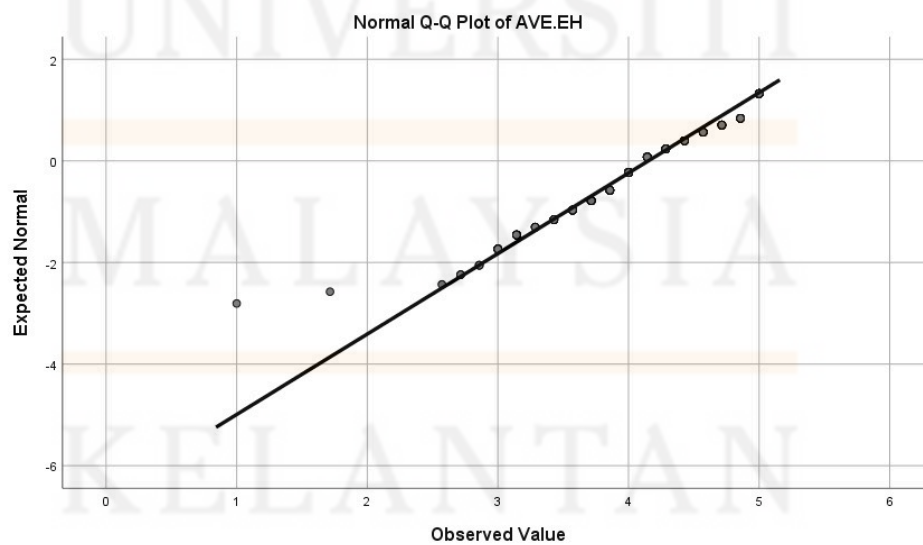


Figure 4.6: Normality Test on Eating Habit



The Figure 4.6 shows The Relationship between Independent Variable of Eating Habit and Dependent Variable of Academic Performance among University Students.

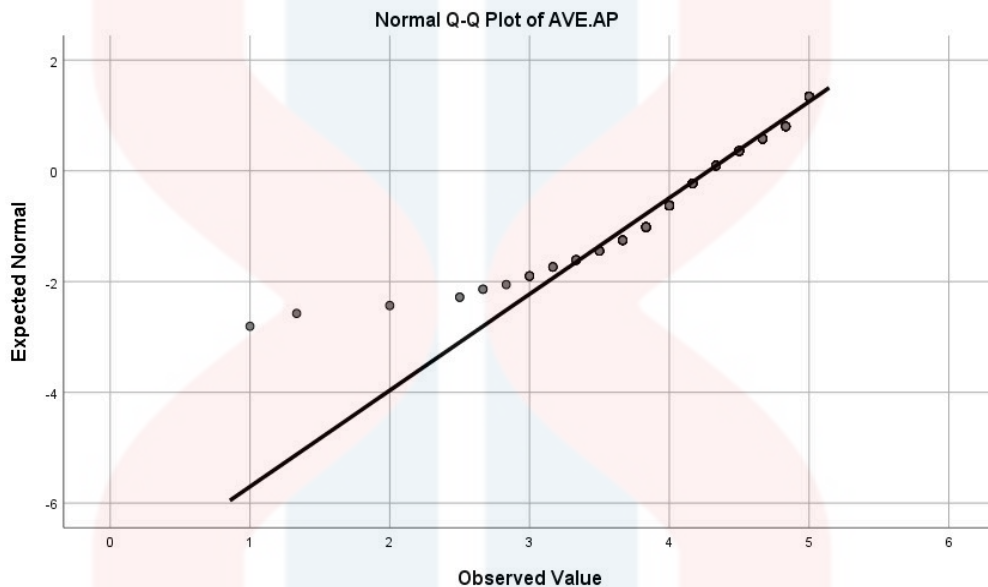


Figure 4.7: Normality Test on Academic Performance

The Figure 4.7 shows The Relationship between The Impacts of Lifestyle Study and Eating Behaviour Quality On Dependent Variable of Academic Performance Among University Students.

#### 4.4.2 Univariate Test

This section displays the results of the univariate analysis done on the items for each variable as a frequency distribution, mean, and standard deviation. All Independent Variable items were assessed using a five (5) Likert scale with the

following values: Strongly Disagree (SD), Disagree (D), Neither Disagree nor Agree (N), Agree (A), Strongly Agree (SA). Meanwhile, Dependant Variable was measured using the same five (5) Likert scale but different in values: Very Dissatisfied (VD), Dissatisfied (Ds), Neither Satisfied Nor Dissatisfied (Ns), Satisfied (S) and Very Satisfied (VS).

#### 4.4.2.1 Descriptive Statistic

Table 4.6: Descriptive Statistic of Physical Activity.

