# Factor Affecting Academic Performance among College Students in Kota Bharu, Kelantan 

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# Factor Affecting Academic Performance among College Students in Kota Bharu, Kelantan 

> By

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A thesis submitted in fulfillment of the requirement for the degree of Master of Business Administration

## Malaysian Graduate School of Entrepreneurship \& Business

 UNIVERSITI MALAYSIA KELANTAN
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# Faktor yang Mempengaruhi Prestasi Akademik di kalangan Pelajar Kolej di Kota 

## Bharu, Kelantan


#### Abstract

Abstrak Terdapat pelbagai faktor yang mempengaruhi prestasi akademik. Kajian ini mengkaji kesusasteraan masa lalu mengenai faktor-faktor yang mempengaruhi prestasi pelajar akademik. Ramai penyelidik yang lalu telah melakukan perkara yang sama. Tetapi, penyelidik yang berbeza mengkaji faktor yang berbeza. Untuk kajian ini, objektif kajian ini adalah untuk mengkaji hubungan antara faktor pengurusan masa, faktor stres, faktor keberkesanan diri dan faktor motivasi dengan prestasi akademik pelajar kolej di Kota Bharu. Data dikumpul melalui soal selidik. Kajian ini mendapati ketiga - tiga faktor iaitu faktor pengurusan masa, faktor stres, faktor keberkesanan diri dan motivasi dengan prestasi akademik terdapat hubungan yang signifikan.




# Factor Affecting Academic Performance among College Students in Kota Bharu, Kelantan 


#### Abstract

There are various factors that affecting academic performance. This study studied the past literature on the factors which affect the academic performance of students. Many past researcher has already done the same thing. But, different researchers examined different factors. For this research, the objective of this study is to examine the relationship between time management factor, stress factor, self-efficacy factor and motivation factor with academic performance of college students in Kota Bharu. The data were collected through questionnaire. The study has found there is significant relationship among these three factors - time management, stress, self-efficacy and motivation with academic performance.




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## CHAPTER 1

## INTRODUCTION

### 1.0 Introduction

The first chapter of this study presents an overview of this study. In this chapter, the background of the research which are academic performance and the factors affecting academic performance like time management, stress management, motivation, and self- efficacy will be discussed. These are followed by the problem statements which will briefly discuss on the problem arise from the research background of this study. The research questions and objectives will be drawn based on the problem statements which will further determine the scope of study as well as the limitations. Lastly, this chapter will discuss the significance of the study on the research questions and objectives.

### 1.1 Research background

Education is an essential sector for every country in which through education then the country able to produce quality society. According to World Bank, education is fundamental to development and growth (2011). Malaysia is also no exception from doing improvement in their education system from time to time. Researchers like Malakolunthu and Rengasamy (2012) believe Malaysia's higher education system has been changed depend on governmental
socioeconomic and development objectives. In 1960 to 1980, Malaysia's economy had been based on agricultural activities. Thus, at this time, people are really aware about agricultural activities including the parents, students, institutions and society as a whole. Demand for agricultural programs and training is high rather that other course. However, in year 1980 to 2000, economic activities of Malaysia was moved to industrial development. This changes happened because of the emergence of a knowledge-based economy.

At this time, many institutions are demanded a highly skilled and knowledgeable workers. As reported by Grapragasem et al. (2014), currently rate of unemployment is high among Malaysian graduates. Grapragasem et al (2014) also stated that reason of high unemployment among Malaysian graduate is because of employability problem which is students nowadays lacking in proper skills demanded by employers.

Thus, in order to fulfill the demand from the contemporary employers, future graduates have to develop skills and get high grade point average when they are still students. This is because, only at that time, the students can learn how to improve themselves. Furthermore, the first way an employer will value students is through their academic performance which is measured by grade point average (GPA) and it is stated in the transcript. The transcript is the paper that the students will be presented to their future employers. According to Ali et al (2009), academic performance plays a vital role in producing good quality graduates who will become great leader and workforce for the country hence responsible for the country's economic and social development.

Therefore, academic performance has become a concern in previous research and becomes more challenging since discussion on this topic especially regarding to the factors that affecting academic performance because it differs from person to person. The differences occurs because every person and country has their own personality, cultures and beliefs.

Previously, mostly research of student academic performance focuses on gender issue, teaching's education and teaching style, facilities and family background. Thus, instead of focuses on the external factors, the researcher emphases more on the internal factors such as time management, stress, selfefficacy and motivation.

For this research as most of the other researcher use to measure the student performance, this research also use grade point average (GPA) to measure the academic performance of students focuses on the colleges' students in Kota Bharu. According to James \& Chilvers (2001), Svanum \& Zody (2001), the grade point average (GPA) system is used in numerous countries around the world as an indicator of the students' academic performance.

### 1.2 Problem Statement

There is amount of published research regards to college students and academic performance issues. Most of students pursue their tertiary education regardless of their result during high school. This is because, pursuing study has been common nowadays. Currently, there is so many colleges and universities
have been established in Malaysia and it is also easy for student to further their study although they do not have money. This is because, students can borrow loans from National Higher Education Fund Corporation (PTPTN) or they can apply for various scholarship to pursue study. However, no matter how easy the students can continue their study, but if they unable to maintain their academic performance, their loan or scholarship will be suspended or be pulled back by the providers. Other than that, if the students continuously fails in their study, they also can be expelled by the colleges or universities.

Academic performance has a significant impact in the life of students, specifically students who studying in tertiary level of education. This is because, the way of study and the way of living is different compared to primary and secondary level of education. Most of colleges requires their students mostly in semester one to stay in campus. Thus, for those who are not used to stay far from their family and teacher supervision have to manage their academic life well.

Most of previous studies on academic performance are studied on external factors such as facilities, family factors, teaching style factors and financial factor. Only little studies has been done on the internal factors like self-efficacy, stress and attitude. In addition, most of studies has been done in any other countries besides Malaysia.

Even though there are many research has been done related to factors affecting academic performance, but there is no any research has been done for college students in Kota Bharu, Kelantan. Moreover, those research that has been
done previously, did not focuses on the time management factor, stress factor, self-efficacy and motivation factor.

Besides, there is not so many latest research regarding the factors affecting academic performance. Since there is so many changes happens in the education systems, technology, politics and policy, it is believe that there will have differentiation in the result of the current research.

### 1.3 Research questions

1. What are the relationship between time management and academic performance among college students in Kota Bharu?
2. What are the relationship between stress management and academic performance among college students in Kota Bharu?
3. What are the relationship between self - efficacy and academic performance among college students in Kota Bharu?
4. What are the relationship between motivation and academic performance among college students in Kota Bharu?
5. What is the most important factor that affecting college students in Kota Bharu?

### 1.4 Research objectives

1. To determine the relationship between time management and academic performance among college students in Kota Bharu.
2. To examine the relationship between stress management and academic performance among college students in Kota Bharu.
3. To identify the relationship between self - efficacy and academic performance among college students in Kota Bharu.
4. To observe the relationship between motivation and academic performance among college students in Kota Bharu.
5. To identify the most important factor that affecting academic performance among college students in Kota Bharu.
1.5 Scope of research

This research focuses on the factors affecting academic performance among college students in Kota Bharu, Kelantan. The main key of this research is to find out the most important factor that affecting academic performance among college students in Kota Bharu. In this research, the researcher study the relationship between time management factor, stress factor, self-efficacy and motivation factor with academic performance.

This research is based in Kota Bharu, Kelantan and will only focuses on colleges apart of the whole tertiary education in Kota Bharu. the population studied in this research are the college students around Kota Bharu, Kelantan. There are around 10 colleges in Kota Bharu with total number of students is around 6000 .

As with any research project conducted, there were a number of limitations to the present study, which must be addressed. First limitation is the sample of study is only limited to the college students who study in Kota Bharu., Kelantan. Thus, the result may not accurate enough to be concluded to all college students in Kelantan. In addition, this students are randomly selected regardless of their background and personality.

Second limitation is the feedback of the students which is it is quite risky that the questionnaire distributed to the students will not be received back. Without proper observation and guidance towards the students, the questionnaire given to them may not be received back and they may not properly answered the questions. The researcher may not able to use the response if the response is having any mistakes. In addition, the students also may only answer the questions that they favour. Thus, it is difficult for the researcher to get the exact result.

