# RELATIONSHIP BETWEEN MOTIVATION, MENTAL HEALTH, LEARNING STYLE AND ACADEMIC PERFORMANCE AMONG SAK STUDENTS IN UNIVERSITI MALAYSIA KELANTAN

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2024

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by

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A thesis submitted in fulfillment of the requirements for the degree of Entrepreneurship (Commerce) With Honours

**Faculty of Entrepreneurship and Business**
**UNIVERSITI MALAYSIA KELANTAN**

2024

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## ACKNOWLEDGEMENT

We would like to express our gratitude and appreciative to our supervisor, Prof. Madya Dr. Mohd Nazri Bin Zakaria for providing us the opportunity to do this research and his obliging advice during this process. We so treasured that he was willing to give us his precious time to offer us insightful advice.

Secondly, we want to thank our parents' love, prayers, care, and sacrifices in order to provide us a good education for our future. The support and help they providing also kept us motivated and robust to complete this project.

Thirdly, we would like to thank our group for its cooperative attitude and efforts. We actively participated in the group chats using WhatsApp and face-to-face discussions gave our suggestions to make the task effective. Therefore, we are happy to accomplish the project within the allowed period. All in all, we would like to express our gratitude to everyone who contributed to this project and offered suggestions to improve it.

Next, we appreciate the respondents' cooperation and willingness to spend a few minutes to filing out our surveys. Without the cooperation of the respondents, our research conducted will not complete in the time given.

Lastly, we would like to convey our gratitude and debt to our coordinator for their unwavering understanding, support and guide throughout the project's duration.

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## ABSTRACT

This study aims to investigate the relationships between motivation, mental health, learning style, and academic performance among students of commerce program at Universiti Malaysia Kelantan. This study is driven by the need to understand the various elements that influence students' performance in higher education, particularly in the context of a competitive labor market and an information-driven economy. This study underlines the research framework based on theory of self-determination in education which consist motivation, mental health and learning style towards academic achievement. A total of 450 questionnaire were e-mail to the selected respondent using simple random sampling. The usable 300 questionnaires, which had a valid response rate of 67 percent, were analyzed using SPSS for descriptive analysis, correlation and regression analysis. The finding of this study shows that motivation, mental health and learning style have positive and significant relationship with academic performance of the students. From the regression analysis found that learning style have not influence academic performance of the study, but motivation and mental health have shown significant influenced on academic achievement of the student. Overall, this study provides a better insight and understanding of student academic performance benefiting to the university, Ministry of Higher Education, lecturer and policy maker.



***Keywords***: Academic Performance, Motivation, Mental Health, Learning Style

# CHAPTER 1: INTRODUCTION

## 1.1 Background of the study

The number of higher education institutions (HEIs), student enrollments, and possible subjects of study have all increased dramatically since the Malaysian Federation was founded in 1963. Studies show that the Malaysian higher education sector has grown significantly as a consequence of the Ministry of Education's attempts to strengthen the education sector. This conclusion is based on the significant yearly national budget that the Malaysian government allots to the education sector, which demonstrates the government's unwavering commitment to education. Malaysia had six public universities in 1985; currently, it has twenty public universities, of which five are research universities and the other fifteen are focus or comprehensive universities. (Rosmaizura,Z. & Ainon,R. , 2019)

Higher education institutions (HEIs) are important and worthwhile investments in the best-case scenario. They fulfill a variety of functions and provide benefits, including job path preparation, learning center functions, and personal development assistance. By offering flexible education options, they contribute to the development of the sector as well as the personal growth of each individual. (Rosmaizura,Z. & Ainon,R., 2019)

Variations in enrollment across public university institutions between 2018 and 2022 are depicted in Table 1.1. There were precisely 552,702 in 2018; 567,625 in 2019; 584,576 in 2020; 589,879 in 2021; and 595,624 in 2022. The gradual growth in student numbers indicates a pattern over the selected years.

Table 1.2 reveals the irregular trends in public university admissions between 2018 and 2022. Remarkably, there was a notable increase in enrollment of 182,722 students in 2018 compared to a slight decrease of 182,536 in 2019. 2020 marked a decrease in admissions, with 177,710 students admitted. Despite this decline, enrollment in public institutions increased in 2021 when 181,901 new students enrolled. The tendency continued to rise in 2022, when 188,969 students were enrolled.

Table 1.1: Student enrollment in public university in Malaysia, 2018-2022

| **Institution** | **2018** | **2019** | **2020** | **2021** | **2022** |
|---|---|---|---|---|---|
| **Public university** | 552,702 | 567,625 | 584,576 | 589,879 | 595,624 |

Source: Ministry of Higher Education

Table 1.2: Student intake in public university in Malaysia, 2018-2022

| **Institution** | **2018** | **2019** | **2020** | **2021** | **2022** |
|---|---|---|---|---|---|
| **Public university** | 182,722 | 182,536 | 177,710 | 181,901 | 188,969 |

Source: Ministry of Higher Education

Students' decisions to continue their studies are a complicated, broad process that is impacted by a wide range of factors. Undervalues education as a human capital investment, establishing a connection between learning, higher production, and higher earning potential (Becker, G. S., 1964). This narrative is expanded by Oreopoulos and Salvanes in "Priceless: The Nonpecuniary Benefits of Schooling," where they highlight the priceless non-monetary

advantages of education in addition to its financial advantages, such as better health and a higher quality of life.

Student performance is a broad term that includes improvement on all fronts during the educational process, as well as skill development and academic accomplishments. Grades, results on standardized tests, and qualitative metrics like critical thinking and problem-solving skills are frequently used to evaluate it. In Malaysia, where the job market is very competitive, employability is important. Academic achievements are considered markers of discipline, dedication, and learning capability. According to a study by Abdullah et al. (2020), labor market trends emphasize how the labor market is changing and how employers are looking for people with both academic credentials and real-world experience, underscoring the importance of holistic student success. The study indicates that future workers in Malaysia's information-based economy would gain a great deal from the knowledge and skills that flexible and high-achieving students learn throughout their university careers.

The learning environment—which is impacted by things like school facilities, class size, and teacher-student interactions—plays a crucial part in creating environments that are favorable to learning. Student performance is greatly influenced by motivation and engagement, with intrinsic motivation being a key factor. Although external incentives like grades and awards also play a role, their effectiveness tends to diminish over time (Closs et al., 2021).

## 1.2 Problem Statement

Students today face a wide range of challenges in higher education that can have a big influence on their academic achievement. The goal of this study is to understand the interactions between learning styles, mental health, and motivation towards students' academic performance.

Educational research has placed a lot of emphasis on the role that motivation plays in academic performance. Many studies have examined the effects of both external and internal motivation on students' engagement and perseverance in learning (Deci & Ryan, 1985; Pintrich & Schunk, 2002). However, a thorough knowledge of how various motivational elements, such as goal orientation and self-efficacy, interact with other psychological and cognitive variables to impact academic success is needed.

Diverse cultural perspectives play a crucial role in shaping the definitions and conceptualizations of mental health within various societies and communities. (Katherine, 2000) highlights the variability in views regarding the nature and causal factors of mental health problems, influencing the criteria for defining mental well-being and determining appropriate counseling and intervention strategies. In the realm of higher education, college students grapple with developmental challenges, with some facing more intricate and enduring issues.

Mood disturbances, destructive behaviors, interpersonal problems, and disruptions to self-concept are prevalent concerns among university students, as noted by (Grayson, 1989). The academic journey is often fraught with stress, anxiety, symptoms of depression, and eating disorders, contributing to a significant negative impact on both academic performance and mental health, as outlined by studies conducted by (Cooley, Toray, Valdez, and Tee, 2007), along with (Tosevski, Milovancevic, and Gajic, 2010).

Different learning styles have been acknowledged as essential elements of the educational process (Kolb, 1984). The variety of ways that students choose to take in and process knowledge is highlighted in this body of work. In order to maximize teaching tactics, it is essential to comprehend how learning styles align with or diverge from instructional approaches.

Student academic achievement is the main subject of this study. The assessment of academic achievement will be conducted using objective measurements, including course completion rates, test scores, and GPA. The goal of this study is to shed light on the complex relationships that exist between learning styles, mental health, and motivation in order to better understand the elements that affect students' academic success in higher education。

For higher education institutions to create successful interventions and support systems, it is crucial to comprehend how learning styles, motivation, and mental health all affect academic performance. The development of focused initiatives to improve student progress, well-being, and overall educational experience may be accomplished by educators, counselors, and governments by recognizing the complex links that exist between these factors.

### 1.3 Research Questions

The following research questions are developed based on the objectives:

RQ1: What is the relationship between motivation and academic performance among SAK students in Universiti Malaysia Kelantan?

RQ2: What is the relationship between mental health and academic performance among SAK students in Universiti Malaysia Kelantan?

RQ3: What is the relationship between learning style and academic performance among SAK students in Universiti Malaysia Kelantan?

## 1.4 Research Objectives

The research objective is to examine the relationship between motivation, mental health, learning style and academic performance among SAK students in Universiti Malaysia Kelantan. Hence, the objectives of this study follow:

RO1: To examine the relationship between motivation and academic performance among SAK students in Universiti Malaysia Kelantan.

RO2: To examine the relationship between mental health and academic performance among SAK students in Universiti Malaysia Kelantan.

RO3: To examine the relationship between learning style and academic performance among SAK students in Universiti Malaysia Kelantan.

## 1.5 Scope of the Study

The scope of the study examined the relationship between motivation, mental health, learning style and academic performance among SAK students in Universiti Malaysia Kelantan. This study will use questionnaires as a research medium to collect data from the respondents so as to fulfill the research objectives. The research will focus on second to fourth year SAK students enrolled in Universiti Malaysia Kelantan. The researchers decided to focus on second- to fourth-year SAK students because they possessed the GPA to earn a grade point average over the course of a semester. In addition, the scope of this study also will be measured according to dependent variables and three independent variables.

## 1.6 Significance of Study

Through this research, the students will realize the importance of mental health, learning styles, and motivation on their academic performance among SAK students in UMK. Students will be able to identify what causes their academic performance to be affected. This study wants to identify the factors that make students' academics affected among university students.

There are many factors that cause this to happen. Most of the students are still academically affected and need to repeat the paper to pass. These three issues play a role in giving a big impact on the academic performance of students. With this research, the students can identify their problems and make improvements in controlling, maintaining and also organizing how to maintain academic performance without involving physical or mental disorders.

As a result, the study will be encouraged to promote the best way to provide the best solution for students in maintaining their academics. Furthermore, detailed research on the comparison of the academic performance involved in this research may serve as a tool for further studies to innovate the current method studying among SAK students.