No.	Item Description	N	Mean	Std. Deviation	Level of Agreement
1	Do you regularly exercise for less than 3 days/week?	399	3.43	1.034	Agree
2	Are you categorized in the active group in the university?	399	3.46	.912	Agree
3	Do you often do physical Activity such as walking/ swimming/running on a treadmill or cycling on a campus?	399	3.63	1.019	Agree
4	Do you often get involved in clubs at university?	399	3.60	.938	Agree

5	Do you agree that involvement in physical activity will have a positive impact on the academic achievement of a university students?	399	4.20	.778	Agree
6	Do you agree that students should get involved in games and sport activities at university?	399	4.23	.690	Strongly Agree
<b>Average Mean</b>		<b>399</b>	<b>3.76</b>		<b>Agree</b>

The mean values for the independent variable, physical activity, are shown in Table 4.6. The highest mean value of 4.23 for the item “Do you agree that students should get involved in games and sport activities at university?” its level of agreement is extremely agree. Next would be that “Do you agree that involvement in physical activity will have a positive impact on the academic achievement of a university students?” with a mean 4.20 that also has an agree, followed by “Do you often do physical activities such as walking/swimming/running on a treadmill or cycling on a campus?” with a mean value of 3.63 and an acceptable level of agreement. For item “Do you often get involved in clubs at university?” that have a 3.60 mean, followed for the second lowest mean which is agree level of agreement 3.46 “Are you categorized in the active group in the university?” and the lowest mean 3.43 that also in an agree level of agreement is the item “Do you regularly exercise for less than 3 days/week?”.

The average mean for physical activity is 3.76, and the level of agreement is agree. It demonstrates that the majority of respondents feel that physical activity is vital for university students to ensure high academic achievement. The majority of students believe that physical activity is essential for good academic performance.

Table 4.7: Descriptive Statistic on Study Habit.

No.	Item Description	N	Mean	Std. Deviation	Level of Agreement
1	I read all the questions before answer the test question.	399	4.39	.762	Strongly Agree
2	I take notes while reading the text that related to subject.	399	4.20	.693	Agree
3	Do you agree that note taking technique is an important study skill?	399	4.38	.706	Strongly Agree
4	Do you agree that writing skills is an important study skill?	399	4.32	.666	Strongly Agree
5	I prefer to study within a week before the final exam.	399	3.71	1.068	Agree
6	I prefer to study within two weeks before the final exam.	399	3.84	.983	Agree
7	Do you agree that study skills can be improved by reading and repeating the text.	399	4.21	.784	Strongly Agree
<b>Average Mean</b>		<b>399</b>	<b>4.15</b>		<b>Agree</b>

The mean values for the independent variable, study habit, are shown in Table 4.7. 4.39 is the highest mean value for the item “I read all the questions before answer the test question.” has strongly agree for its level of agreement followed by the statement “Do you agree that note taking technique is an important study skill?” stated as the second highest with mean 4.38. Next, the statement “Do you agree that writing skills is an important study skill?” with mean 4.32, and “Do you agree that study skills can be improved by reading and repeating the text?” with mean 4.21, both had strongly agree in level of agreement. For statement, “I take notes while reading the text that related to subject.” with mean 4.20, followed by the second lowest mean 3.84, with the statement “I prefer to study within two weeks before the final exam.” and the lowest, “I prefer to study within a week before the final exam.” with 3.71 mean, likewise in accord on the amount of agreement

The average mean for study habits is 4.15, and the level of agreement is agree. It demonstrates that the majority of respondents feel that study habits are necessary for university students to ensure good academic performance. Good study habits are also important to majority of students if they want to have a good academic performance.

Table 4.8: Descriptive Statistic on Eating Habit.

No.	Item Description	N	Mean	Std. Deviation	Level of Agreement
1	Do you agree that breakfast intake is important?	399	4.44	.688	Strongly Agree
2	Do you agree that academic performance has to do with breakfast?	399	4.06	.869	Agree
3	Do you agree that breakfast leads to the quality of student education?	399	4.15	.800	Agree
4	Do you agree that nutritional food intake will have a good effect on the student academic performance?	399	4.37	.699	Strongly Agree
5	Do you agree that students with higher grades have healthier eating habits?	399	3.87	.919	Agree
6	Do you agree that student performance develops well if they consume good nutrition?	399	4.18	.733	Agree
7	As a student, do you agree that unhealthy food will have a negative effect on the student academic performance?	399	3.99	.899	Agree
<b>Average Mean</b>		<b>399</b>	<b>4.15</b>		<b>Agree</b>

Table 4.8 above shows mean values of the independents variable which is eating habit. The highest the statement receives a mean value. “Do you agree that breakfast intake is important?” with a mean of 4.44 and a level of agreement that is strong. The next higher of mean which is 4.37 that also have a strongly agree level of agreement is “Do you agree that nutritional food intake will have a good effect on the student academic performance? The next level of agreement has a high mean but is still in the agreed level of agreement, which is 4.18, 4.15, and 4.06 is “Do you agree that student performance develops well if they consume good nutrition?”, “Do you agree that breakfast leads to the quality of student education?” and “Do you agree that academic performance has to do with breakfast?”. Furthermore, the mean 3.99 that likewise has a degree of agreement is “As a student, do you agree that unhealthy food will have a negative effect on the student academic performance?” followed the mean, which has just 3.87 mean and has a degree of agreement of is “Do you agree that students with higher grades have healthier eating habits?”

The average mean for eating habits is 4.15, indicating a high level of agreement. This demonstrates that the majority of respondents feel that eating habits are important in terms of academic performance among university students. They believe that eating habits with good behaviour on food consumption can affect the academic performance either is good or not depends on how they care of their own eating habits.

Table 4.9: Descriptive Statistic on Academic Performance.