Third limitation is the questionnaire paper will be distributed personally to the sample students and they will be asked to spend some time to answer all questions in the paper. Since it involve some time, there is possibility of lower response rate from the sample students. Other than that, they may also answer it in half-heartedly. So, the researcher may not get the accurate answer from the survey. Other that distributed in hand, the link of questionnaire which is formed using Google Form also will be distributed through WhatsApp application. The
link to the questionnaire may go wider. Thus, possibility to get inaccurate data is high through Google form data.

Fourth limitation may face by the researcher is this research must be completed within the time frame, which is only 3 month and a week. And another limitation is this research may failure to obtain participatory consent from college's student council.

### 1.7 Significance of research

The findings from this research can be useful to several groups such as to the colleges or universities, academic researchers and students. Besides, this study al so can have significance to the government and parents. This section will clarify the importance of the research towards these groups.

Firstly, this research will contribute to the college or universities by helping these sector in understanding the potential students. They can use this research in developing better syllabus and course which is demand and suitable with the character and personality of new era students. In addition, they will able to improve and create new strategies to attract more students to join their colleges or universities.

Secondly, this research can be useful to the academic researchers which is do research in line with this research. It will help other academic researchers to explore more the data and knowledge on the factors affecting academic performance especially on the time management factor, stress factor, self-efficacy
factor and motivation factor. Other than that, they can use this research as a reference in order to expand their research findings.

Thirdly, this research would be beneficial for students because through this research, the students will be aware and concern more which factors affecting their study. Besides, from this research, the students will be more understand about the importance of education towards their future. So that, they will be more careful in choosing the course in college and will also take care of their performance in academic.

### 1.8 Structure of the research

This research is divided into five chapters:
Chapter 1 of this research provides the background of the research and introduces the context of the research by clarifying the related problems, objectives, scope and significance of the research.

The literature review will be presented in Chapter 2, which will explore on the previous studies related to this research as well as the research framework and hypothesis developed based on the previous literature. Review of literature will provide a comprehensive review of time management and its relations to stress, gender, motivation and academic performance.

The research methodology will be discussed and explained in Chapter 3. It contains an overview of how the study was undertaken. The methodology chapter contains a reiteration of the research questions that flow from the literature
review, the data sources surveyed, the instruments used in data collection and a comprehensive discussion of the analysis techniques working.

The analysis and findings of this research will be discussed in the Chapter 4. In this chapter, it will contain the result data from the research, including the presentation of all relevant statistics and their values.

Chapter 5 will be last chapter for this research. In this chapter, the summary of the findings, the discussion on the research questions and objectives, conclusion and recommendations will be stated.

### 1.9 Conclusion

As a whole, in this chapter researcher describe background of the study, problem statement, research question and research objective, scope of study, significance of the research and limitation of the research. Therefore, for the next chapter researcher will discuss on the past literatures of the research that has been done by past researcher to support this research.

## CHAPTER 2

## LITERATURE REVIEW

### 2.0 Introduction

This chapter presents a review of past studies and literature that explains the theoretical foundations of the research framework to be tested in this study. For the first part, the researcher will review on related literature on academic performance, time management, stress, self-efficacy and motivation. In this part, the hypothesis also will be discussed. Then, for the next part, from this literature review the researcher will come out with the research framework to enhance the study.

### 2.1 Academic performance

Students are the future leaders for a nation. But, it is not easy to build a great future leaders. Thus, as in an idiom stated, "Strike while the iron is hot", in order to form a great person, the education of children must be started when they are young. In addition, current employers are demanded for high-skilled and knowledgeable employees to work with them. Thus, to ensure the future, everyone have to struggle to achieve better academic performance and learn many skills during their study time. Academic performance is measured by the grade point
average (GPA) system. According to James \& Chilvers (2001), the grade point average (GPA) system is used as indicator of the students' academic performance.

As stated by Von Stumm, Sophie Hell, Benedikt, Chamorri premuzic, Toman (2011), academic performance usually refers to how well a student is completing his or her task, but there are various factors that determine the level and quality of students' academic performance included grades, attendance, test, extracurricular activities, behavior, individual differences in academic performance have been linked to difference in intelligence and personality.

In this current research, the researcher use academic performance as a dependent variable which is a variable that could be affected by various factors. In this research, the independent variables which are the factors that affecting academic performance used are; time management factor, stress factor, selfefficacy factor and motivation factor.

### 2.2 Time Management

Time management is a vital scope in a person life. If a person unable to manage his time well, his work will be delayed and his life will be stressful. So, it is important for everyone to manage their time well. What people gain from time management, in essence, is not more time, but a better life (Britton \& Tesser, 1991; Misra \& McKean, 2000).

It is a fact that everyone has the same 24 hours a day. So, it is up to them how to manage their time. Time management is a priority-based structuring of
time allocation and distribution among competing demands since time cannot be stored, and its availability can neither be increased beyond nor decrease from the 24 hours. (Aduke, A. F., 2015).

Especially the students, they really have to ensure their time is manageable. They need to balance their time for both academic life and social life. If they unable to spend enough time to study, their academic performance could be affected and their GPA will be dropped. The academic performance of a student in any semester is measured with the grade point average (G.P.A). One of the possibility reason GPA is usually dropped, is because they unable to organize their study life properly. GPA is an up-to-date weighted mean of the grade points, where the weights are the course credit units (Nnamdi Azikiwe University Academic Programme, 2010).

And simultaneously, if the academic performance is not good, it would also affect their social life. They may be do not even have sufficient time to mingle with their friends and family since they have to allocate more time to study. This is because, study is the students' priority. Balduf, (2009) recognized that poor time management can contribute to academic underachievement, and effective time management can contribute to higher levels of college achievement (Britton \& Tesser, 1991). Britton and Tesser (1991) found that $67 \%$ of undergraduate students identified time management as their most pressing problem.

From the past study, both Britton and Tesser (1991) and Macan, et al. 1990 report that a student's ability to manage their time successfully and productively is clearly related to academic performance - the better a student's time management, the better their grades.

H1: There is a significant relationship between time management and academic performance.

### 2.3 Stress

In recent day, so many cases connected to the students' commits suicide due to stress. One of the cases is reported in the Sin Chew Daily titled '20-YearOld TARUC Student Commits Suicide Due to Stress from Work and Studies.

According to this article, the student named Wong commit suicide because she felt so depressed and there so much pressure from life and studies for her to handle. This never-ending problems in life have caused her to lose hope in life. According to another case reported in Berita Awani, titled 'It's stressful being a student these days', the students are feeling pressure because of the high expectations from their parents, and even from the society on their academic achievement. Just because they unable to fulfil the expectation, instead of study harder, many of them choose to commit suicide since they see it is an easy way to way out from their misery.

When stress is perceived negatively or becomes excessive, it can affect both health and academic performance (Campbell \& Svenson, 1992). Students whom take the decision to commit suicide mostly because they do not have any person close to them to listen to them and to advise them.

H2: There is a significant relationship between stress and academic performance.

### 2.4 Self-efficacy

According to Hills (2002), self-efficacy means believing one's capabilities for learning and performance, which is a key of attribution for the academic success of university students. A person who has high in self-efficacy attempt challenging tasks, persistence on doing the task, and need more effort.

Schunk and Zimmerman (1994, cited by Mousoulides \& Philippou, 2005) reported that there was a positive relationship between self-efficacy and academic achievement and that if students are trained to have higher self-efficacy beliefs their academic performance also improves. Most researchers examining the relationship between self-efficacy and performance have testified a strong correspondence (Pajares and Miller, 1994).

Students with strong senses of self-efficacy tendency involve in challenging tasks, investing more effort and persistence, and showing outstanding
academic performance in comparison with students who lack such confidence (Bong, 2001, cited by Nasiriyan, Azar, Noruzy, Dalvand, 2011).

A study has been done by Meral, M., Colak, E., \& Zereyak, E. (2012), there has significant correlation shows that the self-efficacy is an important variable on students' academic performance which is effects their academic performance positively.

H3: There is a significant relationship between self-efficacy and academic performance.

Motivation

Motivation is state of mind that motivates human body actions. As stated by Brophy (1986), motivation means an ability to acquire general experience but motivated most directly through role model, communication of expectations and direct instruction or socialization by other like parents and teachers.