## 1.7 Definition of Term

Describe the definition of the main keywords used in his study. Each keyword used in this study research project is described in the definitions. The dependent variables of the research are “academic performance” while the independent variables are “motivation”, “mental health” and “learning styles”.

### 1.7.1 Academic Performances

Academic performance is defined as a student's ability to complete academic assignments, and it is assessed using objective criteria such as final course grades and grading point average (Carroll and Garavalia,2004; Naser, & Hamzah, 2018; Olivier et al., 2019). Through Alsheikh (2019) & Mishra (2019), education is seen as extremely important for an individual because it is required for obtaining good jobs, achievement, and prospects for better living. However, that academic performance is understood as a component of academic success that seeks to evaluate the achievement of learning objectives and development of skills and abilities (York et al., 2015). Different education systems around the world adopts traditional metrics to monitor the development of students through the average scores, individual grades in modules/disciplines or tests, reach a new academic level or completion of the course, in addition to academic failure (Mthimunye and Daniels, 2019; Silva and Gomes, 2021).

### 1.7.2 Motivation

Motivation is a complex psychological concept, and there are various definitions of motivation by different authors and scholars in the fields of psychology, sociology, and management. According to Whiseand and Rush, (1988) explained motivation as the willingness of an individual to do something and conditioned by actions to satisfy needs. Following the recent definition contributed by (Fuller et.al., 2008), motivation is a person’s intensity, direction and persistence of efforts to attain a specific objective. From the statement provided, intensity as further elaborated is how hard an individual tries to attain the specific objective while direction is the channel to intensity towards the correct objective, whereas persistence refers to how long someone maintains an effort to attain the specific objective. Through (Saraswathi, 2011) states

that motivation as the willingness to exert high levels of effort, toward organizational goals, conditioned by the effort's ability to satisfy some individual need.

### 1.7.3 Mental Health

Mental health refers to a person's emotional, psychological, and social well-being. It encompasses the individual's emotional and cognitive functioning, as well as their capacity to handle stress, relate to others, and make choices. Mental health is an integral part of overall health, and it is essential for leading a fulfilling and productive life. According to (World Health Organization, 2001) mental health is broadly described as a state of well-being where an individual recognizes their capabilities to cope with normal stresses of life, work effectively and contribute to the society. It is a significant issue for employees, workplaces, and societies and the fifth most significant cause of disability in the Organization for Economic Cooperation and Development (OECD) countries (Cottini & Lucifora, 2013). However, mental health also can be defined as a "state of mind characterized by emotional well-being, good behavioral adjustment, relative freedom from anxiety and disabling symptoms, and a capacity to establish constructive relationships and cope with the ordinary demands and stresses of life" (Association, 2023)

### 1.7.4 Learning Style

Learning styles refer to the various ways in which individuals tend to acquire, process, and retain information. These styles are essentially a person's preferred or dominant method of learning and can encompass a combination of sensory modalities, cognitive strategies, and social interaction preferences. The information gathering, processing and thinking methods employed when learning, which can be termed learning styles (Chenet al., 2018; Deng et al., 2022; Duff,

2004; Tsingos et al., 2015), influences whether students employ a deep learning approach, their development of decision-making skills and possibly their academic success (Çolak, 2015). Honn and Ugrin (2012). According to (Vincent & Ross, 2001), learning style is identified by using the questionnaires and the scoring material given by these eminent psychologists. Learners fill the questionnaires, and they are marked. These later evolved into online questionnaires being marked automatically by computer programs.

### 1.8 Organization of the Proposal

The research project is divided into six chapters. The first chapter is for the introduction of research. The first chapter contains several parts: an introduction, the background of the study, the problem statement, the research question, the research objectives, the scope of the study, the significance of the study, the definition of the term, and the organization of the proposal.

Followed by, in the second chapter discusses the literature review that is related to the study. This chapter not only focuses on the literature review but also contains an introduction, underpinning theory, previous studies, hypotheses statement, conceptual framework, and framework.

Next, the third chapter touches on the research methods, which are divided into a few parts. This chapter contains an introduction, research design, data collection methods, study population, sample size, sampling techniques, research instrument development, measurement of the variables, the procedure for data analysis, and a summary.

# CHAPTER 2: LITERATURE REVIEW

## 2.0 Introduction

Chapter 2 commences with an exploration of the correlation between independent variables (IV) and dependent variables (DV), which is followed by an examination of the impact of motivation, mental health, and learning style on academic performance among SAK students at University Malaysia Kelantan. Within this chapter, there is also an analysis of the connection between dependent variables (DV) and independent variables (IV), accompanied by an investigation into the interplay among academic performance among SAK students in University Malaysia Kelantan and the variables of motivation, mental health, and learning style.

## 2.1 Academic performance

Academic performance can be defined as the extent to which an institution, a teacher, or a student achieves long- or short-term educational goals and the academic achievement of performance is usually measured by continuous assessments and overall cumulative grade point average (CGPA) achieved by the student (Hellas et al., 2018). Researchers have indicated that students with good academic records and achievements usually have better employment opportunities, higher income, more professional development and advancement opportunities, and better employment benefits (Tentama & Abdillah, 2019). One of the most important variables in determining school outcomes is academic achievement.

By making a commitment in their academic performance, students can acquire the abilities needed to excel both within and outside of the classroom. It may provide you the knowledge and skills that need to lead a successful life, open doors to education and employment, and enable you

to pursue a career in an area that is constantly changing. As the academic performance is a global issue, this study focuses on collecting data from a wide variety of research collected beyond to examine the most prominent factors that lead to the academic performance at the undergraduate level. This will be a valuable contribution to the relationships of academic performance among students as it will collect the data to compare, and contrast various types of factors that have occurred this academic performance in SAK courses at University of Malaysia, Kelantan. Furthermore, this study also has focused on year 2 to year 4 students as the higher education sector has a higher academic failure and dropout than education. Students' higher education is also vital for ensuring a sustainable professional future.

## 2.2 Motivation

Originating from the Latin verb "movere," which means "to move," the word "motivation" poses basic queries regarding what drives people to choose particular actions, take initiative, put up effort, and persevere in their pursuits. These questions are at the center of motivation theory and research, provoking a great deal of academic discussion and producing a wide range of theoretical models that take into account different factors and perspectives on motivation. Despite their apparent simplicity, these concerns have escaped obvious and plain answers for decades. (Dörnyei et al., 2021)

Personal qualities such as confidence, goal-setting skills, and efficient time management are essential in determining an individual's motivation. Students who set realistic objectives, believe in their abilities, and effectively manage their time are more motivated, which helps them succeed academically. Academic achievement and motivation are linked in an ongoing cycle. High academic achievement often boosts motivation and creates a positive feedback loop that is

advantageous. On the other hand, a drop in performance may lead to a reduction in motivation, creating a difficult cycle that students must actively break.

### 2.3 Mental health

In its 2008 study, the Mental Health Foundation highlights how an individual's thoughts and emotions about themselves and their life have a significant impact on their mental health and their capacity to overcome hardship. One's ability to perform at their best, grasp opportunities, and engage in family, job, community, and peer relationships is all part of this interconnection. There is no denying the direct and indirect effects that both mental and physical health have on one another.

There are progressively difficult academic requirements in Years 2 through 4 of the SAK programme. Stress levels rise when students advance in their studies because of increased workloads, expectations, and competition. Students' general well-being has been impacted by the connection between academic stress and mental health conditions, including anxiety and depression. It is critical that the institution maintains its commitment to provide strong support services and encourages a holistic approach to education as these students negotiate the difficulties of tertiary education. Through the provision of academic and mental health support, UMK can enhance the general academic performance and overall well-being of its SAK programme participants.

### 2.4 Learning style

Learning styles, according to Brown (2000), include the many ways people take in and process information throughout educational activities. According to Brown, the inclination

towards a specific learning style is evidence of a person's selection of one learning environment or circumstance over another. The way that people assimilate, arrange, and interpret the information they are given is indicative of their ownership of their learning methods. Understanding this innate relationship makes cognitive functions easier. Students' learning methods might be simple or inconsistent, which can lead to learning process failure. In order to guarantee effective educational outcomes, instructors must recognise and accommodate each learner's individual learning style.

Acknowledging and meeting the needs of a variety of learning styles will help create a more welcoming and productive learning environment, which will eventually improve students' academic performance in their pursuit of practical knowledge. To guarantee the success of Year 2 to Year 4 of SAK students in UMK moving forward and to continuously improve teaching strategies, further research and continuous assessment are necessary.

**2.5 Underpinning Theory of Self Determination in Education.**

Before getting into details of the underpinning theory for this research study, the term self-determination needs to be defined. SDT is a motivation theory that highlights the importance of three basic psychological needs including competence, autonomy, and relatedness (Adams, Little, & Ryan, 2017, pp. 47–54). Teaching strategies like the flipped classroom style can help meet these demands. SDT is a theoretical framework that may be utilized to look at how the flipped classroom paradigm affects students' motivation and ability to study. In other words, the flipped classroom paradigm may foster a sense of competence, independence, and community among students and instructors (Sergis, Sampson, & Pelliccione, 2018).

In this research project, Self Determination theory (SDT) is the underpinning theory that's adopted for conducting and completing the research study. In fact, Self Determination theory (SDT) is more focused on educational needs that stimulates a critical and refreshing perspective on some of the educational policies and regularly applied practices in education. In order for schools to be environments where all parties can develop intrinsic or fully internationalized extrinsic motivation, the principles of Self Determination theory are applied to education with a focus on how principals and teachers can facilitate the satisfaction of the basic psychological needs of teachers and learners, respectively (Ryan & Deci, 2017, p. 380-381). Self Determination theory also can be defined as the metatheory of human motivation and personality development. It is thought of as a metatheory in the sense that it is made up of several "mini-theories" which fuse together to offer a comprehensive understanding of human motivation and functioning. The fundamental humanistic concept of self-determination theory is that people naturally and consciously gravitate towards development and self-organization (SDT; Ryan & Deci 2000).

Thus, Self Determination theory is used in this research study because the current research used Self-Determination Theory to consider the potential associations between basic psychological needs (competence, relatedness, and autonomy), self-determined autonomous motivation, and the perceived benefits to well-being controlling for demographic variables and the musical activity parameters. Importantly, the analyses also revealed that the basic needs of competence and relatedness were related to overall perceived well-being as well as specifically social, cognitive, and esteem dimensions of well-being.