No.	Item Description	N	Mean	Std. Deviation	Level of Agreement
1	Improving my grades every semester is my biggest goal in university.	399	4.56	.827	Strongly Agree
2	I know how to manage my time to maintain good grades.	399	3.99	.797	Agree
3	I set the deadlines for myself for completing my assignments.	399	4.12	.912	Agree
4	I believe that I can improve my Academic performance if I manage my time wisely.	399	4.54	.714	Strongly Agree
5	I enjoy doing assignments and outdoor activities because they help me to improve my skills in every subject.	399	4.23	.809	Strongly Agree
6	I actively participate in every discussions. (group discussion, etc.)	399	4.25	.751	Strongly Agree
<b>Average Mean</b>			<b>399</b>	<b>4.28</b>	<b>Strongly Agree</b>



The mean values for the dependent variable, academic performance, are shown in Table 4.9. The statement has the highest mean value of 4.56 which is “Improving my grades every semester is my biggest goal in university”, followed by second highest mean 4.54, “I believe that I can improve my academic performance if I manage my time wisely”, both had stated strongly agree in level of agreement. Next, the statement “I actively participate in every discussion (group discussion, etc..)” had the mean of 4.35 and followed closely by mean 4.23 with the statement “I enjoy doing assignments and outdoor activities because they help me to improve my skills in every subject”, both statements also expressed a high degree of agreement. The mean with the second lowest value is 4.12 with statement “I set the deadlines for myself for completing my assignments” and the lowest mean 3.99 with statement “I know how to manage my time to maintain good grades”. Both statements had stated agree in agreement.

Academic performance has an average mean of 4.28, with strongly agree being the level of agreement. It demonstrates that the majority of respondents strongly think that developing and sustaining performance is critical for university students in order to attain success.

#### **4.4 PEARSON CORRELATION ANALYSIS**

Table 4.10 shows results of analysis of correlation about the influence of study lifestyle and eating behavior quality on academic performance among university students in terms of physical activity, study habit, and eating habit attributes indicated in terms of MFT.

Table 4.10: Results of Pearson Correlation Analysis.

	Physical	Study	Eating	Academic
Physical Activity Value	1			
Study Habit Value	0.482**	1		
Eating Habit Value	0.350**	0.528**	1	
Academic Performance Value	0.563**	0.601**	0.386**	1

\*\* Correlation is significant at the 0.01 level (2-tailed).

Table 4.10 reveals a substantial correlation between a physical activity and academic performance value ( $r = 0.563$ ,  $p < 0.01$ ). According to Williams and Naumann (2011), a modest level of association existed between quality and satisfaction value.

With  $r = 0.601$ ,  $p < 0.01$  there was a statistically significant correlation between study habit and academic performance. The correlation coefficient indicates that study habit and academic performance value have a moderate relationship.

With  $r = 0.386$ ,  $p < 0.01$  there was a statistically significant correlation between eating habit and academic performance value. The correlation coefficient indicates that eating habit and academic performance have a weak relationship.

In conclusion, academic performance was substantially correlated with physical activity, study habit and eating habit value, there were moderate and weak relationship.

## 4.5 DISCUSSION BASED ON RESEARCH OBJECTIVES

Table 4.11: Summary for Hypothesis Testing.

Hypothesis	Pearson's correlation results	
H <sub>1</sub> There is a significant relationship between physical activity and academic performance among university students.	$r = 0.563, p < 0.01$	Supported
H <sub>2</sub> There is a significant relationship between study habits and academic performance among university students.	$r = 0.601, p < 0.01$	Supported
H <sub>3</sub> There is a significant relationship between eating habits and academic performance among university students.	$r = 0.386, p < 0.01$	Supported

Based on Table 4.11, Pearson's correlation analysis was used in testing the relationship between hypothesis on a significant relationship such as physical activities, study habits and eating habits with student's academic performance. The result shown all hypotheses stated were eating habits with accepted at 0.01 significant level.

#### 4.6 SUMMARY

To conclude, this chapter has discussed about the data analysis used in the study. The purpose of data analysis is to analyze the data collection by using descriptive analysis, inferential analysis, reliability test and Pearson's correlation test.



## CHAPTER 5

### CONCLUSION

#### 5.1 INTRODUCTION

Further discussion in this chapter was based on the results of data analysis. Thus, this chapter would be discussed about the recapitulation of the findings while limitations of the study and recommendations for the future research also has considered in terms of theoretical, methodological and practical.

#### 5.2 RECAPITULATION OF THE FINDINGS

##### 5.2.1 Physical Activity

Research Objective 1: To identify the relationship between physical activity and academic performance among university students.

Research Question 1: What is the relationship between physical activity and academic performance among university students?

The first hypothesis predicted a positive and significant relationship between physical activity and academic performance. The Pearson Correlation analysis indicates that ( Table 4.10), the result shows physical activity are moderately correlates on academic performance among university students. The relationship between independent variable 1 (physical activity) and dependent variable (academic performance among university students) shows a moderate positive correlation as followed the result, which is  $r = 0.563$ ,  $p < 0.01$ .

In fact, result has shown similarities with previous studies. According to Andrew et al., (2020) and Hamilton (2021), most students was moderate significant correlation between physical activity and academic performance among university students. Based on the comparison between the finding from the previous studies, university students have physical activity that are more involved in engaging in sports activities at the university for example exercise like walking, swimming, cycling and other. The next is students also involved in encouraging dynamic work openings and proactive assignments with learning. These physical activities can influence academic performance among university students.