Motivation is also one of the factors which affect a student' study life. If a student do not have enough motivation, they unable to persist in their study and will lead to many bad consequences. Bomia et al. (1997) has suggested student motivation as student willingness, need, desire and obligation to participate and be booming in the learning process. In order to keep a student motivated, it is important for especially parents and friends, to always inspiring the student.

A study on student motivation and its impact on student academic performance has been done by Afzal, H., Ali, I., Aslam Khan, M., \& Hamid, K. (2010). It is shown that, there is relationship between academic performance and motivation among students. According to this study, student performance will increase between 23 percent and 34 percent due to extrinsic and instrinsic motivation. In summary, motivational factors are one of the factors that effects academic performance. According to Masitsa (2008), student motivation is a prerequisite of academic performance.

H4: There is a significant relationship between motivation and academic performance.

### 2.6 Theoretical framework

The research framework is developed based on the collections of previous literature on the factors affecting academic performance. The framework for this study identifies four factors as independent variables based on previous literature. They consist of time management factor, stress factor, self-efficacy factor and motivation factor which are related to the academic performance of student as an outcome variable. These variable will be applied in the current study on college students in Kota Bharu.

Based on the supporting journals and literature in previous study, so the research framework is developed accordingly as shown in Figure 2.1.

Figure 2.1: Research framework of factors affecting academic performance


### 2.7 Conclusion

As a whole, in this chapter the researcher discussed the literature review of all dependent and independent variables for current study supported by the previous studies. For the next chapter on this study, the researcher will present the methodology used.

## CHAPTER 3

## RESEARCH METHODOLOGY

### 3.0 Introduction

This chapter presents the research methodology to be used in this research. Collis and Hussey (2009) identified methodology as the "overall approach to the entire process of the research study". This chapter starts with the explanation of the structure to be used in this research in the research design. Then, followed by research method used in this research. Under research method, the survey method, sample size will also be discussed. Afterward, under questionnaire development, the process of developing questionnaire will be explained. The measurement items, research framework and pilot testing will also be elaborated under questionnaire development. Last part in this chapter the data analysis technique and statistical analysis used in this research will be discussed.

### 3.1 Research design

According to Leedy (1997:195), research design is a plan for a study, providing the overall framework for collecting data. To ensure the fulfilment of the goals and objectives of the study, the research design have to be applied so that suitable research methods will be used. Research design is a strategic framework for action that serves as a bridge between research questions and the
implementation of the research strategy (Durrheim, 2004:29). The researcher is using the research plan to ensure their research keeps going as planned.

This research plan involves three 3 phases which are design phase, data collection phase and data analysis phase. A literature review on the dependent variable which is academic performance and its relationship with independent variables which are, stress management, time management, self-efficacy and motivation has been conducted to identify the research gap, research questions and objectives as the basis for performing this research. Then, four hypothesis have been proposed based on the development of research framework from the previous literatures. The research method selected for this research is survey method since this research has adopted quantitative type of research. The sample size was determined based on the Krejcie and Morgan's sample size determination table. For this research, the sample of 361 was sufficient.

The next phase was the data collection phase whereby this research has conducted a pilot study in order to examine the validity and reliability of the questionnaire proposed. Once the questionnaire was validated, the data collection process was conducted. The questionnaire has been produced via Google Form application and also been printed to be blasted and distributed to the target respondents. The researcher has chosen to distribute the link of the questionnaire only via WhatsApp social messaging application since it is more convenient and focus because the researcher can distribute the questionnaire directly to the target respondents.

As a result, a total of 430 completed questionnaire were acquired. However, in order to get the most valid and reliable data, a data cleansing exercise was conducted to drop those respondents that have not answered the questions appropriately. After data cleansing, 361 respondents has been selected which is enough as required by the Krejcie and Morgan sample size determination.

The process then moved to the last phase which is the data analysis phase. The data was analyzed using IBM SPSS Statistic version 20 software and the analysis includes descriptive analysis, correlation analysis and regression analysis. The outcome of this plan enabled this research to answer the research questions and achieved its objectives.

### 3.2 Research method

Research method or techniques are mainly used to gather information so that the researchers can answer the research questions. (Saunders et al., 2009). There are various types of research methods such as survey, experiments, case studies, observations and interviews. But, according to Collis and Hussey (2014), research methods that suitable for qualitative research includes surveys and experimental studies. Based on that, thus the survey method is selected to be used as research method for this research.

### 3.2.1 Survey Method

Surveys method is regarded as an accurate method to gather information of the samples and able to facilitate in the generalization of research findings to represent the population (Cresswell, 2003). It is an economical method of large data collection from a bigger population which it has larger control over the process of research. Hence, in order to collect to collect a large collection of data, surveys are the most suitable method since it is cost-effective, fast and efficient to collect data from a large sample size (Collis \& Hussey, 2014).

### 3.2.2 Sample Size

The sample size for this research is 361 . It is determined based on Krejcie and Morgan table. According to this table, if the population is 6000 , thus the sample size should be 361 . The data collected are more than that which is 430 , however, after conducting data cleansing exercise, only 361 completed questionnaire has been used.

Table 3.1: Table for determining sample size of a known population

| Table for Determining Sample Size of a Known Population |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | S | N | S | N | S | N | S | N | S |
| 10 | 10 | 100 | 80 | 280 | 162 | 800 | 260 | 2800 | 338 |
| 15 | 14 | 110 | 86 | 290 | 165 | 850 | 265 | 3000 | 341 |
| 20 | 19 | 120 | 92 | 300 | 169 | 900 | 269 | 3500 | 346 |
| 25 | 24 | 130 | 97 | 320 | 175 | 950 | 274 | 4000 | 351 |
| 30 | 28 | 140 | 103 | 340 | 181 | 1000 | 278 | 4500 | 354 |
| 35 | 32 | 150 | 108 | 360 | 186 | 1100 | 285 | 5000 | 357 |
| 40 | 36 | 160 | 113 | 380 | 191 | 1200 | 291 | 6000 | 361 |
| 45 | 40 | 170 | 118 | 400 | 196 | 1300 | 297 | 7000 | 364 |
| 50 | 44 | 180 | 123 | 420 | 201 | 1400 | 302 | 8000 | 367 |
| 55 | 48 | 190 | 127 | 440 | 205 | 1500 | 306 | 9000 | 368 |
| 60 | 52 | 200 | 132 | 460 | 210 | 1600 | 310 | 10000 | 370 |
| 65 | 56 | 210 | 136 | 480 | 214 | 1700 | 313 | 15000 | 375 |
| 70 | 59 | 220 | 140 | 500 | 217 | 1800 | 317 | 20000 | 377 |
| 75 | 63 | 230 | 144 | 550 | 226 | 1900 | 320 | 30000 | 379 |
| 80 | 66 | 240 | 148 | 600 | 234 | 2000 | 322 | 40000 | 380 |
| 85 | 70 | 250 | 152 | 650 | 242 | 2200 | 327 | 50000 | 381 |
| 90 | 73 | 260 | 155 | 700 | 248 | 2400 | 331 | 75000 | 382 |
| 95 | 76 | 270 | 159 | 750 | 254 | 2600 | 335 | 1000000 | 384 |
| Note: $N$ is Population Size; S is Sample Size Source: Krejcie \& Morgan, 1970 |  |  |  |  |  |  |  |  |  |

Source: Adapted from (Krejcie and Morgan, 1970)

### 3.3 Questionnaire Development

The questionnaire is commonly used as data collection method as it is simple and easy to construct. In addition, compared to another method such as interviews, the questionnaire is more practical since it can be sent to hundreds respondents in a shorter time and it is also low-cost. This research has chosen both internet-based and printed-based format to distribute the questionnaire.

The printed-based has been chosen because it is easier to acquire the respondents which is we know personally. For this research, this printed-based questionnaire has been distributed only in certain place. The respondents was given a specific time to answer the questionnaire. The respondents was also allowed to ask the question directly to the researcher regarding to the questionnaire. Thus, by using this type of format, the researcher able to get the accurate answers from the respondents.

The internet-based was chosen because it is much easier, practical and economical than printed-based. For this research, the researcher was produced the questionnaire link through Google Form application.