Autonomous motivation demonstrated significant associations with both an overall well-being score as well as four of five specific well-being subscales measured. Collectively, the findings indicate that Self-Determination Theory offers a useful theoretical framework to

understanding the relationship between musical participation and well-being. Self-determination is important for empowering students to control their own lives because it allows them to make appropriate decisions or choices offered throughout life. These supports increasingly enable persons with disabilities to go to school, live independently, find recreation and leisure, and work.

In conclusion, this research study focuses on Self Determination for entrepreneurship among students in Universiti Malaysia Kelantan (UMK) to pursue things that are intrinsically motivated and aligned with student goals, and more capable of making good choices about the relationships between motivation, mental health and learning styles among students.

## 2.6 Hypothesis development

A hypothesis is a theoretical connection between two or more factors that drives the activity of research to investigate it (Sekaran, U., & Bougie, R., 2016, p. 83). This relationship may either be positive or negative. A testable theory that is assumed to exist is an example of what is known as a hypothesis. It may be a false or a fundamental assertion that is checked in the analysis to test its validity. The research aims to examine the relationship between the motivation, mental health, learning style, and academic performance among SAK students in Universiti Malaysia Kelantan. Students need motivation to help them stay focused on their goals in order to achieve them (Mohamad & Jais, 2016). Based on this study, hypotheses were developed and will be tested:

### 2.6.1 The relationship between motivation and academic performance

Fortier et al. 's (1995, as referenced in Sivriyaka, 2019) research revealed no correlation between students' motivation and academic achievement. Another researcher that supports it is

Pintrich (2003, as referenced in Sivrikaya, 2019), who said that motivation plays a major role in determining a person's success in the educational process.

H1: There is significant relationship between motivation and academic performance among SAK students in Universiti Malaysia Kelantan.

### 2.6.2 The relationship between mental health and academic performance

According to Sha`iri (2004), there is a strong correlation between academic achievement and mental health. Asgari (2008) came to the conclusion in his research that there is no significant relationship between students' academic success and mental health, regardless of gender.

H2: There is a significant relationship between mental health and academic performance among SAK students in Universiti Malaysia Kelantan.

### 2.6.3 The relationship between learning style and academic performance

In a study involving a survey of students' learning preferences and their academic achievement, Valenta et al. concluded that learning preferences can have a positive impact on students' academic success. According to the findings of Jegede et al.'s study, learning styles have an impact on academic achievement and were carried out on university students at Hong Kong University.

H3: There is a significant relationship between learning style and academic performance among SAK students in Universiti Malaysia Kelantan.

## 2.7 Previous Studies

In this specific case, the researcher discovers some earlier studies that are applicable to the study that is currently being completed. They are in journal and thesis format. These studies indicate that this type of research has been conducted.

Based on a previous study by Liu Cheng and all (2022), "Self-Determination Theory in Education: The Relationship between Motivation and Academic Performance of Primary School, High School, and College Students. it appears that students are becoming unable to exhibit intrinsic motivation. According to Liu Cheng, students are increasingly unable to show enthusiasm in learning and motivation to learn. This causes students to put less effort in understanding the learning taught by the teacher and think that learning is something that is not important nowadays. In this study, it shows that male students are more interested in learning than female students. This research indicates that achievement motivation is linked to academic success, suggesting youngsters with stronger motivation do better academically.

Research finding of Yazici Kubikay, (2017), "The Relationship between Learning Style, Test Anxiety and Academic Achievement". Kubikay as researcher of this research concluded that, the relationship between test anxiety, academic achievement, and learning style of social study prospective educators (SSPTs). Researchers in the field of education have looked into the effects of a variety of individual and environmental factors on student success, such as peers, class size, and teacher behavior. Other factors that have been examined include the student's age, attention span, motivation, past experiences, socioeconomic status, and teacher behaviors.

Based on research by Mumtaz Begam (2013), "The Relationship between Students' Learning Style and Academic Performance in Mara Professional College, Malaysia. Mumtaz concluded this study by stating that environmental influences have little bearing on academic

success. However, research has indicated that the learning environment has an impact on cognitive abilities and how the brain works.

Siti Aishah Hanawi (2022) concluded that Students' learning styles can be driven by their culture, gender, age, and academic achievement. It is clear that achieving remarkable exam results depends greatly on students' learning preferences. The impact of education adapting teaching styles has been emphasized by the study's findings. Professors in current times have to change their teaching methods to fit the needs of the students and the course. Teachers can't keep teaching the way they always have—by giving lectures and using tests as the exclusive means of student evaluation.

Based on previous studies El-sabagh, (2021) "Adaptive e-learning environment based on learning styles and its impact on development students' engagement. In this case, this study suggested that A higher level of choice and engagement in motivation styles were associated with high levels of perceived social support, regardless of the effect these styles have on academic attainment. On the other hand, low levels of autonomy and integration have been related to low levels of perceived social support, high levels of academic stress, and poor mental health.

It is clear from the previously mentioned five previous studies that the research was successful. In order to determine what factors may influence students' academic achievement, the researcher conducts and applied research in the same approach as earlier researchers.

## 2.8 Conceptual Framework

Based on the research objectives, literature was selected to create a framework for addressing the research questions. A research model was constructed to illustrate exactly what associations should be assessed and how they should be assessed. The model includes variables extracted from the literature that are relevant to the study. Each variable demonstrates the relationship between the other variables. The following conceptual framework is based on previous studies reported in the literature review on the relationship between motivation, mental health, learning styles and academic performance among SAK students in Universiti Malaysia Kelantan. The objective of the conceptual model was to study the academic performance of SAK students. The model examined the link between the independent and dependent variables. The independent variables include: motivation, mental health and learning styles.

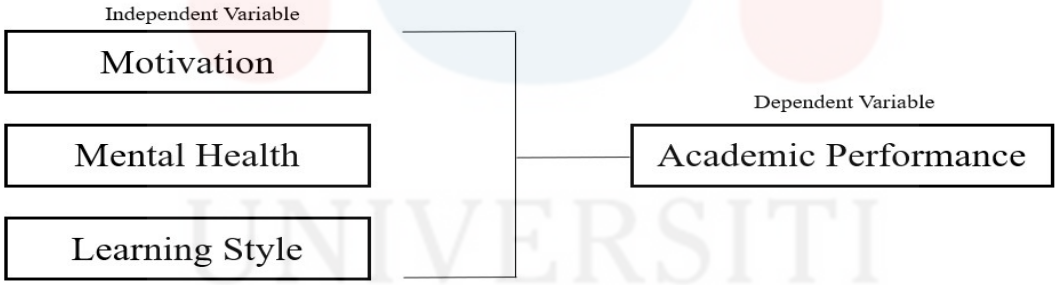


Figure 2.1: The Conceptual Framework of This Research

## 2.9 Conclusions

Essentially, a variable is a specified characteristic or function used in a particular manner. Variables serve roles in calculations, monitoring, or manipulation within an inquiry. In this study, the researchers designated academic performance as the dependent variable. Motivation, mental health, and learning style constitute the independent variables for the researcher. By establishing these variables, the researchers anticipate an impact on academic performance among SAK students in University Malaysia Kelantan. The connection between each independent variable and dependent variable, along with the conceptual framework and hypothesis, remains crucial. Thus, the researchers narrowed the scope of their investigation to enhance the research outcome. A unique methodology is applied to quantify the acquired data.

# CHAPTER 3: RESEARCH METHODOLOGY

## 3.0 Introduction

This chapter discusses the methods used in this investigation. There are many components of research design, sample design, data collection techniques, measurement tools, research equipment, and data analysis will all be covered in this chapter.

## 3.1 Research Design

The selected philosophy of science informs decisions regarding the best research methodologies. According to Saunders et al. (2009), it describes how theory is used in research and can take one of two forms: deductive or inductive. In terms of this study, deductive research was used. It serves to clarify the cause-and-effect relationship between particular factors. As a result, using this approach is consistent with the researcher's goal.

The statistical package for social sciences (SPSS) will be used to examine the data in this study, and it will be an essential analytical tool. The study's technique will mostly include descriptive research, using descriptive statistics—specifically, frequency—to show the respondents' sociodemographic traits and calculate average scores for the important variables under research.

Bivariate analysis has been implemented to explore the link and assess the strength of the correlation between motivation, mental health, learning style, and academic success. In particular, because it may be used in situations where the data is regularly distributed, the Pearson correlation was selected as the analytical technique. The analytical approach used in this study included both Pearson Correlation Analysis and Descriptive Analysis as essential elements. The most recent

version of the Statistical Package for Social Sciences (SPSS) used to handle the findings from these studies.

### 3.2 Population & Sampling

#### 3.2.1 Study Population

According to Sekaran and Bougie (2016), the population is the total number of individuals or items that the researcher gathers in order to obtain the necessary data. The SAK students are the study's target population. The second- to fourth-year SAK students from Universiti Malaysia Kelantan made up the research population. It is predicted by the researchers that 582 students from the Faculty of Entrepreneurship and Business are SAK students from second to fourth year. The total number of elements in the population, represented by the letter "N", is the population size. Approximately 582 students are SAK students enrolled in their second through fourth year.

| YEAR | MALE | FEMALE |
|---|---|---|
| Y2 | 46 | 134 |
| Y3 | 49 | 137 |
| Y4 | 56 | 160 |
| **TOTAL** | 151 | 431 |
| | **582** | |

Source: FKP of Universiti Malaysia Kelantan (2023)

### 3.2.2 Sample Size

Sample size can be defined as the subset of a population required to ensure that there is a sufficient amount of information to draw conclusions (Sekaran & Bougie, 2010). Kumar et al. (2013) also described sample size as the number of respondents or observations to be included in a study. This study uses the Krejcie and Morgan table to calculate the sample size from the given population. For this research, the sample of the study on relationship between academic performances and motivation, mental health, learning styles among SAK students at UMK. The sample size for this study was taken between year 2 to year 4 students from SAK courses which is the number of respondents is 234. Considering the return rate probably low of the questionnaire, the sample size of this study will be increased to 300 respondents.