In conclusion, the research objective 'To identify the relationship between physical activity and academic performance among university students' has accomplished as well as the research question 'What is the relationship between physical activity and academic performance among university students?' also has been answered along this study.

### 5.2.2 Study Habit

Research Objective 2: To examine the relationship between study habits and academic performance among university students.

Research Question 2: What is the relationship between study habits and academic performance among university students?

Next hypothesis was proposed as a positive and conspicuous relationship between study habits and academic performance among university students. As reported by Pearson Correlation analysis (see Table 4.10), the result shows that study habits are moderately correlates on academic performance among university students. The relationship between independent variable 2 (study habits) and dependent variable (academic performance among university students) shows a moderate positive correlation as followed the result, which is at  $r = 0.601, p < 0.01$ .

In fact, the result has shown similarities with previous studies. According to Jafari et al., (2019) and Gilbert and Magulod (2019), most students was moderated significant correlation between study habits and academic performance among university students. Based on the comparison between the finding from the previous studies, university students have study habits that are more inclined to time management, reading ability, writing skill and note taking. Thus, these study habits can influence academic performance among university students.

To conclude, the research objective ‘To examine the relationship between study habits and academic performance among university students’ has accomplished as well as the research question ‘What is the relationship between study habits and

academic performance among university students?’ also has been answered along this study.

### 5.2.3 Eating Habit

Research Objective 3: To illustrate the relationship between eating habits and academic performance among university students.

Research Question 3: What is the relationship between eating habits and academic performance among university students?

The Third hypothesis predict a positive and significant relationship between eating habits and academic performance among university students. According to a Pearson Correlation analysis (see Table 4.10), the result showed that eating habit value has a weakly correlate on the academic performance among university students. As a consequence, independent variable 3 and the outcome have a weakly positive correlation relationship (Eating habits) and dependent variable (Academic performance among university students) at  $r = 0.386$ ,  $p = < 0.01$  are shown.

Therefore, this third hypothesis is accepted. This indicated that if the eating habits have a positive result, this may cause disruption and changes in the academic performance among university students. Students' academic performance improves when they practise healthy eating habits. Other characteristics, such as sleeping patterns, study habits may be more relevant (Reuter, Forster & Brister, 2020). The results of this study also corroborate and accept these conclusions.



In conclusion, the research objective ‘To illustrate the relationship between eating habits and academic performance among university students’ is achieved and the research question ‘What is the relationship between eating habits and academic performance among university students?’ is also achieved.

### **5.3 LIMITATIONS OF THE STUDY**

The study has considered as the relationship between physical activity and academic performance among university students, the relationship between study habits and academic performance among university students as well as the relationship between eating habits and academic performance among university students. In fact, the study was quantitative research where the researchers have decided to use questionnaires as on-line survey that help us to had fast response from respondents which are among university students in Malaysia.

However, there are few challenges in this study while conducted the survey. Firstly, the number of genders was not same and more in favour of one gender only. This is because, the number of respondents among female students is very significant compared to male students. The result of finding in this study has shown that 290 of 399 respondents are belongs to female students at 73% while 109 of 399 respondents was male students at 27% only. Therefore, it is likely that most of the questionnaires answered did not provide optimal satisfaction to the study.

Other than that, the number of years’ study also might be affected to the result of questionnaires. Thus, the researchers have decided to conduct the survey that focused on university students that were at Year 1 and Year 4. Unfortunately, there was only

one year of study has shown an encouraging response to the results of the survey. To illustrate, university students that were at Year 1 has answered the survey has contributed 260 of 399 respondents at 65% while the university students that were at Year 4 has contributed only 139 of 399 respondents at 35%.

Also, the number of Cumulative Grade Point Average (CGPA)s' level was not considered as good response to the survey. This is because of many questionnaires was answered by the university students had higher pointer rather than lower pointer. As the result of finding has shown that there was only 4 of 399 respondents who had lower pointer which is 2.5 and below at 1% while 41 of 399 respondents was 2.5 and above at 10% as compared to the respondents who had higher pointer such as 3.0 to 3.5 was 231 of 399 respondents at 58% as well as 3.6 to 4.0 was 123 of 399 respondents at 31%.

## **5.4 RECOMMENDATIONS**

### **5.4.1 Theoretical Recommendation for Future Research**

As stated from the result, reading ability in study habits had the highest benefaction among university students. This is because it has become a habit for students to have such a study habit during the examination. In fact, it can make easier for students to get excellent performance in academic by understanding the questions related to the subjects. Moreover, the independent variable such as physical activity and eating habits also important to determine the highest students' performance in academic. In terms of physical activity, the students who engage in sports activities are

able to change the future because these sports activities are able to provide a good mental health for their academic performance. In addition, eating habits such as breakfast intake as it involved the academic performance of a university student. This is because of breakfast is also crucial for students' health as well as to gain knowledge. Therefore, future researchers can apply these independent variables based on the questions that have been done by the recent study.