In developing the questionnaire, the researcher must be careful especially on the constructing the sentences and sequences of the questions. According to Saunders et al. (2012), it is important to carefully examine the design of the questionnaire as it will have an impact in the response rate as well as on the data reliability and validity. Other than that, the researcher must be cautious in choosing the question wording and font. It must be clear and understandable by the respondents.

In this research, the researcher used the Likert scales (Bryman \& Bell, 2007) to rate the questions in order to obtain respondent's opinion. The Likert scale which has been used consists of five point scales starting with number $1=$ strongly disagree, $2=$ disagree, $3=$ undecided, $4=$ agree and $5=$ strongly agree.

### 3.3.1 Measurements

The measurement items for this research are adapted from the wideranging of literature review and other validated constructs. The advantage of using established scales and validated instruments are the validity and reliability of the instruments have been proven and the other one is a comparison can be made between current and previous research. (Kitchenham and Pfleeger, 2002).

The questionnaire for this research has been designed in five parts:
Part 1: Demographics
It would consists of personal information and demographic profiles of respondents such as, gender, age, races, status, study status, grade point average (GPA), students preferred delivery mode of study and several open-ended questions regarding to students social life.

Part 2: Time Management
The questions from this part has been adapted from Neills's (2016) University Student Satisfaction and Time Management Questionnaire version 9 (TUSSTMQ9). It consists of 10 questions using five-point rating scale.

## Part 3: Perceived Stress Scale (PSS)

The questions has been adapted from work by Sheldon Cohen. It consist of 10 questions focusing on the second independent variable which is asking about feelings and thoughts since starting college course.

Part 4: The Self - Efficacy
The questions is developed in 2015 by Research Collaboration. It consist of 10 questions focusing on the third independent variable which is asking about students' self-efficacy.

Part 5: Motivation
The questions has been adapted from Neills's (2004) University Student Motivation and Satisfaction Questionnaire version 2 (TUSMSQ2). It consist of 10 questions focusing on the fourth independent variable which is concentrating in measuring both intrinsic and extrinsic motivation of students.

### 3.3.2 Research Framework

The framework of this research which is can be referred on the figure 2.1, this study underlines the relationship between students' academic performance which is measured by using their grade point average (GPA) and its determinant factors: time management, stress management, self-efficacy and motivation.

The development of the research framework is supported by the previous studies and literature review in Chapter 2, which show there is interrelation between the dependent variable of students' academic performance and independent variables of time management, stress management, self-efficacy and motivation.

### 3.3.3 Pilot Testing

Before distributing and using the questionnaire for data collection, it is important for the questionnaire to be tested. The purpose of the pilot test is to clarify the questionnaire so that the respondents will not have any problems to answer the questions and there will be not problems in recording the data.

For this research, 30 printed-based format of questionnaire has been distributed to a group of target respondents. Based on the feedbacks, all respondents able to understand and answer the questions within 5-8 minutes. The collected data then were used to test the validity and reliability using IBM SPSS Statistic version 20. The common method used to measure the reliability and validity of the questionnaire is known as Cronbach's Alpha.

Table 3.2: Rule of Thumb of Cronbach's Alpha Coefficient

| Cronbach's Alpha coefficient range | Strength of association |
| :---: | :---: |
| $\boldsymbol{\alpha}>\mathbf{0} .9$ | Excellent |
| $0.7<\boldsymbol{\alpha}<\mathbf{0 . 9}$ | Good |
| $0.6<\boldsymbol{\alpha}<\mathbf{0 . 7}$ | Acceptable |
| $\mathbf{0 . 5}<\boldsymbol{\alpha}<\mathbf{0 . 6}$ | Poor |
| $\boldsymbol{\alpha}<\mathbf{0 . 5}$ | Unacceptable |

According to the rule of thumb for Cronbach's Alpha coefficient value in table 3.2, a value of 0.5 or less indicates poor reliability and internal consistency. A Cronbach's Alpha value which is 0.9 and more indicates the highest degree of reliability and consistency. Based on the reliability test conducted on the questionnaire during the pilot test, the Cronbach's Alpha value indicates the reliability and internal consistency of the questionnaire is good with the value of 0.863

## Reliability Statistics

| Cronbach's Alpha | N of Items |
| :---: | :---: |
| .863 | 41 |

### 3.4 Data Analysis

The data analysis process begins with data cleaning to ensure all the data collections are reliable and valid. Then, descriptive analysis was conducted based on the data collected. The reliability test was carried out to ensure the satisfactory internal consistency, reliability and validity. Other than reliability test, another statistical analysis such as Pearson correlation analysis and regression analysis also has been conducted. The analysis was conducted using IBM Statistical Package for Social Science (SPSS) version 20.

### 3.4.1 Descriptive Analysis

According to Yogesh (2006), descriptive statistical analysis usually dealing with a numerical description that provide valuable information about the character of a certain group of respondents. The descriptive analysis conducted in this research determine the mean score for every questions in every parts.

### 3.4.2 Reliability Test

In this research, the researcher has conducted the reliability test to ensure the consistency of measurement items. Through reliability test, the researcher able to know whether to proceed or not the test, through readings of Cronbach's Alpha. According to Sekaran (2010), the higher the Cronbach's Alpha value, the more reliable the measurement items.

### 3.4.3 Pearson Correlation Analysis

Correlation analysis is a method of statistical analysis to study the strength of a connection between two or more numerical variables. By conducting the correlation analysis the researcher able to see if there is any possible relationship between independent variables and dependent variable related in this research. The independent variables in this research are time management, stress management, self-efficacy and motivation, while dependent variable for this study is academic performance of college students.

Table below shows the correlation coefficient table which is used as a guideline in determining the relationship strength.

Table 3.3: Correlation Coefficient

| Range | Strength |
| :---: | :---: |
| $\mathbf{0 . 0 0}-\mathbf{0 . 1 9}$ | Very weak |
| $\mathbf{0 . 2 0}-\mathbf{0 . 3 9}$ | Weak |
| $\mathbf{0 . 4 0}-\mathbf{0 . 5 9}$ | Moderate |
| $\mathbf{0 . 6 0}-\mathbf{0 . 7 9}$ | Strong |
| $\mathbf{0 . 8 0}-\mathbf{1 . 0}$ | Very strong |

(Source: Beldjazia \& Alatou, 2016)

### 3.4.4 Regression Analysis

Regression analysis is used to estimate the value of one variable based on the value of the other variable (Singh, 2007). According to Malhotra (2010), regression analysis is used to investigate and determine the significance and the strength of association relationship between a dependent variable and one or more independent variables based on beta value.

### 3.5 Conclusion

In general, in this chapter the methodology to be used in this research has been discussed. Thus, for the next chapter, the survey result obtained from respondents will be analyzed by using Statistical Package for Social Sciences (SPSS) program. Then, the result from this program will be discussed.


## CHAPTER 4

## DATA ANALYSIS AND FINDINGS

4.0 Introduction

This chapter presents the data analysis that has been conducted in this research as well as the findings of the analysis. Before proceeding to the analysis of data, the data cleaning was carried out and there were no missing data. Then, after the data cleaning process, the reliability test was conducted in order to test the reliability of the measurement items. After the data was believed as reliable based on the overall reliability test coefficient alpha which indicates a good reliability with 0.863 .

Then, descriptive analysis has been conducted which describes the samples based on their demographic profiles. Afterwards, the mean score has been conducted in order to determine the mean score for each observed variables.

Then, the analysis process proceeded to the next analysis, which is to examine the correlation coefficient of each independent variable to the dependent variable. The last analysis conducted in this research was the regression analysis which is to determine and examine which factor is the most important amongst all factors that affecting academic performance of college students.

All data were obtained from online questionnaire by Google For. As a result, there are 361 respondents answered the questionnaire.

### 4.1 Descriptive Analysis

Descriptive analysis is an analysis that summarized all data collection with clear and reasonable technique through numerical and graphic procedures. For this research, frequency and percentage were used to describe demographic profiles of the respondents.

According to Neuman (2014), by using frequency distribution, it is easier to describe the numerical data of one variable.