| *N* | *S* | *N* | *S* | *N* | *S* |
|---|---|---|---|---|---|
| 10 | 10 | 220 | 140 | 1200 | 291 |
| 15 | 14 | 230 | 144 | 1300 | 297 |
| 20 | 19 | 240 | 148 | 1400 | 302 |
| 25 | 24 | 250 | 152 | 1500 | 306 |
| 30 | 28 | 260 | 155 | 1600 | 310 |
| 35 | 32 | 270 | 159 | 1700 | 313 |
| 40 | 36 | 280 | 162 | 1800 | 317 |
| 45 | 40 | 290 | 165 | 1900 | 320 |
| 50 | 44 | 300 | 169 | 2000 | 322 |
| 55 | 48 | 320 | 175 | 2200 | 327 |
| 60 | 52 | 340 | 181 | 2400 | 331 |
| 65 | 56 | 360 | 186 | 2600 | 335 |
| 70 | 59 | 380 | 191 | 2800 | 338 |
| 75 | 63 | 400 | 196 | 3000 | 341 |
| 80 | 66 | 420 | 201 | 3500 | 346 |
| 85 | 70 | 440 | 205 | 4000 | 351 |
| 90 | 73 | 460 | 210 | 4500 | 354 |
| 95 | 76 | 480 | 214 | 5000 | 357 |
| 100 | 80 | 500 | 217 | 6000 | 361 |
| 110 | 86 | 550 | 226 | 7000 | 364 |
| 120 | 92 | 600 | 234 | 8000 | 367 |
| 130 | 97 | 650 | 242 | 9000 | 368 |
| 140 | 103 | 700 | 248 | 10000 | 370 |
| 150 | 108 | 750 | 254 | 15000 | 375 |
| 160 | 113 | 800 | 260 | 20000 | 377 |
| 170 | 118 | 850 | 265 | 30000 | 379 |
| 180 | 123 | 900 | 269 | 40000 | 380 |
| 190 | 127 | 950 | 274 | 50000 | 381 |
| 200 | 132 | 1000 | 278 | 75000 | 382 |
| 210 | 136 | 1100 | 285 | 1000000 | 384 |

Note.—*N* is population size. *S* is sample size.
Source: Krejcie & Morgan, 1970

Table 3.1: Krejcie & Morgan Table

### 3.2.3 Sampling Techniques

The sampling technique involves many probability sampling methods, such as basic random, systematic, stratified, and cluster sampling, each of which has multiple sub-methods that may help studies in choosing data to the accurate respondents. We apply random sampling in this research. Random sampling is a subset of the population selected at random consisting of a simple random sample. Each participant of the population has an exact equal probability of getting selected using this sampling technique. In this study, the population of respondents among UMK students in Campus Kota is also determined by basic random sampling. There are 300 responders that must be included in the sample size for this study's population. Therefore, to sample this large number of responders, a simple random sampling procedure was used.

## 3.3 Data Collection Methods

### 3.3.1 Source of Data

Primary and secondary sources will both provide data for this study. Primary data collection includes the use of techniques like focus groups and social media monitoring. Conversely, secondary data will be acquired from a range of sources, such as government publications, trade journals, and websites (Alison, 2016). Using these recognized data gathering methods accelerates the study process, assuring a timely and effective finish. This thorough technique of obtaining primary and secondary data serves as the study's foundation.

### 3.3.2 Pilot Test

As recommended by Tracy et al. (2017), the questionnaires underwent a pilot-tested data collection process. The purpose of the pre-testing was to refine the questionnaire, ensuring that respondents encounter no difficulties when answering questions and facilitating smooth data recording for researchers. Google Forms will be utilized to distribute questionnaires to second to fourth-year except SAK students at Universiti Malaysia Kelantan in this study. The pilot test is expected to span a week to gather comprehensive reviews and details. The pilot test expected 30 students to fill out the questionnaire. The insights and feedback obtained from the pilot test will enable researchers to conduct a large-scale analysis and study with confidence following the initial testing phase.

### 3.3.3 Reliability and Validity Test

Within the field of research, the evaluation of validity and reliability is a critical component of research quality. The validity and reliability indices provide light on how well tests, procedures, and methods work to evaluate different elements (Price et al., 2015). This emphasizes how reliable the measures used in the study are. On the other hand, validity concerns how well the measuring technique captures the target of the measurement (Middleton, 2019). A high degree of validity in research indicates that the findings are consistent with the genuine nature, traits, and variances in the social or physical area.

To gauge reliability, researchers often employ methodologies such as test-retest, internal consistency reliability, split-half reliability, and inter-rater reliability. In the current study, internal consistency reliability is the chosen method. The coefficient value of Cronbach's alpha and internal consistency measurement are as follows:

| Alpha Coefficient Range | Internal consistency |
|---|---|
| a≥0.9 | Excellent |
| 0.9>a≥0.8 | Good |
| 0.8>a≥0.7 | Acceptable |
| 0.7>a≥0.6 | Questionable |
| 0.6>a≥0.5 | Poor |
| 0.5>a | Unacceptable |

Table 3.2: Cronbach's alpha Coefficient Value

### 3.4 Research Instrument Development

The quantitative research method was used to create the questionnaires for the purposes of this research. According to Aliaga & Gunderson (2002), quantitative research methods involve the collecting of numerical data and mathematical analysis to explain a particular topic or event. Quantitative research comes in four types: survey, experimental, correlational, and comparative. In (2007), Sukamolson, S. This proposal uses a survey as its methodology. It involves employing scientific sampling techniques and prepared questionnaires with statistical methodologies to gather data from respondents.

Four sections of a survey will be created by the student in order to collect sufficient and relevant data. Part one is the demographic section. Respondents are questioned personally. which include things like age, gender, year of study, and education level. In contrast, sections 2, 3 and 4 pose a question regarding the relationship between learning styles, mental health, and motivation and how these factors affect students' academic performance. The main reason that is related to the academic performance of UMK students at Campus Kota is depicted in these 4

sections. Students can conclude from the outcomes of these sections that were the main factor influencing UMK students' academic performance.

### 3.4.1 Likert-Scales

Likert scales are a type of rating scale used to assess a given statement. Every item on the scale received a value of 1 based on the verbal expression "strongly disagree," while a grade of 5 was given to "strongly agree." Five points on a Likert scale—strongly disagree, disagree, neutral, agree, and strongly agree—were chosen to be used for this investigation.

| **Characteristics** | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| **Number** | 1 | 2 | 3 | 4 | 5 |

Table 3.3: The table of 5-point Likert Scale

### 3.4.2 Questionnaire Design

Part A (demographics), Part B (dependent variable: academic performance), Part C (independent variable: motivation), Part D (independent variable: mental health), and Part E (independent variable: learning style) comprise the five sections of the questionnaire utilized in this study. This study will give a succinct explanation of the research's goal. Table 3.4 presents an overview of the design of the questionnaire.

| **Part** | **Variable/Source** | **Items** |
|---|---|---|
| **A** | **Demographics** | 1. Gender |

| | | |
|---|---|---|
| | | 2. Age<br>3. Race<br>4. Year of Study<br>5. Level of Education before Undergraduate Degree<br>6. CGPA Level |
| **B** | **Academic Performance**<br>• Osharive, Peter. (2015) | 1. The facilities provided by the faculty help you carry out assignments smoothly.<br>2. Collaborative learning can strengthen your intellectual judgment.<br>3. Learning in an active form should always be given to me compared to learning in a passive form.<br>4. My lecturers guide me in setting personal targets and developing strategies to achieve that target. |
| **C** | **Motivation**<br>• Gilou Nino M. De Baguio<br>• John Carlo M. Dela Cruz<br>• Lailyn Q. Dumili | 1. My academic interests are not influenced by anyone but myself.<br>2. No matter how much I like or dislike a class, I still try to learn from it.<br>3. I ask questions because I want my teacher to notice me. |

| | | |
|---|---|---|
| | • Rose Anne L. Malagasa (2018) | 4. I like to stick to the assignments which are pretty easy to do.<br>5. I do my task because I'm supposed to. |
| **D** | **Mental Health**<br>• Williams et al. (2017) | 1. Obstacles to your personal growth may include significant choices regarding your education and prospective career, discontent with your writing or mathematical skills, and difficulties in meeting academic expectations, whether set by yourself or others.<br>2. Pressures related to time, such as managing multiple tasks simultaneously, disruptions to your academic work, and handling numerous responsibilities.<br>3. Academic dissatisfaction includes things like not enjoying your studies, finding courses uninteresting, or feeling unhappy about university.<br>4. There is an individual or individuals in my life who would offer practical assistance to me in times of need, such as providing financial support for tuition or books. |

| | | |
|---|---|---|
| | | 5. I have someone in my life, or a group of people, with whom I'd feel completely at ease discussing any issues I may encounter. |
| **E** | **Learning Style**<br><br>• İlçin, N., Tomruk, et al. (2018) | 1. In the 4 learning styles available, kinesthetic, visual, logic and auditory learning, I prefer visual styles learning.<br>2. I prefer lectures with small group discussions and group projects.<br>3. Self-paced in-struction and studying alone is better than studying in a group.<br>4. I prefer attending lectures, reading textbooks, doing independent research and watching demonstrations by instructors when learning.<br>**5.** In order to provide me, the best learning opportunity, educators must be aware of the learning styles and I ability to solve problems. |

Table 3.4: Overview of the Questionnaire Design

### 3.5 Measurement of the Variable

Measurement scales are a basic tool used in research methodology and statistical analysis. Scale technique or measurement level are other terms for measuring scale. It is a system or framework used to categorize or measure observations or variables in a research study. By providing a way to assign numerical values to distinct features or levels of a variable that allows researchers to collect and analyze data in a meaningful and systematic way. To evaluate each variable on the scale, researchers will collect and examine data in order to help develop statistical inference tests. Nominal and ordinal scales are the measurement systems that are employed.

#### 3.5.1 Nominal Scale

The nominal scale, which can only offer a difference or categorization, is the lowest level of measurement. Nominal measurement results in data that is limited to classification or categories. The nominal measure is the most appropriate measure for the qualitative qualities because there is neither an increase nor a decrease in the variates' distance in the nominal size. Questionnaires designed for the section A inquiry employ the nominal scale to determine the demographic characteristics of each individual respondent. Things like gender, age, race, year of study, and CGPA grade are evaluated using the nominal scale. The delivery of questionnaires to specific respondents with the intention of analyzing them is the basis of this scale.

#### 3.5.2 Ordinal Scale

Ordinal scales are employed in the evaluation of non-numerical notions, such as respondents' levels of pleasure, discomfort, and happiness. This scale establishes the degree to which respondents are inclined to respond to the provided questionnaire. Every item will be rated

on the scale to determine if it is superior to or inferior to the other items. We employ the ordinal scale for both the independent and dependent variables in this study. A 5-point Likert scale, ranging from 1 (strongly disagree), to 2 (disagree), to 3 (neutral), to 4 (agree) and to 5 (strongly agree), will be used to rate each of the three sections, A, B, and C.