#### **5.4.2 Methodological Recommendation for Future Research**

The quantitative methods in this study have to be maintained in future research. The future researchers has recommended to continued the study based on all of the methods as for data collection purposes among the respondents. This is due to the number of populations that has been chosen among 811,791 university students in Malaysia. Basically, the data has been collected through online survey such as Google form. Hence, the future research would be advised to do this kind of method because the questionnaire has clearly informed in the survey based on the result of finding. In fact, the results would become more realistic and applicable to a larger population.

### 5.4.3 Practical Recommendation for Future Research

Students lifestyle always give an impact on their academic performance either its positive or negative depends on how they care on doing a physical activity, control both their eating and studying habits. The researcher suggests using the data that have been gathered to enhance university student academic performance as a practical advice. This is because the data collected has yielded results that are helpful for improving physical activity, study habits, and eating habits. For future research, it is suggested that the study be conducted over a long length of time. This research has focused on three independent variables: physical activity, study habits, and eating habits. More variables, such as sleep pattern, time management and eating pattern would be more beneficial to investigate. It would be beneficial to gather more information in order to conduct a more comprehensive study on the impact of study lifestyle and eating behaviour quality on academic achievement among university students.

In general, the researcher has found the effectiveness of this study for future research that can give an impact on the future study. For the future research on the academic performance, the researcher can make a study on academic performance based on the variable question that the previous researcher has been done. The question concerning reading proficiency in study habits is one of the top questions with the highest mean. Reading comprehension is one of the most important study skills to guarantee that students achieve well in university. Reading comprehension, verbal fluency, and general knowledge are all improved in students who read independently. They improve as readers, stronger subject knowledge than their non-reading

counterparts, and do better on achievement assessments overall and this thing will give a positive impact on the academic performance.

Another important variable that the researcher can do for future study is on the a question that has the highest mean which is on physical activity and eating habit. The question that show students involved in sport activity can affect the academic performance either they perform or not the quality of their academic performance depends on that. Student involved in any activity is important to look forward for future study because physical activity is related to the student academic performance and apart from physical health, mental health also has a strong influence on academic performance. Other than that, breakfast intake also had to be concern in the future research that related to the study involving academic performance. Breakfast intake also one of the highest means choose by respondent, this show that breakfast is important to health and it also related to the academic performance. If they know how to manage good eating habit, they will have a healthy body at the same time giving a positive impact on their academic performance.

## **5.5 SUMMARY**

Basically, the study was to find out The Impacts of Lifestyle Study and Eating Behavior Quality on Academic Performance among University Students has been tested. As mentioned by this study, all independents variable such as physical activity, study habits and eating habits was impacted to academic performance among university students. Also, the study has advocated to use (eating behavior) and the same research methodology for data collection purposes in future research.

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## APPENDIX

Listed below are a series of statements to know the demographic profile of the respondents. Please tick (✓) **ONLY ONE ANSWER** from the statement given.

*Senarai berikut adalah pernyataan berkaitan profil demografi responden. Sila tandakan (✓) **SATU JAWAPAN SAHAJA** dari setiap pernyataan yang diberikan.*

### SECTION A : DEMOGRAPHIC PROFILE

#### *SEKSYEN A; PROFIL DEMOGRAFI*

NO	STATEMENTS
1	GENDER / JANTINA <ul style="list-style-type: none"><li>● Male / Lelaki</li><li>● Female / Perempuan</li></ul>
2	YEAR / TAHUN <ul style="list-style-type: none"><li>● Year 1 / Tahun 1</li><li>● Year 4 / Tahun 4</li></ul>
3	CGPA <ul style="list-style-type: none"><li>● 2.5 and below / 2.5 dan ke bawah</li><li>● 2.5 and above / 2.5 dan ke atas</li><li>● 3.0 - 3.5</li><li>● 3.6 - 4.0</li></ul>

Please indicate your level of agreement to the respective statements by ticking (√) ONLY ONE ANSWER for each statement. *Sila nyatakan tahap persetujuan anda terhadap pernyataan masing-masing dengan menandakan (√) SATU JAWAPAN SAHAJA bagi setiap pernyataan*

<b>Strongly Disagree</b> <i>Sangat Tidak Setuju</i>	<b>Disagree</b> <i>Tidak Setuju</i>	<b>Either Agree or Disagree</b> <i>Sama ada bersetuju atau tidak bersetuju</i>	<b>Agree</b> <i>Setuju</i>	<b>Strongly Agree</b> <i>Sangat Setuju</i>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

**SECTION B; ACADEMIC PERFORMANCE**

***SECTION B; PRESTASI AKADEMIK***

NO	STATEMENTS	LEVEL OF AGREEMENT				
		1	2	3	4	5
1	Improving my grades every semester is my biggest goal in University. <i>Meningkatkan gred saya setiap semester adalah matlamat terbesar saya di Universiti.</i>					
2	I know how to manage my time to maintain good grades.					