### 4.1.1 Demographic Characteristic of Respondents

A total of 361 respondents responded to researcher. Demographic analysis result was shown as below:

Table 4.1: Gender

|  |  | Frequency | Percent |
| :---: | :---: | :---: | :---: |
| Valid | Female | 258 | 71.5 |
|  | Male | 103 | 28.5 |
|  | Total | 361 | 100.0 |

Table 10 shows the frequencies of respondents' gender. Frequency for the female is the highest which is $71.5 \%$ with 258 respondents compared to male which is only $28.5 \%$ with 103 respondents.

Table 4.2: Age

|  | Frequency | Percent |  |
| :--- | :--- | :---: | :---: |
| Valid | Below 25 years old | 313 | 86.7 |
|  | $25-30$ years old | 30 | 8.3 |
|  | Above 30 years old | 18 | 5.0 |
|  | Total | 361 | 100.0 |

In terms of age, the majority of the respondents are below 25 years old which a percentage of $86.7 \%$ with 313 respondents. Then followed by the respondents who are in the age of 25 to 30 years old at $8.3 \%$ with 30 respondents only. And the least respondents are above 30 years old, which is only $5.0 \%$ with 18 respondents.

Table 4.3: Race

|  | Frequency | Percent |  |
| :---: | :---: | :---: | :---: |
| Valid | Malay | 330 | 91.4 |
|  | Chinese | 21 | 5.8 |
|  | Indian | 10 | 2.8 |
|  | 361 | 100.0 |  |

The table above (table 4.3) show the race of the respondents. Majority of the respondents are Malay with percentage of $91.4 \%$ with 330 respondents. Then, followed by Chinese which is only $5.8 \%$ with total frequency of 21 respondents. And lastly 10 respondents who answered the questionnaire is from race of Indian with percentage of $2.8 \%$.

Table 4.4: Status

|  | Frequency | Percent |  |
| :---: | :---: | :---: | :---: |
| Valid | Single | 318 | 88.1 |
|  | Married | 43 | 11.9 |
|  | Total | 361 | 100.0 |

Table 4.4 shows status of the respondents. Most of the respondents which are 318 respondents are single with percentage of $88.1 \%$. And, about 43 respondents with percentage of $11.9 \%$ are married.

Table 4.5: Study Status

|  |  | Frequency | Percent |
| :---: | :---: | :---: | :---: |
| Valid | Full-time | 352 | 97.5 |
|  | Part-time | 9 | 2.5 |
|  | Total | 361 | 100.0 |

The table above shows the study status of the respondents. Majority of the respondents are full-time students ( 352 respondents) with percentage of $97.5 \%$. Least of respondents are part - time students which is only 9 respondents with percentage of $2.5 \%$.

Table 4.6: GPA

|  | Frequency | Percent |
| :---: | :---: | :---: |
| 2.80 | 10 | 2.8 |
| 2.90 | 14 | 3.9 |
| 3.00 | 35 | 9.7 |
| 3.10 | 32 | 8.9 |
| 3.20 | 46 | 12.7 |
| 3.30 | 38 | 10.5 |
| Valid | 3.40 | 30 |
| 3.50 | 50 | 13.9 |
|  | 3.60 | 21 |
| 3.70 | 19 | 5.8 |
| 3.80 | 38 | 10.5 |
| 3.90 | 18 | 5.0 |
| 4.00 | 10 | 2.8 |
| Total | 361 | 100.0 |

The table above shows the grade point average of college students in Kota Bharu. Majority of students get 3.50 above with the highest frequency of 50 respondents for grade point average (GPA) 3.50 with percentage of $13.9 \%$. And only minority students get both 4.00 and 2.80 (GPA) with the frequency of 10 respondents with percentage of $2.8 \%$.

Table 4.7: Delivery mode

|  | Frequency | Percent |
| :---: | :---: | :---: |
| Valid | Face to face | 234 |
|  |  |  |
|  | Online | 17 |
|  |  |  |
|  | Intensive | 16 |
| 4.4 |  |  |
|  | Flexible | 84 |
| Self-paced | 10 | 23.3 |
| Total | 361 | 100.0 |

According to table 4.7, majority of students (234 respondents) are preferred to study in face to face mode with percentage of $64.8 \%$. And self-paced mode was the less chosen by the students (10 respondents) with percentage of $2.8 \%$.

Table 4.8: In classes

|  | Frequency | Percent |
| :---: | :---: | :---: |
|  | 4.00 | 43 |
| 11.9 |  |  |
| 6.00 | 62 | 17.2 |
| Valid | 7.00 | 17 |
| 4.00 | 33 | 9.1 |
|  | 10.00 | 12 |
|  | 12.00 | 35 |
|  | 14.00 | 51 |
| 15.00 | 72 | 9.7 |
|  | 16.00 | 36 |
| Total | 361 | 14.1 |
|  |  | 10.9 |
|  |  | 100.0 |

From the table 4.8 , majority of students ( 72 respondents) chose the average of time in classes is 15 hours. The percentage is $19.9 \%$. The choice of respondents is varies, which may because of status of study and semester of study.

## Table 4.9: Sleeping

|  | Frequency | Percent |
| :---: | :---: | :---: |
| 4.00 | 30 | 8.3 |
| Valid | 6.00 | 73 |
|  | 7.00 | 118 |
|  | 8.00 | 140 |
| Total | 361 | 32.7 |
|  |  | 100.0 |

From the table above, majority of students (140 respondents) with percentage of $38.8 \%$ chose 8 hours of their time for sleeping. And only minority of students ( 30 respondents) with percentage of $8.3 \%$ chose only 4 hours as for their time for sleeping.

Table 4.10: Studying outside classes

|  |  | Frequency | Percent |
| :---: | :---: | :---: | :---: |
| Valid | . 00 | 29 | 8.0 |
|  | 1.00 | 45 | 12.5 |
|  | 2.00 | 187 | 51.8 |
|  | 3.00 | 9 | 2.5 |
|  | 4.00 | 28 | 7.8 |
|  | 5.00 | 12 | 3.3 |
|  | 6.00 | 28 | 7.8 |
|  | 7.00 | 23 | 6.4 |
|  | Total | 361 | 100.0 |

Table 4.10 shows the frequency of students studying outside classes. Majority of students ( 187 respondents with percentage of 51.8 ) only spend two hours in average for studying outside classes. Less students (9 respondents with percentage of $2.5 \%$ ) chose three hours for their time of studying outside classes.


Table 4.11: Socializing

|  | Frequency | Percent |
| :---: | :---: | :---: |
| 1.00 | 12 | 3.3 |
| 2.00 | 45 | 12.5 |
| 4.00 | 78 | 21.6 |
| 5.00 | 51 | 14.1 |
| Valid | 3.00 | 37 |
| 8.00 | 10 | 10.2 |
| 9.00 | 10 | 2.8 |
| 10.00 | 63 | 2.8 |
| 12.00 | 41 | 17.5 |
| 24.00 | 14 | 11.4 |
| Total | 361 | 100.0 |

Table above (4.11) shows the time students socializing with their family and friends. Most of students (78 respondents with percentage of $21.6 \%$ ) spend four hours with their family and friends on average in a week. The results is scattered since the question are an open-ended question. The subject taken and whether the students live in campus or out campus is also can be a reason why the result is dispersed enough.

Table 4.12: Recreation and sport

|  | Frequency | Percent |
| :---: | :---: | :---: |
| 1.00 | 49 | 13.6 |
| 2.00 | 164 | 45.4 |
| 3.00 | 17 | 4.7 |
| 4.00 | 8 | 2.2 |
| 5.00 | 26 | 7.2 |
| Valid | 17 | 4.7 |
|  | 7.00 | 21 |
| 8.00 | 10 | 5.8 |
| 9.00 | 10 | 2.8 |
| 10.00 | 30 | 2.8 |
| 20.00 | 9 | 8.3 |
| Total | 361 | 2.5 |
|  |  | 100.0 |

From the table above, we can see that majority of students (164 respondents with percentage of $45.4 \%$ ) spend their time for recreation and sport. Most of students do not spend so much time for recreation and sports, but they still do since by playing sport and spending time for recreation can improve their health.

### 4.1.2 Mean Score Analysis

The mean score determined for every section of independent and dependent variables conducted in order to obtain the mean score of each items.