### 3.6 Procedure for Data Analysis

In this research, inspecting, cleaning, transforming, and modeling the data are the objectives of data analysis. However, with appropriate data analysis, the findings might be used to identify patterns, create correlations, and distinguish across factors. Data analysis in research is to present reliable and correct data. Aim to minimize statistical mistakes and learn how to deal with frequent issues such as missing or altered data, outliers, data mining, and graphical representations. As a result, only quantitative methods were used for data analysis in this study.

#### 3.6.1 Quantitative Data Analysis

The main goal of quantitative data analysis is to use different statistical approaches to the study of number-based data, which includes both numerical and categorical data. By providing helpful facts and information which is usually presented as charts, illustrations, statistics, and infographics the approach lowers the risks associated with making snap decisions. Analysts utilize the technique of hypothesis testing to evaluate a supposition regarding a sample statistic. The type of data and the study's objective impact the analyst's methodology. To evaluate a theory's feasibility, hypothesis testing is done using data samples. A large population or data-generating equipment can provide this kind of information. In the descriptions that follow, "population" will

be used to refer to each of these scenarios. The Social Sciences Statistical Package was used to analyze the questionnaire data (IBM-SPSS Version 25 of Windows).

### 3.6.2 Descriptive Analysis

Descriptive analysis is the type of data analysis that helps to explain, show, or summarize data points in a constructive way so that the patterns can develop that satisfy all of the data conditions. The descriptive analysis measures the use of three averages that are mean, median and mode. Some of the descriptive analyses use standard division.

### 3.6.3 Pearson's Correlation Analysis

The Pearson Correlation was conducted so that the strength of a linear connection could be determined between independent variables and dependent variables by applying the coefficient. The most common technique for figuring out how strong a linear association is is to utilize the Pearson correlation coefficient, also abbreviated as r. The degree and direction of the relationship between two variables are both represented by the coefficient of determination, which is a numerical number between -1 and 1. This number is closer to 0 the less linear the connection is. Aside from that, the correlation coefficient in table 3.5 may be calculated using a few broad guidelines.

| **Coefficient Correlations** | **Strength of Relationship** |
|---|---|
| Greater than .5 | Strong |
| Between .3 and .5 | Moderate |

| | |
|---|---|
| Between 0 and .3 | Weak |
| 0 | None |
| Between 0 and -3 | Weak |
| Between -3 and -5 | Moderate |
| Less than -5 | Strong |

Table 3.5: Pearson's Correlation Table

### 3.6.4 Regression Analysis

A single dependent variable and several independent variables can be analyzed using the statistical technique known as multiple regression. Multiple regression analysis employs independent variables with known values to anticipate the value of the single dependent value. Despite being widely used, linear regression can only be applied to one independent variable and one dependent variable. Linear regression, which is similarly restricted to the training dataset, cannot predict a non-linear regression. To take into consideration the same constraints, we employ multiple regression. Its main goal is to get rid of one particular barrier, which is making it possible to analyze several independent variables. The benefits of multiple regression analysis allow researchers to look more closely at the predictor variables that are available. Furthermore, dependability is increased by employing several independent variables rather than just one to support the event. Finally, researchers might explore more complex possibilities by employing multiple regression analysis.

### 3.7 Summary/Conclusions

In order to investigate the relationship between motivation, mental health, learning style, and academic performance among SAK students at Universiti Malaysia Kelantan, this chapter describes the research that will be done and how data is collected. The survey respondents receive questionnaires via Google Forms as part of this procedure. Every question posed to responders needs to be constructed in a way that makes it possible to get precise data. This affects the interpretation and generalizability of the findings. In order to investigate the relationship between the groups to be examined and the statistical analysis that will be employed, data collecting is therefore crucial.

# CHAPTER 4: FINDINGS AND RESULTS

## 4.1. INTRODUCTION

The analysis's findings are reported in this chapter, along with an explanation of how significant they are. The analytical framework was established based on the study goals. The essential information was communicated and emphasized in the figures, tables, and paragraphs that were used to show the results.

## 4.2 PRELIMINARY ANALYSIS

### 4.2.1 Pilot Test

Before the actual distribution of the questionnaire to the respondents, a pilot test was conducted to determine the validity of each variable, to identify flaws and errors in the questionnaire, and to check that the materials and questions were clear and understandable. Reliability tests are used to show how reliable the data are (Sekaran, U. & Bougie, R., 2016). The reliability of the data reflects how well the parts that make up the conceptual measure fit together as a whole. Cronbach's alpha is a reliability coefficient that reflects how strong the positive correlation is between a set of items.

Table 4.1 shows the results of the reliability analysis for the 30 sample respondents who indicated whether the variable data were reliable for the study. According to the results, the reliability test indicated that Cronbach's alpha was above 0.80 for academic performance, motivation, mental health and learning style. The Cronbach's alpha results encourage and increase confidence in the academic performance, motivation, mental health and learning style survey instruments used in this study. It was also determined that the questionnaires for both the

dependent and independent variables were valid. This means that the researcher can now distribute the questionnaires to the target respondents in order to proceed with the study.

Table 4.1: Reliability of the Pilot Test by Cronbach's Alpha

| Variable | Cronbach's Alpha | Number of items |
|---|---|---|
| Academic Performance | .876 | 4 |
| Motivations | .757 | 5 |
| Mental Health | .781 | 5 |
| Learning Style | .827 | 5 |
| **Overall Variable** | | **19** |

## 4.3 DEMOGRAPHIC PROFILE OF RESPONDENT

For each of the 300 participants in the final sample, the answers to six of the demographic questions are displayed. The population is a crucial factor to take into account because the participants in this study were anonymous and randomly chosen from SAK students at University Malaysia Kelantan. As a result, it cannot be assumed that the findings of this study will accurately reflect the SAK students at University Malaysia Kelantan.

According to the data, there are 135 male respondents, or 45.0%, and 165 female respondents, or 55.0%. Male respondents to the questionnaire are the minority, with female respondents being the majority.

According to table 4.2, the percentage of respondents who are 21 years old is 19.7%, with 59 respondents; the percentage of respondents who are 22 years old is 23.3%, with 70 respondents; the percentage of respondents who are 23 years old is 44.3%, with 133 respondents showing the highest number of respondents who answered the questionnaire; in contrast, the percentage of

respondents who are 24 years old is 11.7%, with 35 respondents; and the percentage of respondents who are 25 years old is 1.0%, with 3 respondents only. This indicates that the majority of respondents in this study are 23 years old.

Table 4.2 shows that, among respondents, Malay respondents made up 50.3% (N = 151), whereas Chinese respondents made up 32.3% (N = 97). Meanwhile, Indians make up 17.3% (N = 52). It is clear that a minority of respondents are Indian students, while the majority of respondents are Malay students. According to the survey, more Malay students than other races responded to it.

The data indicates that 248 respondents, or 82.7% of the sample, have a STPM education level, 33 respondents, or 11.0%, have a diploma education level, 18 respondents, or 6.0%, have a matriculation education level, and 1 respondent, or 0.3% of the sample, solely has other education levels. As can be seen, the majority of respondents to the questionnaire had a STPM education level, with other education levels making up the minority. Finally, a significant portion of those who participated had STPM education levels.

Based on table 4.2, the percentage of respondents in year 2 is 20.7% (N = 62). In year 3, the percentage of respondents is 27.0% (N = 81). Meanwhile, the percentage of respondents in year 4 is 52.3% (N = 157). This indicates that the majority of the respondents are from year 4, while the minority are from year 2.

According to the presented data, 27 respondents, or 9.0%, have a CGPA between 2.0 and 2.5, whereas 79 respondents, or 26.3%, have a CGPA between 2.6-3.0. In addition, 120 respondents, or 40.0%, had a CGPA between 3.1 and 3.5, while 74 respondents, or 24.7%, had a CGPA between 3.6 and 4.0. The data indicates that the majority of students who answered the questionnaire had a CGPA between 3.1 and 3.5, while a minority of students had a CGPA between

3.6 and 4.0. In summary, a significant number of individuals included had CGPAs between 3.1 and 3.5.

Table 4.2: Respondent Demographic Profile

| Respondents Profile | Classification | Frequency (N=300) | Percentage |
|---|---|---|---|
| **Gender** | Male | 135 | 45.0 |
| | Female | 165 | 55.0 |
| **Age** | 21 years old | 59 | 19.7 |
| | 22 years old | 70 | 23.3 |
| | 23 years old | 133 | 44.3 |
| | 24 years old | 35 | 11.7 |
| | 25 years old | 3 | 1.0 |
| **Race** | Malay | 151 | 50.3 |
| | Chinese | 97 | 32.3 |
| | Indian | 52 | 17.3 |
| **Education Level** | STPM | 248 | 82.7 |
| | Diploma | 33 | 11.0 |
| | Matriculation | 18 | 6.0 |
| | Others | 1 | 0.3 |
| **Study Year** | Year 2 | 62 | 20.7 |
| | Year 3 | 81 | 27.0 |
| | Year 4 | 157 | 52.3 |
| **CGPA** | 2.0 - 2.5 | 27 | 9.0 |
| | 2.6 - 3.0 | 79 | 26.3 |

| | | |
|---|---|---|
| 3.1 - 3.5 | 120 | 40.0 |
| 3.6 – 4.0 | 74 | 24.7 |

## 4.4 DESCRIPTIVE ANALYSIS

Descriptive analysis used to define the mean and average of each statement in independent and variables. Mean and average mean is used to identify the level of agreement of respondents to statements. In this analysis, the researchers have summarized the item and found a means to indicate the relationships between academic performances and motivation, mental health and learning styles among SAK students at University Malaysia Kelantan. Table below shows the mean and average mean of the dependent and independent variables.

### 4.4.1 Descriptive Analysis of Academic Performances

Table above shows the mean and average mean of the dependent variables, which is Academic Performances. Statement "The facilities provided by the faculty help you carry out assignments smoothly" has the mean 4.20 in the strongly agreed level. Statement "Collaborative learning can strengthen your intellectual judgment" has the mean of 4.25. Statement "Learning in an active form should always be given to me compared to learning in a passive form" has the mean 4.24 while the statement "My lecturers guide me in setting personal targets and developing strategies to achieve that target" has the mean 4.31 also in the level of strongly agree. As a conclusion, the average mean for academic performances is 4.25. It shows that academic performances are very important among SAK students at University Malaysia Kelantan.