	<p><i>Saya tahu cara menguruskan masa saya untuk mengekalkan gred yang baik.</i></p>					
3	<p>I set the deadlines for myself for completing my assignments.</p> <p><i>Saya menetapkan tarikh akhir untuk saya menyiapkan tugas saya.</i></p>					
4	<p>I believe that I can improve my academic performance if I manage my time wisely.</p> <p><i>Saya percaya bahawa saya boleh meningkatkan prestasi akademik saya jika saya menguruskan masa dengan bijak.</i></p>					
5	<p>I enjoy doing assignments and outdoor activities because they help me to improve my skills in every subject.</p> <p><i>Saya seronok membuat tugas dan aktiviti luar kerana ia membantu saya meningkatkan kemahiran saya dalam setiap mata pelajaran.</i></p>					
6	<p>I actively participate in every discussion. (group discussion, etc..)</p> <p><i>Saya mengambil bahagian secara aktif dalam setiap perbincangan (perbincangan kumpulan, dll..)</i></p>					

**SECTION C; PHYSICAL ACTIVITY**

**SECTION C; AKTIVITI FIZIKAL**

NO	STATEMENTS	LEVEL OF AGREEMENT				
		1	2	3	4	5
1	Do you regularly exercise for less than 3 days/week? <i>Adakah anda kerap bersenam kurang dari 3 hari/minggu?</i>					
2	Are you categorized in the active group in the university? <i>Adakah anda dikategorikan dalam golongan yang aktif di universiti?</i>					
3	Do you often do physical activities such as walking/ swimming/ running on a treadmill or cycling on a campus? <i>Adakah anda sering melakukan aktiviti fizikal seperti berjalan/ berenang/ berlari treadmill atau berbasikal di kampus?</i>					
4	Do you often get involved in clubs at university? <i>Adakah anda sering melibatkan diri dalam kelab di universiti?</i>					
5	Do you agree that involvement in physical activity will have a positive impact on the academic achievement of a					

	<p>university student?</p> <p><i>Adakah anda bersetuju bahawa penglibatan dalam aktiviti fizikal akan memberi kesan positif kepada pencapaian akademik seseorang pelajar universiti?</i></p>					
6	<p>Do you agree that students should get involved in games and sports activities at university?</p> <p><i>Adakah anda bersetuju bahawa pelajar perlu melibatkan diri dalam aktiviti permainan dan sukan di universiti?</i></p>					



**SECTION D; STUDY HABIT**

**SECTION D; TABIAT BELAJAR**

NO	STATEMENTS	LEVEL OF AGREEMENT				
		1	2	3	4	5
1	I read all the questions before answering the test questions. <i>Saya membaca semua soalan sebelum menjawab soalan ujian.</i>					
2	I take notes while reading the text that is related to the subject. <i>Saya mencatat nota semasa membaca teks yang berkaitan dengan subjek.</i>					
3	Do you agree that note taking techniques are important study skills? <i>Adakah anda bersetuju bahawa teknik mengambil nota adalah kemahiran belajar yang penting?</i>					
4	Do you agree that writing skills are important study skills? <i>Adakah anda bersetuju bahawa kemahiran menulis adalah kemahiran belajar yang penting?</i>					
5	I prefer to study within a week before the final exam. <i>Saya lebih suka belajar dalam masa seminggu sebelum peperiksaan akhir.</i>					
6	I prefer to study within two weeks before the final exam. <i>Saya lebih suka belajar dalam masa dua minggu sebelum peperiksaan akhir.</i>					
7	Do you agree that study skills can be improved by reading and repeating the text?					

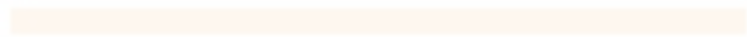
*Adakah anda bersetuju bahawa kemahiran belajar boleh  
dipertingkatkan dengan membaca dan mengulang teks?*

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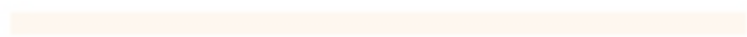
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KELANTAN

**SECTION E: EATING HABIT**

**SEKSYEN E; TABIAT PEMAKANAN**

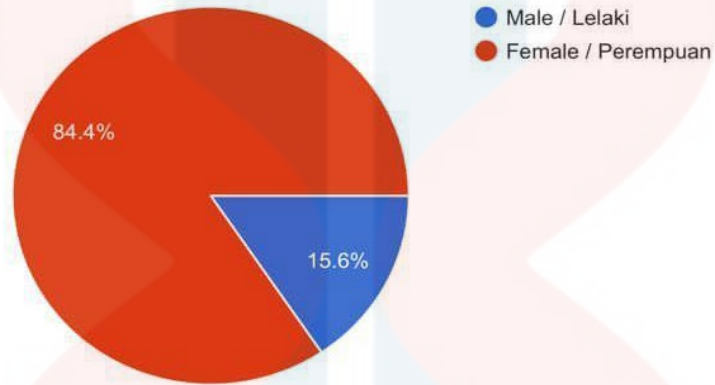
NO	STATEMENTS	LEVEL OF AGREEMENT				
		1	2	3	4	5
1	<p>Do you agree that breakfast intake is important?</p> <p><i>Adakah anda bersetuju pengambilan sarapan pagi adalah penting?</i></p>					
2	<p>Do you agree that academic performance has to do with breakfast?</p> <p><i>Adakah anda bersetuju bahawa prestasi akademik ada kaitan dengan sarapan pagi?</i></p>					
3	<p>Do you agree that breakfast leads to the quality of student education?</p> <p><i>adakah anda bersetuju bahawa sarapan pagi membawa kepada kualiti pendidikan pelajar?</i></p>					
4	<p>Do you agree that nutritional food intake will have a good effect on the student academic performance?</p> <p><i>Adakah anda bersetuju bahawa pengambilan makanan berkhasiat akan memberi kesan yang baik kepada prestasi akademik pelajar?</i></p>					
5	<p>Do you agree that students with higher grades have healthier eating habits?</p> <p><i>adakah anda bersetuju bahawa pelajar dengan gred yang lebih tinggi mempunyai tabiat pemakanan yang lebih sihat?</i></p>					