Table 4.13: Descriptive Statistical for Time Management

|  | N | Mean | Std. Deviation |
| :---: | :---: | :---: | :---: |
| TM1 | 361 | 2.7479 | 1.52940 |
| TM2 | 361 | 2.6454 | 1.62328 |
| TM3 | 361 | 3.2327 | 1.52976 |
| TM4 | 361 | 2.8643 | 1.61791 |
| TM5 | 361 | 2.8338 | 1.61248 |
| TM6 | 361 | 3.2715 | 1.55581 |
| TM7 | 361 | 2.8033 | 1.66753 |
| TM8 | 361 | 3.3629 | 1.70901 |
| TM9 | 361 | 2.7091 | 1.63338 |
| TM10 | 361 | 2.6122 | 1.46601 |
| Total | 361 | 2.9083 | 1.59446 |

Table 4.13 shows descriptive statistical for first factor which is time management with total mean scored 2.9083 and standard deviation is 1.70901 . The highest mean is 3.363 which is question number 8 labeled as TM8, "I find myself procrastinating over tasks that need to be done. The lowest scored for mean is 2.6122 which question number 10 labeled as TM10, "I balance work, rest and play".

Table 4.14: Descriptive Statistical for Stress

|  | N | Mean | Std. Deviation |
| :---: | :---: | :---: | :---: |
| PSS1 | 361 | 2.8920 | 1.64045 |
| PSS2 | 361 | 2.7701 | 1.62781 |
| PSS3 | 361 | 2.7839 | 1.62202 |
| PSS4 | 361 | 2.8144 | 1.59214 |
| PSS5 | 361 | 2.7812 | 1.69453 |
| PSS6 | 361 | 2.7147 | 1.59305 |
| PSS7 | 361 | 2.6981 | 1.63137 |
| PSS8 | 361 | 2.7341 | 1.66038 |
| PSS9 | 361 | 3.2521 | 1.76231 |
| PSS10 | 361 | 3.2188 | 1.66142 |
| Total | 361 | 2.8659 | 1.48241 |
|  |  |  |  |

Table 4.14 shows descriptive statistical for second factor which is stress with total mean of 2.8659 and standard deviation is 1.48241 . The highest mean is 3.2521 for question number 9 labeled as PSS9 which is "been angered because of things that were outside of your control". The lowest scored for mean is 2.6981 for question number 7 labeled as PSS7, "been able to control irritations in your life".

Table 4.15: Descriptive Statistical for Self-Efficacy

|  | N | Mean | Std. Deviation |
| :---: | :---: | :---: | :---: |
| SE1 | 361 | 2.7590 | 1.74963 |
| SE2 | 361 | 2.7258 | 1.66821 |
| SE3 | 361 | 2.7618 | 1.58247 |
| SE4 | 361 | 2.7701 | 1.62781 |
| SE5 | 361 | 2.8006 | 1.65969 |
| SE6 | 361 | 2.9197 | 1.53539 |
| SE7 | 361 | 2.7424 | 1.60817 |
| SE8 | 361 | 2.5402 | 1.66639 |
| SE9 | 361 | 2.5817 | 1.63286 |
| SE10 | 361 | 2.7867 | 1.70992 |
| Total | 361 | 2.7388 | 1.64405 |
|  |  |  |  |

Table 4.15 shows descriptive statistical for third factor which is selfefficacy. The total mean is 2.7388 and standard deviation is 1.64405 . The highest mean is 2.9197 which is question number 6 labeled as SE6, "When I'm struggling to accomplish something difficult, I focus on my progress instead of feeling discouraged". The lowest scored for mean is 2.5402 which is question number 8 , labeled as SE8, "I believe hard work pays off".

Table 4.16: Descriptive Statistical for Motivation

|  | N | Mean | Std. Deviation |
| :---: | :---: | :---: | :---: |
| M1 | 361 | 3.1219 | 1.67385 |
| M2 | 361 | 2.6787 | 1.73903 |
| M3 | 361 | 2.5983 | 1.65560 |
| M4 | 361 | 2.5956 | 1.44237 |
| M5 | 361 | 2.8061 | 1.39087 |
| M6 | 361 | 2.7285 | 1.57885 |
| M7 | 361 | 2.7064 | 1.63544 |
| M8 | 361 | 2.6814 | 1.55846 |
| M9 | 361 | 2.6787 | 1.63531 |
| M10 | 361 | 3.2244 | 1.40912 |
| Total | 361 | 2.7820 | 1.57189 |

For Table 4.16, it shows the descriptive statistical for fourth factors which is motivation. Total mean is 2.7820 and standard deviation is 1.57189. The highest mean is 3.2244 for question number 1 which is labeled as M1, "because I don't know what else to do". The lowest scored for mean is 2.5956 which is for question number 4 labeled as M4, "because it's fun place to be".

### 4.1.3 Pearson's Correlation

The correlation analysis in this study is to examine the relationship between the independent variables and dependent variable related in this study. The independent variables for this study are time management, stress, self-efficacy and motivation, whereas, the dependent variable for this study is academic performance which is measured by grade point average (GPA).

Table 4.17: Correlations Time Management and GPA

|  |  | GPA | MeanTM |
| :--- | :--- | :---: | :---: |
| GPA | Pearson Correlation | 1 | $.803^{* *}$ |
|  | Sig. (2-tailed) |  | .000 |
|  | N | 361 | 361 |
|  | Pearson Correlation | $.803^{* *}$ | 1 |
|  | Sig. (2-tailed) | .000 |  |
|  | N | 361 | 361 |
| **. Correlation is significant at the 0.01 level (2-tailed). |  |  |  |

First Hypothesis
Hypothesis 1: There is a significant relationship between time management and academic performance of college students in Kota Bharu.

P -value is $0.000(<0.05)$ we reject H 0 . We conclude that time management significantly influence academic performance of students. Further analysis shows that correlation coefficient is 0.803 which indicates very strong relationship between time management and academic performance of students which is measured by using grade point average (GPA).

Table 4.18: Correlations Stress and GPA

|  |  | GPA | MeanPSS |
| :--- | :---: | :---: | :---: |
| GPA | Pearson Correlation | 1 | $.770^{* *}$ |
|  | Sig. (2-tailed) |  | .000 |
|  | N | 361 | 361 |
|  | Pearson Correlation | $.770^{* *}$ | 1 |
|  | Sig. (2-tailed) | .000 | 361 |
|  | N |  | 361 |

## Second Hypothesis

Hypothesis 2: There is a significant relationship between stress and academic performance of college students in Kota Bharu

P-value is 0.000 (<0.05) we reject H 0 . We conclude that stress significantly influence academic performance of students. Further analysis shows
that correlation coefficient is 0.770 which indicates strong relationship between stress and academic performance of students which is measured by using grade point average (GPA).

Table 4.19: Correlations Self-Efficacy and GPA

| GPA |  | Pearson Correlation | 1 |
| :--- | :--- | :---: | :---: |
| GPA | MeanSE |  |  |
|  | Sig. (2-tailed) |  | $.789^{* *}$ |
|  | N | 361 | .000 |
| MeanSE | Pearson Correlation | $.789^{* *}$ | 361 |
|  | Sig. (2-tailed) | .000 | 1 |
|  | N | 361 | 361 |
| $*$ |  |  |  |

## Third Hypothesis

Hypothesis 3: There is a significant relationship between self-efficacy and academic performance of college students in Kota Bharu.

P-value is $0.000(<0.05)$ we reject H 0 . We conclude that self-efficacy significantly influence academic performance of students. Further analysis shows that correlation coefficient is 0.789 which indicates strong relationship between
self-efficacy and academic performance of students which is measured by using grade point average (GPA).

Table 4.20: Correlations Motivation and GPA

|  |  | GPA | MeanM |
| :--- | :--- | :---: | :---: |
| GPA | Pearson Correlation | 1 | $.763^{* *}$ |
|  | Sig. (2-tailed) |  | .000 |
|  | N | 361 | 361 |
|  | Pearson Correlation | $.763^{* *}$ | 1 |
|  | Sig. (2-tailed) | .000 |  |
|  | N | 361 | 361 |
| **. Correlation is significant at the 0.01 level (2-tailed). |  |  |  |

## Fourth Hypothesis

Hypothesis 4: There is a significant relationship between motivation and academic performance of college students in Kota Bharu.

P-value is $0.000(<0.05)$ we reject H 0 . We conclude that motivation significantly influence academic performance of students. Further analysis shows that correlation coefficient is 0.763 which indicates strong relationship between motivation and academic performance of students which is measured by using grade point average (GPA).