Table 4.3: Descriptive Analysis of Academic Performance Mean Score

| No. | Item Description | Mean | Level of Agree |
|---|---|---|---|
| 1. | The facilities provided by the faculty help you carry out assignments smoothly. | 4.20 | Strongly Agree |
| 2. | Collaborative learning can strengthen your intellectual judgment. | 4.25 | Strongly Agree |
| 3. | Learning in an active form should always be given to me compared to learning in a passive form. | 4.24 | Strongly Agree |
| 4. | My lecturers guide me in setting personal targets and developing strategies to achieve that target. | 4.31 | Strongly Agree |
| | **AVERAGE MEAN** | **4.25** | **Strongly Agree** |

### 4.4.2 Descriptive Analysis of Motivation

Table 4.4 shows the mean and the average mean of an independent variable, which is Motivation. The statement “My academic interests are not influenced by anyone but myself” has the mean 4.26. Meanwhile the statement “No matter how much I like or dislike a class; I still try to learn from it” and “I ask questions because I want my lecturers to notice me” has the same

amount of mean which is 4.13. The next statement is “I like to stick to the assignments which are pretty easy to do” has the mean of 4.14 in the level of strongly agree. The last statement “I do my task because I’m supposed to” has the highest mean which is 4.36 in the strongly agree level. To conclude this analysis, the average mean for Motivation is 4.20. It shows that many respondents strongly agree on relationships between motivation and academic performances.

Table 4.4: Descriptive Analysis of Motivation Mean Score

| No. | Item Description | Mean | Level of Agree |
|---|---|---|---|
| 1. | My academic interests are not influenced by anyone but myself. | 4.26 | Strongly Agree |
| 2. | No matter how much I like or dislike a class, I still try to learn from it. | 4.13 | Strongly Agree |
| 3. | I ask questions because I want my lecturers to notice me. | 4.13 | Strongly Agree |
| 4. | I like to stick to the assignments which are pretty easy to do. | 4.14 | Strongly Agree |
| 5. | I do my task because I’m supposed to. | 4.36 | Strongly Agree |
| | **AVERAGE MEAN** | **4.20** | **Strongly Agree** |

### 4.4.3 Descriptive Analysis of Mental Health

Table 4.5 shows the mean and average mean of Metal Health, which are the independent variables of this study. The statement "Obstacles to your personal growth may include significant choices regarding your education and prospective career, discontent with your writing or mathematical skills, and difficulties in meeting academic expectations, whether set by yourself or others" and "There is an individual or individuals in my life who would offer practical assistance to me in times of need, such as providing financial support for tuition or books" has the highest mean which is 4.40. Next, the statement "Pressures related to time, such as managing multiple tasks simultaneously, disruptions to your academic work, and handling numerous responsibilities" has the lowest mean which is 4.18 in the strongly agree level. Statement "Academic dissatisfaction includes things like not enjoying your studies, finding courses uninteresting, or feeling unhappy about university" has the mean 4.38. The last statement is "I have someone in my life, or a group of people, with whom I'd feel completely at ease discussing any issues I may encounter" which means 4.22. As a conclusion, the average mean of Mental Health is 4.32. It shows that mental health influenced the academic performances among SAK students in University Malaysia Kelantan.

Table 4.5: Descriptive Analysis of Mental Health Mean Score

| No. | Item Description | Mean | Level of Agree |
|---|---|---|---|
| 1. | Obstacles to your personal growth may include significant choices regarding your education and prospective career, discontent with your | 4.40 | Strongly Agree |

| | | | |
|---|---|---|---|
| | writing or mathematical skills, and difficulties in meeting academic expectations, whether set by yourself or others. | | |
| 2. | Pressures related to time, such as managing multiple tasks simultaneously, disruptions to your academic work, and handling numerous responsibilities. | 4.18 | Strongly Agree |
| 3. | Academic dissatisfaction includes things like not enjoying your studies, finding courses uninteresting, or feeling unhappy about university. | 4.38 | Strongly Agree |
| 4. | There is an individual or individuals in my life who would offer practical assistance to me in times of need, such as providing financial support for tuition or books. | 4.40 | Strongly Agree |
| 5. | I have someone in my life, or a group of people, with whom I'd feel completely at ease discussing any issues I may encounter. | 4.22 | Strongly Agree |
| | **AVERAGE MEAN** | **4.32** | **Strongly Agree** |

### 4.4.4 Descriptive Analysis of Learning Style

The table below shows the mean and average mean of independent variables, which is Learning Styles. Statement “In the 4 learning styles available, kinesthetic, visual, logic and auditory learning, I prefer visual styles learning” and “In order to provide students, the best learning opportunity, educators must be aware of the learning styles and I ability to solve problems” has the same mean(4.42) which is the highest mean in strongly agree level. The statement “I prefer lectures with small group discussions and group projects” has the mean 4.25 in the strongly agreed level. Beside that, the statement “Self-paced instruction and studying alone is better than studying in a group” has the mean 4.40. Lastly, the mean of the statement “I prefer attending lectures, reading textbooks, doing independent research and watching demonstrations by instructors when learning” is 4.26 in the strongly agreed level. For the conclusion, the average mean of learning styles is 4.35. It shows that the learning style is very important to improve the academic performances among university students.

Table 4.6: Descriptive Analysis of Learning Style Mean Score

| No. | Item Description | Mean | Level of Agree |
|---|---|---|---|
| 1. | In the 4 learning styles available, kinesthetic, visual, logic and auditory learning, I prefer visual styles learning. | 4.42 | Strongly Agree |
| 2. | I prefer lectures with small group discussions and group projects. | 4.25 | Strongly Agree |

| | | | |
|---|---|---|---|
| 3. | Self-paced instruction and studying alone is better than studying in a group. | 4.40 | Strongly Agree |
| 4. | I prefer attending lectures, reading textbooks, doing independent research and watching demonstrations by instructors when learning. | 4.26 | Strongly Agree |
| 5. | In order to provide students, the best learning opportunity, educators must be aware of the learning styles and ability to solve problems. | 4.42 | Strongly Agree |
| | **AVERAGE MEAN** | **4.35** | **Strongly Agree** |

## 4.5 RELIABILITY TEST

Reliability test analysis is the degree to which the values that make up the scale measure the same attribute. In addition, the most used measure of reliability is Cronbach's alpha coefficient. It is the average correlation between all values on a scale. For the purpose of determining whether or not the results of the questionnaire can be trusted, a reliability test was carried out in SPSS. From the SPSS analysis done using Cronbach's Alpha.

Table below shows the SPSS analysis done using the Cronbach's Alpha, it was determined the values of the questionnaire were in between of low good acceptance level (0.743) to very good acceptance level (0.833). A total number of three independent variables has been tested using Cronbach's Alpha. The first independent variable which is Motivation to be good reliable (5 items,

α= 0.743). Mental Health also has good reliability (5 items, α= 0.824). Meanwhile, the last independent variable which is Learning Style found to be good and reliable (5 items, α= 0.833). Furthermore, the dependent variables, Academic Performances, found to be good reliability (4 items, α= 0.797). Overall, the independent variables have five (5) items for every independent variable. Therefore, the data were considered suitable for analysis.

Table 4.7: Reliability of the Actual Study by Cronbach's Alpha Coefficient

| No. | Variables | Items | If Item Deleted | Cronbach's Alpha |
|---|---|---|---|---|
| 1. | Academic Performances | 4 | - | .797 |
| 2. | Motivation | 5 | - | .743 |
| 3. | Mental Health | 5 | - | .824 |
| 4. | Learning Styles | 5 | - | .833 |

## 4.6 NORMALITY TEST

The results of the normality tests in this study are shown in the table 4.8. The Kolmogorov-Smirnova and Shapiro-Wilk tests were used to assess the findings of the SPSS normality test. The theoretical p-value (the. sig value) must be greater than 0.05 if the researcher declares that the data in the study is normally distributed. Conversely, if the p-value is less than 0.05, it indicates that the distribution of the data is not normal. Based on the previously displayed results, the normality test yields a p-value of less than 0.05 for the importance of all variables, including academic achievement, motivation, mental health, and

learning style. Thus, this leads to the use of the Spearman Correlation test, as the data is shown as not normally distributed.

Table 4.8: Result Tests of Normality by Kolmogorov-Smirnov and Shapiro-Wilk

| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| **Variable** | **Statistic** | **df** | **Sig.** | **Statistic** | **df** | **Sig.** |
| Academic Performance | .152 | 300 | .000 | .929 | 300 | .000 |
| Motivation | .132 | 300 | .000 | .937 | 300 | .000 |
| Mental Health | .160 | 300 | .000 | .927 | 300 | .000 |
| Learning Style | .186 | 300 | .000 | .910 | 300 | .000 |

a. Lilliefors Significance Correction

## 4.7 Correlation Analysis of Motivation, Mental Health, Learning Style and Academic Performance

The Pearson coefficient is one type of correlation value that shows the relationship between two variables measured on the same interval or ratio scale. The Pearson coefficient is a metric used to measure the type of correlation that exists between two continuous variables. (motivation, mental health, learning style) and the dependent variable (academic performance among SAK students in Universiti Malaysia Kelantan.

For numerical variables, the most widely used method is the Pearson correlation method, which gives a value between − 1 and 1, where 0 indicates no correlation, 1 indicates total positive correlation, and − 1 indicates total negative correlation. This can be interpreted as follows: if two

variables have a correlation value of 0.7, it means that there is a significant positive relationship between them.

Firstly, the relationship between motivation (IV) and academic performance (DV) are examined. The Pearson's correlation value is r = .611. When comparing these statistics against the correlation coefficient scale of linear strength, the outcome is that the scale coefficient indicates a strong and positive correlation. These statistics showing that coefficient correlations are greater than 0.5 indicates that this relationship between motivation and academic performances is significantly strong.

Secondly, the relationship between mental health (IV) and academic performance (DV) are examined. The Pearson's correlation value r = .573. The scale coefficient shows a moderate and positive connection when these statistics are compared to the correlation coefficient scale of linear strength. The analysis's conclusion is that academic performance (DV) and self-regulation have a somewhat positive correlation. This indicates that the variables have a significant relationship ($p < 0.05$).

Lastly, the relationship between learning style (IV) and academic performance (DV) are examined. The Pearson's correlation value is r = 0.530. When comparing these statistics against the correlation scale of linear strength, the outcome is that the scale coefficient indicates a moderate and positive correlation. The analysis's conclusion is that academic performance (DV) and self-regulation have a somewhat positive correlation. This indicates that the variables have a significant relationship ($p < 0.05$).