6	<p>Do you agree that students 'performance develops well if they consume good nutrition?</p> <p><i>Adakah anda bersetuju bahawa prestasi pelajar berkembang dengan baik jika mereka mengambil pemakanan yang baik?</i></p>					
7	<p>As a student, do you agree that unhealthy food will have a negative effect on the student's academic performance?</p> <p><i>Sebagai seorang pelajar, adakah anda bersetuju bahawa makanan yang tidak sihat akan memberi kesan negatif kepada prestasi akademik pelajar?</i></p>					

PART A : DEMOGRAPHIC PROFILE / PROFIL DEMOGRAFI

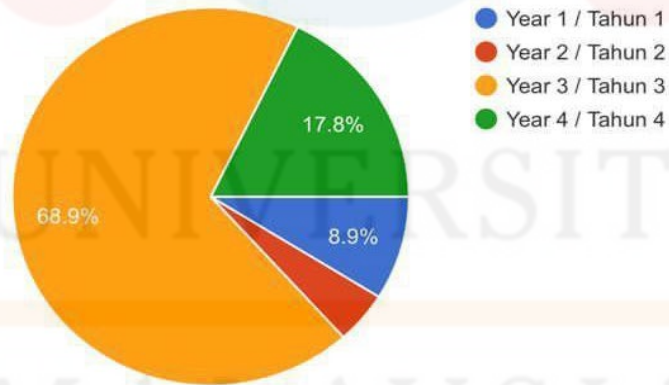
1. GENDER/ JANTINA

45 responses



2. YEAR / TAHUN

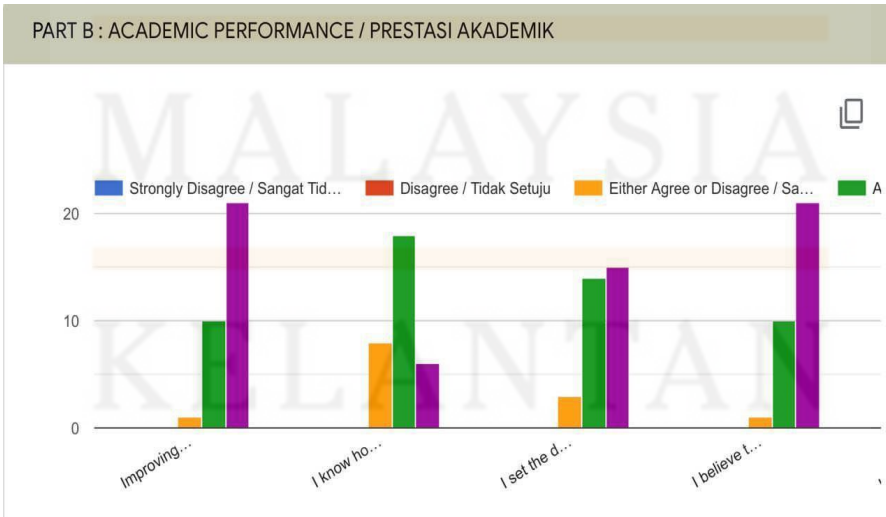
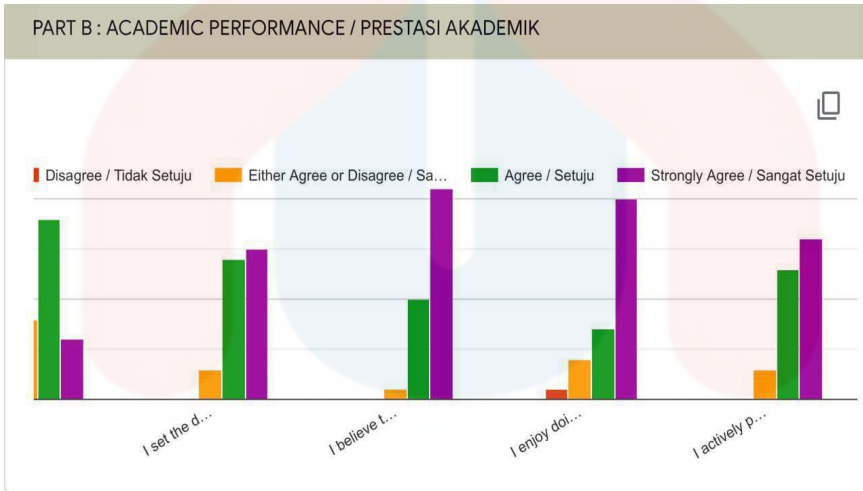
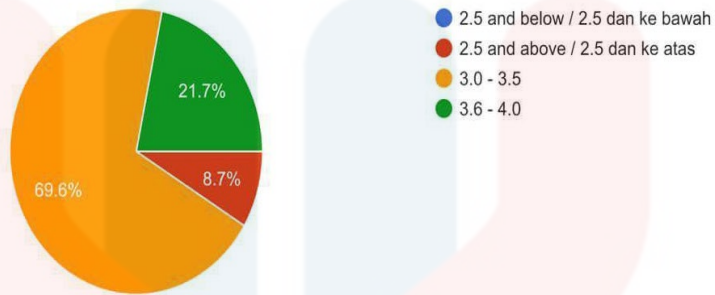
45 responses