### 4.1.4 Regression Analysis

Regression analysis is used to examine the strength and significance of an association relationship between a metric dependent variable and one or more independent variables that will be indicated by the Beta value (Malhotra, 2010). The indicator to measure the strength of the association among variables is indicates by the coefficient of determination, $\mathrm{R}^{2}$.

Table 4.21: R Square ( $\mathrm{R}^{2}$ )

| Model Summary |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| 1 | $.810^{\mathrm{a}}$ | .656 | .652 | .18386 |

This first part of the analysis is to assess the strength of association among the independent variables towards dependent variable. Table 4.21 shows that the linear regression test of the model which revealed that $\mathrm{r}^{2}$ of the research framework indicates 0.656 .

The value explains that $65.6 \%$ of the variance in the academic performance (dependable variable) has been significantly explained by the time management, stress, self-efficacy and motivation (independent variables).

Table 4.22: Regression Coefficients ${ }^{\text {a }}$

| Model |  | Unstandardized <br> Coefficients <br> B | Standardized <br> Coefficients <br> Beta | t | Sig. |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | (Constant) | 2.547 |  | 20.742 | .000 |
|  | MeanTM | .352 | .706 | 5.805 | .000 |
|  | MeanPSS | -.150 | -.450 | -2.496 | .013 |
|  | MeanSE | .133 | .669 | 3.202 | .001 |
|  | MeanM | -.042 | -.122 | -.943 | .346 |

a. Dependent Variable: GPA

Second part of the analysis is to examine the most important factor among time management, stress, self-efficacy and motivation towards academic performance of college students in Kota Bharu, Kelantan. Among all factors, time management has the highest Beta value in the standardized coefficient with 0.706 , meanwhile the Beta value for self-efficacy factor indicates 0.669 , then followed by motivation factor with -0.122 and lastly stress factor with -0.450 . The p -value indicates that out of four factors, time management, stress and self-efficacy have the significant result.

## Fifth Hypothesis

Hypothesis 5: The most important factor that effecting academic performance of college students in Kota Bharu is the time management.

### 4.2 Conclusion

This chapter discussed the result of analysis of the research using frequencies, descriptive analysis, Pearson correlation and linear regression. Thus, for next chapter, the finding, discussion and recommendation through the result analysis that has been obtain in this study will be discussed.


## CHAPTER 5

## DISCUSSION AND CONCLUSION

### 5.0 Introduction

This chapter is the last chapter of this study which will discuss the summary of the data analysis results the major findings, the discussion on research questions and objectives, the hypothesis validity, the implications of the research, and the limitation and future research. This chapter aims to provide a better understanding of the findings of this research.
5.1 Finding from the research

From the result of descriptive analysis in chapter 4 shown most of the respondents of this research are female with $71.5 \%$ of college students. The results also show that most of respondents are below 25 years old with percentage of 86.7\%. In fact, usually college students are around that age. Only a few students are 25 years and above. Majority college students in Kota Bharu are malay students which is $91.4 \%$. The results reflects the nature of population distribution in Kota Bharu Kelantan, which is mostly Malay people. Then, followed by Chinese students which is only $5.8 \%$ and the least is from Indian students which indicates $2.8 \%$ out of respondents.

In terms of status, since the respondents are mostly below 25 years old, thus most of the students are single which represents $88.1 \%$ of students. In addition, the study showed that majority of respondents are full-time students with percentage of $97.5 \%$ which may indicate that most of college around Kota Bharu mostly offer only full-time but rarely part -time based.

For the analysis of grade point average (GPA), which is a tool to measure academic performance, the study shows that majority of college students in Kota Bharu get GPA above 3.00. The highest is 3.50 of GPA with percentage of $13.9 \%$ which indicates as first class for certain colleges. It shows that, students whom come to study in college in Kota Bharu is really study hard and scored for their academic.

From the result also, we can see that most of respondents are prefer to study in face to face mode which may easier for them to ask the lecturer if they do not understand. College usually is not as big as university. So, it is not so hard for them to always consult with the lecturer. Most of respondents have answered that they spend about 15 hours in average in a week in classes. It indicates $19.9 \%$ of percentage. It shows that in a week, students most of the time are spending their time in classes and for study.

The result of data analysis shows that most of respondents was answered that they are spending their time about 8 hours with percentage of $38.8 \%$ for sleeping in average in a week. It is common and healthy for a student to get enough sleep since they need to always active in the next day. If a student does not have
enough sleep, it will lead to many bad consequences such as getting ill and cannot focus in classes because of tired and sleepy.

For the analysis of studying outside classes, the results shows that majority of respondents which are 187 respondents with percentage of $51.8 \%$ only spend two hours in average to study outside classes. It may because most of the time the students have already spent their time in classes. However, it depends on the course and total of subject that they take in a semester. If the students are taken many practical subjects, they will spend more time to study outside of classes.

According to the data analysis, most of respondents which is 78 respondents with percentage of $21.6 \%$ spending their time for four hours in average for a week. This is maybe because many students are staying in hostel than at home. So, they do not able to spend so long with family. Even though they are staying in hostel, but most of them cannot hang out too long with their friends since they have to focus on study.

From the result, we can see that not half of respondents are spending their time for recreation and sport which is the highest only 164 respondents with percentage of $45.4 \%$. It is a fact that most of college in Kota Bharu do not have their own field and recreation place. Thus, it is believe that these students do not make the recreation and sports as their priority in life.

Regarding to descriptive statistical of the independent variables, for time management the analysis shows that the highest mean is 3.363 which is referred to question "I find myself procrastinating over tasks that need to be done". It shows that, most of college students like to procrastinate on doing their tasks.

This result can lead to more bad consequences such as stress and declining move in their academic performance. It is proved when the last question which is "I balance work, rest and play" has the lowest score of mean. It shows that, most of respondents are not able to manage their time well.

For the analysis of descriptive statistical of second independent variable which is stress, the highest mean scored is 3.2521 for question "been angered because of things that were outside of your control". It shows that many students are unable to control their feeling which may lead to more unhealthy consequences.

The result of data analysis of descriptive statistical for third independent variable which is self-efficacy shows that the highest mean is 2.9197 which is for question "When I'm struggling to accomplish something difficult, I focus on my progress instead of feeling discouraged. It shows that the respondents have the high self-efficacy which is they are encouraged to do the task instead of complain and give up.

Regarding to last analysis for descriptive statistical which is for fourth independent variable, motivation. This analysis shows that the highest mean is 3.2244. It refers to question "because I don't know what else to do". Most of Sijil Pelajaran Malaysia (SPM) leavers who get good results will wait offer from university instead of registered for college.

Thus, for those who do not get places in university, may be the first one who are willing and interested to study and register at college since they do not have so many choices where to study and to go
5.1.1 Relationship between time management and academic performance of college students in Kota Bharu.

Based on the correlation analysis result shown in the table 4.17, it is indicates that time management and academic performance of college students in Kota Bharu has very strong correlation which is 0.803 .

According to Aduke, A. F. (2015), time management is a skill that that able to effect the students' academic performance. Thus, it is proved since from the current research it shown a very strong relationship which means the strudy reached the objective (01) that accepts the hypothesis (H1).
5.1.2 Relationship between stress and academic performance of college students in Kota Bharu.

Based on the correlation result between stress and academic performance in the table 4.18 shown the strong correlation which is 0.770 . That has been indicated by Beldjazia \& Alatou, (2016) with the result of finding it will fall in range of $0.60-0.79$. The result also shows the relation between stress and academic performance is significant with p -value is $0.000(\mathrm{p}<0.05)$.

Since most of questions stated in the questionnaire are positive questions, thus the relationship between stress and academic performance showed positive result. This result indicates that the study has reached the objective (02) that accepts the hypothesis (H2).

Stress is the third higher factor after time management and self-efficacy that affects academic performance. Normally, students will always face the stress only when they unable to handle their responsibilities. Once the students stress, they cannot have proper sleep and cannot study well. In sequence, their grade point average (GPA) may drop. Thus, students have to ensure they are able to control their stress.
5.1.3 Relationship between self-efficacy and academic performance of college students in Kota Bharu.