Table 4.9: The Reliability and Pearson Correlation Analysis Result

| **Reliability and Correlations Analysis** | | | | | |
|---|---|---|---|---|---|
| | α | Motivation | Mental health | Learning Style | Academic Performance |
| Motivation | .743 | 1 | | | |
| Mental Health | .824 | .577** | 1 | | |
| Learning Style | .833 | .526** | .829** | 1 | . |
| Academic Performance | .797 | .611** | .573** | .530** | 1 |
| ***. Correlation is significant at the 0.01 level (2-tailed) ;* *N=300* | | | | | |

## 4.8 REGRESSION TEST (MULTIVARIABLE ANALYSIS)

Table 4.10 shows the R-square was significant at .454. This means only 45.4% of the independent variables which are motivation, mental health, and learning style influence student's academic performance. Another 54.6% can be influenced by other variable that not include in this study.

From table 4.10 motivation variable shows that Beta = 0.414, p=0.000 which mean there is the significant relationship between motivation towards SAK student's academic performance. For the mental health, the regression result shows Beta = .267, p=0.000 that means there is the significant relationship between mental health towards student's academic performance. The learning style shows there is not significant relationship between student's academic performance that is Beta .091, p=0.000. Based on Beta value, it shows that motivation variable is most

influential to dependent variable (academic performance) that is Beta .414. Followed by mental health (Beta =.267) and least variable is learning style (Beta = 0.91). This means, learning style variable does not influence student's academic performance. The higher the beta value, the stronger the factor variable influence the dependent variable.

As the conclusion for regression analysis, the beta value indicates that all three variables can be accepted that is motivation, mental health and learning style based on the significant value less than 0.05. From the value of beta, it showed that the most influential factor is motivation variable.

Table 4.10: Regression Analysis Results

| **Variable** | **Beta** |
|---|---|
| Motivation | .414 |
| Mental Health | .267 |
| Learning Style | .091 |
| R | .674[a] |
| $R^2$ | .454 |
| F-change | 82.091 |
| Sig. | .000[b] |

## 4.9 HYPOTHESES TESTING

### 4.9.1 THE RELATIONSHIP BETWEEN MOTIVATION AND ACADEMIC PERFORMANCE AMONG SAK STUDENTS IN UNIVERSITI MALAYSIA KELANTAN

H1: There is a significant relationship between motivation and academic performance among SAK students in Universiti Malaysia Kelantan.

According to the correlation coefficient test in Table 4.9, the result shows that there is a positive correlation between motivation and academic performance as the p-value is less than 0.05 i.e. 0.000. therefore, H1 is accepted. Pearson's correlation coefficient is 0.611 which shows that there is a positive correlation between the two.

### 4.9.2 THE RELATIONSHIP BETWEEN MENTAL HEALTH AND ACADEMIC PERFORMANCE AMONG SAK STUDENTS IN UNIVERSITI MALAYSIA KELANTAN

H2: There is a significant relationship between mental health and academic performance among SAK students in Universiti Malaysia Kelantan.

According to the correlation coefficient test in Table 4.9, the result shows that there is a positive correlation between mental health and academic performance as the p-value is 0.000. therefore, H2 is accepted. Pearson's correlation coefficient is 0.573 which shows a positive correlation.

### 4.9.3 THE RELATIONSHIP BETWEEN LEARNING STYLE AND ACADEMIC PERFORMANCE AMONG SAK STUDENTS IN UNIVERSITI MALAYSIA KELANTAN

H3: There is a significant relationship between learning style and academic performance among SAK students in Universiti Malaysia Kelantan.

Based on the correlation coefficient test in table 4.9, the output of the results shows the positive relationship between learning style and academic performance because the p value is 0.000. Therefore, H3 is accepted. The Pearson correlation is 0.530 and it shows the positive correlation.

## 4.10 Conclusion

To sum up, chapter 4 looks closely at the data and uses SPSS software to analyse and provide outcomes. Many analyses, including the normality test, demographic analysis, reliability analysis, descriptive analysis, and bivariate analysis (Pearson Correlation), are used to evaluate the collected data. In summary, the study findings include the reliability and normalcy assumptions for the data that were gathered, along with an important representation of frequency findings pertaining to participant demographics. The results of the study hypothesis will be covered in greater depth in the next chapter, chapter 5.

# CHAPTER 5: DISCUSSION AND CONCLUSION

## 5.1 INTRODUCTION

An overview of the study's findings is given in this chapter. First, a summary of the main results is given in relation to every research issue and the study's objectives the practical implications for the findings are the following studied, followed by the theoretical practical implications for the findings are discussed. The overall strengths and limitations of the study are then presented. A few suggestions for transforming research findings into practical solutions are included in the chapter's conclusion for students in motivation, mental health and learning style to improved student's academic performance in the future.

## 5.2 KEY FINDINGS

This research investigates the relationship between motivation, mental health and learning style towards academic performances among commerce students. Data were gathered from students from years two to final years students who studied in University Malaysia Kelantan (UMK). A total of 300 respondent have been answered the questionnaire.

## 5.3 DISCUSSION and FINDINGS

### 5.3.1 To examine the relationship between the motivation and academic performance among SAK students in Universiti Malaysia Kelantan

The findings of this study demonstrate that academic performance has a significant relationship between motivation. This confirms our argument that motivation plays a major role in determining a person's success in the educational process (Sivrikaya, 2019). According to Whiseand and Rush, (1988) explained motivation as the willingness of an individual to do

something and conditioned by actions to satisfy needs. Through (Saraswathi, 2011) states that motivation as the willingness to exert high levels of effort, toward organizational goals, conditioned by the effort's ability to satisfy some individual need. In conclusion, the findings of this study unequivocally establish a significant relationship between academic performance and motivation, aligning with the assertion that motivation plays a pivotal role in determining educational success. In essence, this research underscores the integral connection between motivation and academic performance, emphasizing the motivational drive as a key determinant in the educational process. Recognizing and fostering motivation can be considered essential components in enhancing overall academic success.

**5.3.2 To examine the relationship between mental health and academic performance among SAK students in Universiti Malaysia Kelantan.**

The findings of this study found that mental health provides a positive correlation with academic performance. This is supported by Sha`iri (2004), there is a strong correlation between academic achievement and mental health. According to (World Health Organization, 2001) mental health is broadly described as a state of well-being where an individual recognizes their capabilities to cope with normal stresses of life, work effectively and contribute to the society. It is a significant issue for employees, workplaces, and societies and the fifth most significant cause of disability in the Organization for Economic Cooperation and Development (OECD) countries (Cottini & Lucifora, 2013). In summary, the findings highlight the importance of prioritizing and fostering mental health as it not only positively correlates with academic performance but also has wider implications for the well-being of individuals and societies.

### 5.3.3 To examine the relationship between learning style and academic performance among SAK students in Universiti Malaysia Kelantan

This study found that learning style provides a significant relationship with academic performance. This is supported by El-sabagh, (2021) "Adaptive e-learning environment based on learning styles and its impact on development students' engagement. According to Sha`iri (2004), there is a strong correlation between academic achievement and mental health. Based on research by Mumtaz Begam (2013) concluded this study by stating that environmental influences have little bearing on academic success. In summary, the research underscores the importance of tailoring educational approaches to accommodate diverse learning styles, emphasizing their impact on academic performance. This nuanced understanding contributes to the broader discourse on the multifaceted factors influencing academic success.

## 5.4 IMPLICATIONS OF THE STUDY

### 5.4.1 Theoretical Implication

In this research, we have identified the relationship between academic performances and motivation, mental health, and learning style among SAK students at University Malaysia Kelantan. The study aims to ascertain the effects of psychological factors such as motivation, mental health and learning style on academic performance in this institution's student using a variety of methods and variables.

Theory on the academic and social integration of university students provides the basis for this study because it has established a foundation for research on student retention in higher education. In addition, its methodological approach to student retention is wide-ranging, focusing on individual characteristics prior to entering university and the experience of students upon

entering university alongside the impact of external factors that interfere with students' academic performance. These interrelated theories evaluate student retention and factors affecting students' academic performance.

From a theoretical standpoint, our research's main objective is to ascertain how much motivation, mental health and learning style elements influence or have an impact on the level of academic performances among SAK students at University Malaysia Kelantan. Based on pertinent journals and articles, we have observed and investigated through our study several independent variables that are the driving force behind downward trends in the academic performances of students. The mental health factors that impact academic performance are self-confidence, drive pressure, and test apprehension, specifically related to the subject matter being studied. Additionally, the university's limited facilities contribute to student's academic performances. By identifying legitimate and well-intentioned actions, this study helps to some extent to fix current deficiencies in a better direction.

### 5.4.2 Practical Implication

#### 5.4.2.1 Practical Implication for the students

In this research, our goal is to investigate the relationship between motivation, mental health and learning style as the factors that influence academic performance among students at University Malaysia Kelantan. Considering the context of this study, these two important terms such as practical skills and academic performance are defined as follows. Practical skills relate to reasoning, critical-thinking, problem-solving, and implementation skills. On the other hand, academic performance refers to theoretical knowledge, innovative ideas, and memorization. Performance in various theory-based activities includes algorithmic-based assignments, theory-

based assignments, and paper-based tests which are referred to as academic performance. Students who have a good self-concept tend to be more confident and able to give opinions or interact with friends and lecturers.

Moreover, students who have a negative reflection on themselves are unable to deal with academic pressure and are unable to adapt themselves in the learning environment and social interaction. Meanwhile, a positive self-concept is seen to be able to contribute to success in the educational environment, social interaction, and also the emotional well-being of students during their academic studies.

#### 5.4.2.2 Practical Implication for the University and Lecturers

This study also aims to get a better understanding of motivation, mental health and learning style as the factors that influence academic performance among students at University Malaysia Kelantan. Education is an avenue of training and learning, especially in schools or colleges, to improve knowledge and develop skills. Lecturers also need to improve their teaching skills to enhance student information and learning skill to improve their achievement especially on academic aspect. Inadequate pre-university preparation, a weak background in fundamentals, a dearth of career opportunities outside of teaching, and inadequate teacher certification and pedagogical topic understanding were among the reasons offered for the low enrollment rate. Lack of self-assurance, emotional instability, and an extraverted temperament are the main causes of students' failure.

This is corroborated by the research, which claims that students' lack of confidence in their knowledge contributes to their failure and may lower their level of engagement in the classroom. They also contended that peer groups, inadequate curricula, bad classroom

circumstances, anxiety, maladjustment, and a lack of parental support are among the environmental factors contributing to students' academic difficulties, as are personal shortcomings like low aptitude.

#### 5.4.2.3 Practical Implication for the Ministry of Higher Education

From a practical standpoint, our research's main objective is to ascertain how much motivation, mental health and learning style elements influence or have an impact on the level of academic performances among SAK students at University Malaysia Kelantan. The Ministry of Education for example, need to provide awareness about the importance of motivation, mental health and effective learning methods to students in order to obtain an increase in academic achievement.