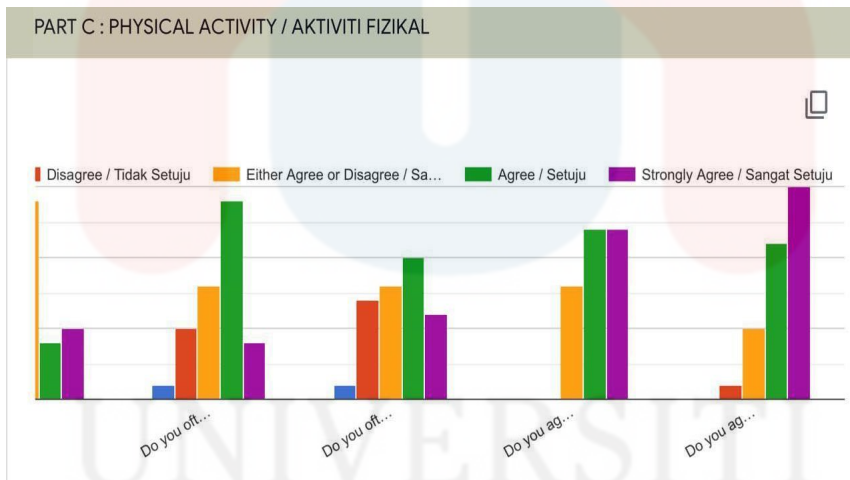
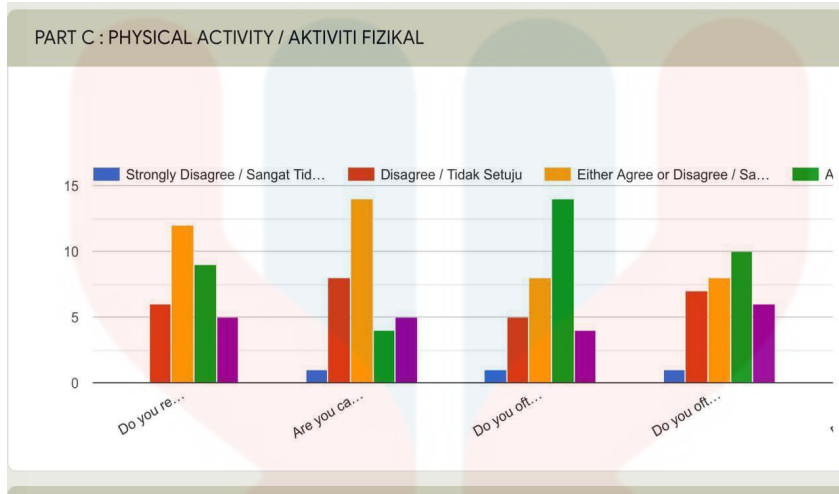


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3. CGPA

46 responses

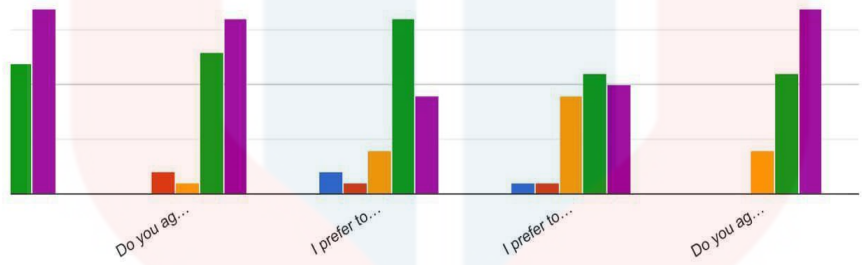




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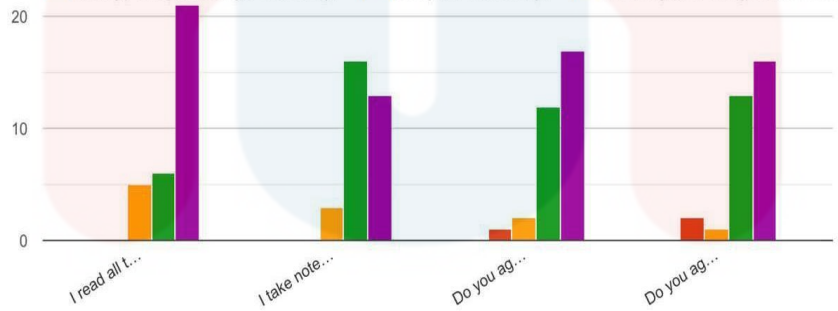
PART D : STUDY HABIT / TABIAT PELAJAR

u ■ Either Agree or Disagree / Sama ada bersetuju atau tid... ■ Agree / Setuju ■ Strongly Agree / Sangat Setuju



PART D : STUDY HABIT / TABIAT PELAJAR

■ Strongly Disagree / Sangat Tidak Setuju ■ Disagree / Tidak Setuju ■ Either Agree or Disagree / Sama ac



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