Based on the literature review and discussion, the researcher would like to suggest that an intervention program that aims to encourage the development of positive self-esteem should be developed. The Ministry of Education needs to encourage more exploration of student self-development in non-academic fields to relieve undue academic pressure caused by parents, schools and society. This is because the pressure given to students has a relationship with the early symptoms of behavior problems and negative life outcomes in the future. The results of this study cannot be generalized to university students from different types of universities and different religious and social backgrounds. A larger-scale study is also desirable to involve university students from a more diverse geographic, family, religious and social background, so that the effect of educational institution and family, religious and social background on behavior and self-esteem can be further explained.

## 5.5 LIMITATIONS OF THE STUDY

This study has been designed with much thought and care to obtain valid results as far as possible. However, there were some limitations beyond the control of the researchers and the scope of the study. Limitations are identifiable risks outside of the researcher's control, such as participant biases or performance inconsistencies regarding the evidence. As in this study, this research naturally leaves some clues and limitations for further researchers.

Firstly, the limitations that come up from this research may be influenced by outside factors in their personal life that influence student academic performances. The research study may not account for the other factors that can influence the academic performance of SAK students at University Malaysia Kelantan. This is because each person may have different opinions, which may have a different influence on their performance. Therefore, this research can be biassed as it does not include the other factors that can influence students.

Second, the limitations are connected to the scope of the research area. This study was conducted at University Malaysia Kelantan where it is focused on SAK courses student. The limitation of the research area has limited this study to conduct and collect the data. The researcher has limitation to search for information and respondents because its only covers that area. The limited number of respondents also could not generalize or represent the results to broader scope for all students at University Malaysia Kelantan. Besides that, the study conducted cannot be represent in others area out of the scope of study. Therefore, the future research should conduct the new scope of area that are widely covered all the area in Malaysia.

Another limitation from this study is the resources of data. The secondary data used by researchers found there was not enough information to use in this study. This is because the data

is not too much to support the primary data in this study. This is likely to restrict the reach of the research because the secondary data that is found may have a shortage of information and finding for the research. In fact, no previous research was conducted in this area of study. This can also cause employee data to be inaccurate and have a different opinion from many perspectives.

In conclusion, there were limitations in conducting the relationship between academic performances and motivation, mental health and learning style among SAK students at University Malaysia Kelantan. This study needs to improve for further study to get more accurate results.

## 5.6 RECOMMENDATIONS / SUGGESTION FOR FUTURE RESEARCH

To address the constraints encountered throughout this research, the researcher thus puts forward a few recommendations and methods to get over such constraints. First, the researchers suggested holding a session at the Wi-Fi location for a potential respondent. For example, the meeting may take place on campus or in close proximity to the residential college for students. This approach will facilitate the potential respondent's ability to complete the questionnaire by providing them with an unrestricted Wi-Fi connection. Valid data will be obtained, and the researcher will have no trouble reaching the entire sample size. We must first provide a positive environment for the responders in order to receive an appropriate response from them. This will enable them to complete the questionnaire at their own pace.

The next step is to expand the range of languages available for the survey. When writing the questionnaire, we exclusively used English. To enable a larger and better comprehension, it would be more advantageous and useful if the questionnaire was offered in languages like Bahasa Melayu, Chinese, and Tamil. As other languages become available, more individuals may reply to the questionnaire because they are able to understand it.

Additionally, the researchers propose that direct interaction might aid in preventing respondents' misconceptions when they respond to the survey. When respondents have questions about the questionnaire, are unsure of the answer, or are having trouble understanding it, researchers may promptly address these issues and provide clarification. For example, in order to assist respondents who struggle with English, researchers can provide instant explanations and translations into other languages. The respondents who are unaware of the relationship between learning style, motivation, mental health, and academic performance might also receive information from the researcher, so they may consciously and knowledgeably complete the full questionnaire. Inaccurate and improper data that may be gathered from respondents as a result of their ignorance can also be avoided by doing this. Furthermore, to draw respondents throughout the data-gathering procedure, researchers advise giving them small presents like candies or bookmarks. The respondents will be more motivated to complete the questionnaire as a result. Researchers in generations to come should hopefully put all of the suggestions made in this most recent study into practice.

## 5.7 OVERALL CONCLUSION OF THE STUDY

The theories developed in this approach motivation, mental health and learning style then moderating value namely academic performances. It is anticipated that research and analysis of these variables would improve knowledge and comprehension of relationship between motivation, mental health and learning style and academic performances. Research questions, objectives, and hypotheses were the main topics of discussion.

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**APPENDIX A – DRAFT OF QUESTIONNAIRE**


Greetings to all dear respondents,

We are Bachelor of Entrepreneurship (Commerce) students with honours from the University of Malaysia Kelantan (UMK). We are currently conducting a research survey regarding "Relationship Between Motivation, Mental Health, Learning Style and Academic Performance among SAK students in Universiti Malaysia Kelantan". In order to complete the task, we would greatly appreciate it if you could respond to this questionnaire. Only academic goals will be served by this research, and your information will be kept private. We appreciate your cooperation and taking the time to complete this questionnaire.

Thank you.

*Your sincerely,*

CHE SALMAN BIN CHE ZUHAR (A20A1293)

LEE SWET TENG (A20A2137)

NOOR ALIYA ANNESA BINTI ABDUL RAHMAN (A20A1599)

NURMAISARAH BINTI OSMAN(A21B2935)

**SECTION A: DEMOGRAPHICS**

1. Gender:

☐ Male ☐ Female

2. Age:

☐ 21 years old ☐ 22years old ☐ 23 years old

☐ 24 years old ☐ 25 years old

3. Race:

☐ Malay ☐ Chinese

☐ Indian ☐ Others

4. Level of Education before Undergraduate Degree:

☐ STPM ☐ Diploma ☐ Matriculation

5. Year of Study

☐ Year 2 ☐ Year 3 ☐ Year 4

6. CGPA Level

☐ 2.0 - 2.5 ☐ 2.6 - 3.0

☐ 3.1 - 3.5 ☐ 3.6 – 4.0

**SECTION B: ACADEMIC PERFORMANCE (DEPENDENT VARIABLE)**

This section will measure your behavioral intention to academic performance. Please mark your answer based on the scale from 1 to 5.

**Strongly Disagree - 1**

**Disagree -2**

**Neutral – 3**

**Agree- 4**

**Strongly Agree - 5**

| AP | ACADEMIC PERFORMANCE | SD | D | N | A | SA |
|---|---|---|---|---|---|---|
| AP1 | The facilities provided by the faculty help you carry out assignments smoothly. | 1 | 2 | 3 | 4 | 5 |
| AP2 | Collaborative learning can strengthen your intellectual judgment. | 1 | 2 | 3 | 4 | 5 |
| AP3 | Learning in an active form should always be given to me compared to learning in a passive form. | 1 | 2 | 3 | 4 | 5 |
| AP4 | My lecturers guide me in setting personal targets and developing strategies to achieve that target. | 1 | 2 | 3 | 4 | 5 |

**SECTION C: MOTIVATION, MENTAL HEALTH AND LEARNING STYLE (INDEPENDENT VARIABLE)**

This section will measure your motivation, mental health, and learning style compatibility to academic performance. Please mark your answer based on the scale from 1 to 5.

**Strongly Disagree - 1**

**Disagree -2**

**Neutral – 3**

**Agree- 4**

**Strongly Agree - 5**

| MT | MOTIVATION | SD | D | N | A | SA |
|---|---|---|---|---|---|---|
| MT1 | My academic interests are not influenced by anyone but myself. | 1 | 2 | 3 | 4 | 5 |
| MT2 | No matter how much I like or dislike a class, I still try to learn from it. | 1 | 2 | 3 | 4 | 5 |
| MT3 | I ask questions because I want my lecturers to notice me. | 1 | 2 | 3 | 4 | 5 |
| MT4 | I like to stick to the assignments which are pretty easy to do. | 1 | 2 | 3 | 4 | 5 |
| MT5 | I do my task because I'm supposed to. | 1 | 2 | 3 | 4 | 5 |

| MH | MENTAL HEALTH | SD | D | N | A | SA |
|---|---|---|---|---|---|---|
| MH1 | Obstacles to your personal growth may include significant choices regarding your education and prospective career, discontent with your writing or mathematical skills, and difficulties in meeting academic expectations, whether set by yourself or others. | 1 | 2 | 3 | 4 | 5 |
| MH2 | Pressures related to time, such as managing multiple tasks simultaneously, disruptions to your academic work, and handling numerous responsibilities. | 1 | 2 | 3 | 4 | 5 |
| MH3 | Academic dissatisfaction includes things like not enjoying your studies, finding courses uninteresting, or feeling unhappy about university. | 1 | 2 | 3 | 4 | 5 |
| MH4 | There is an individual or individuals in my life who would offer practical assistance to me in times of need, such as providing financial support for tuition or books. | 1 | 2 | 3 | 4 | 5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| MH5 | I have someone in my life, or a group of people, with whom I'd feel completely at ease discussing any issues I may encounter. | 1 | 2 | 3 | 4 | 5 |

| LS | LEARNING STYLE | SD | D | N | A | SA |
|---|---|---|---|---|---|---|
| LS1 | In the 4 learning styles available, kinesthetic, visual, logic and auditory learning, I prefer visual styles learning. | 1 | 2 | 3 | 4 | 5 |
| LS2 | I prefer lectures with small group discussions and group projects. | 1 | 2 | 3 | 4 | 5 |
| LS3 | Self-paced in-struction and studying alone is better than studying in a group. | 1 | 2 | 3 | 4 | 5 |
| LS4 | I prefer attending lectures, reading textbooks, doing independent research and watching demonstrations by instructors when learning. | 1 | 2 | 3 | 4 | 5 |
| LS5 | In order to provide students, the best learning opportunity, educators must | 1 | 2 | 3 | 4 | 5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | be aware of the learning styles and I ability to solve problems. | | | | | |

**THE END OF QUESTIONNAIRE**

**APPENDIX B – GANTT CHART**

| TASK | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 |
|---|---|---|---|---|---|---|---|
| Identity research title | | | | | | | |
| Briefing with our SV related to the research project | | | | | | | |
| Start writing chapter 1 | | | | | | | |
| Start writing chapter 2 | | | | | | | |
| Start writing chapter 3 | | | | | | | |
| Turnitin report check | | | | | | | |
| Submission PPTA I | | | | | | | |
| Presentation for PPTA I | | | | | | | |