The result shown on the table 4.19 shows strong relationship if refer to correlation coefficient table (table 3.3). According to this table the result is in the range of $0.60-0.79$. The result of the relationship between self-efficacy and academic performance among college students in Kota Bharu is 0 . 789. The hypothesis (H3) is acceptable and it have strong relationship between self-efficacy and academic performance.

In addition, self-efficacy is the second factor that influence academic performance in current research. According to Bong (2001), students who have strong self-efficacy involve in exciting tasks, more persistence and get better academic performance. Since mean for self-efficacy is high, it is proved that, there is positive and strong relationship between self-efficacy and academic performance.
5.1.4 Relationship between motivation and academic performance of college students in Kota Bharu.

Based on the table 4.20, correlation result is 0.763 that show strong relationship between motivation and academic performance. And according to Beldjazia \& Alatou (2016), in the correlation coefficient table, show that the result is in the range of $0.60-0.79$ which indicates strong relationship.

This result is the answer for the question number 3 (Q3) of this study, which means there is strong relationship between motivation and academic performance of college students in Kota Bharu. It indicates the study has reached the objective (O3) and accepts the hypothesis (H3).

Although the result of correlation between motivation factor and academic performance has the lowest compared to time management factor, stress and selfefficacy, but the relationship between motivation and academic performance is significant.
5.1.5 The most important factor that affecting academic performance of college students in Kota Bharu.

Based on the result in the table 4.22, the most important factor that affecting academic performance of college students in Kota Bharu is time management with the highest standardized coefficients beta with 0.706 . As a result,
the research question number $5(\mathrm{Q} 5)$ is answered and the study also reached the objective (O5) and accepts the hypothesis (H5).

According to Aduke, A. F. (2015), grades usually depend on the completion of tasks including those need to be prioritized and have deadlines. The grades are determined by the effort of a person put to do their task. So, academic performance would be expected to be influenced by the time management.

Furthermore, we can see the significance of this factor as the most affecting factor that affects academic performance based on the result in the table 4.6 which indicates that majority of respondents chose 3.50 and above for their GPA. Thus, it shows the strong relationship between time management and academic performance and simultaneously as the most important factor that affecting academic performance of college students in Kota Bharu.
5.2 Recommendation and Implication of study

### 5.2.1 Theoretical Implication

In this theoretical point of view, the purpose of conducting this study is to understand more on the factors that affecting academic performance especially factors that use in current research which are time management, stress, selfefficacy and motivation. By knowing which factors that affecting most the academic performance, hopefully it can help the students to control the factors affecting their study and ensure that they able to study well and get better GPA.

### 5.2.2 Managerial Implication

From the result of this study, it easier to determine which institutions and supporters that can help the students to get good GPA for their study. The result of this study is not only affecting the students but also give influence to the education sectors, government, family and friends.

The researcher believe that, after identifying the relationship between the factors (time management, stress, self-efficacy and motivation) and academic performance, all the affecting people and institutions will joint hand to solve the current problems happening to the students.

## 1. Students

Since this research is conducting related to the academic performance, the one who are effected most is students. Student can help themselves by conducting their life well in which they must know which one is to prioritize and which one can do later. The students also have to help themselves by learning the stress management and discover the symptoms of stress which is can be found in terms of physiological, psychological and behavioral symptom of stress. If the students able to discover early, they can control better.

The students should spend some time to socialize with their family and friends in a week so that they can boost their motivation. Other than that, in a week, they should spend some time to playing sport so that they can get a quality
life. They can hold a program such as "Sport Day" in colleges to ensure all students involve in the sports.

The role and attitude of students is very important to ensure to ensure they are able to improve and consistent get the better GPA for their study. If they unable to helping themselves, there is no one able to help them.

## 2. Education institutions

Beside the students, the education institutions should support the students by improving the syllabus of study. The education sectors must ensure that the students can get better and balance life by following the improved syllabus of study. To avoiding the students to always facing the stress, the education institutions have to ensure that there have at least a counsellor in that college so that the stress students can refer to them.

In addition, education institutions can play the important role by conducting programs that related to their study which is able to attract the students to join and showing their skill and boost their confidence. For example, the education institutions can hold an "Entrepreneurship Day" for the business students which is they can apply what they study in the class in the practical way.

Besides, education institutions can create awareness about the important of study and ensure that the students aware that their main responsibility is to study and get a good GPA, but not to play and procrastinating the assignment and other work to do.
3. Family and friends

Family and friends also play the important role in supporting the students to get better academic performance. Family and friends is the closest person in a student life. And they able to influence the student to be a good or bad person. So, family and friends have to support the students by always motivating the students to consistently study and get better result in the exam.

Family especially the parents, need to play the role to encourage the students to study, and make sure that they settle down all the task before they hang out with their friends. Family also should check the performance of study of their children once a while. If they are consistently good, the parents may give this opportunity to give rewards to their children. If they are not perform good in their study, instead of giving punishment, the parents can advise the children to improve their performance.

Other that family, friends also one of the closest person in a student life. This is because, most of college students are staying at hostel and live far from their parents. So, their friends is seems to be a replacement for their family when they are in college. So, choosing a good friend is really important to ensure the students do not exposed to the social life.


### 5.3 Limitation of the research

### 5.3.1 Geographical Areas

As the scope of this research is only limited to the college around Kota Bharu, area, thus the measures of academic performance is only done for college students who studied in Kota Bharu. The future researcher may extend this research to the other area of Kelantan and also other states in Malaysia. The findings of this research may differ from the other area and other states since there is differences in culture, values and beliefs. So, it is suggested that further research can be extended to the other areas and states by future researchers in order to get better understandings of the factors that affecting academic performance of college students.
5.3.2 Design of questionnaire

Other limitation of this research is, the design of questionnaire. Generally the questionnaire is simple and easy to understand by the respondents so everyone can answer properly. Besides, there are some complaints about the number of questions in the questionnaire that there are so many questions to answer.

Thus, for future research it is suggested to develop the easy and directed questions in the questionnaire so the respondents can answer in proper way and in short time.

It is important for the researcher to test the questionnaire first before distributed to the target respondents to gain the quality feedback. The researcher also should broader the channel of distribution instead only distribute via WhatsApp application to the respondents so more potential respondents can answer the questionnaire.

### 5.3.3 Study time

Furthermore, the time to settle the entire research is very short which is only in one semester. The researcher is suffered of short time to settle all the chapter of the study within the designated time. Thus, for future research, the research has to really focus and following the guidelines to ensure all the chapters can be settle in the right time.
5.4 Conclusion

To conclude, this chapter is the last chapter discuss on the finding and suggestion that will benefit for those who want to know the factors that affecting academic performance. Thus, researcher will conduct a deep path research in order to ensure that the students able to control their academic performance although there are various factors affecting them.

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## APPENDICES

APPENDIX A: Questionnaire<br><br>UNIVERSITI<br>MALAYSIA<br>KELANTAN

## FACTORS AFFECTING ACADEMIC PERFORMANCE AMONG COLLEGE STUDENTS IN KOTA BHARU, KELANTAN

Dear respondent,
I am a Master of Business Administration candidate at University Malaysia Kelantan. In partial fulfillment of requirement for Master of Business Administration, I am conducting a study on factors affecting academic performance among college students in Kota Bharu, Kelantan. I would like to kindly request your assistance in completing the questionnaire. Your cooperation will ensure the success of this study.

I would like to thank you in advance for your time and cooperation.

## FAKTOR YANG MEMPENGARUHI PENCAPAIAN AKADEMIK DALAM KALANGAN PELAJAR KOLEJ DI KOTA BHARU, KELANTAN

Kepada responden,

Saya adalah calon Sarjana Pengurusan Perniagaan di Universiti Malaysia Kelantan. Sebagai memenuhi syarat kelayakan untuk Sarjana Pengurusan Perniagaan, saya menjalankan kajian mengenai faktor yang mempengaruhi pencapaian akademik dalam kalangan pelajar kolej di Kota Bharu, Kelantan. Saya berharap untuk mendapatkan bantuan anda dalam melengkapkan kaji selidik ini. Kerjasama anda akan menyumbang kepada kejayaan kajian ini.

Terlebih dahulu, saya ingin mengucapkan terima kasih atas masa dan kerjasama anda.

## Part 1: Demography / Demografi

1. Gender / Jantina
a. Female / Perempuan
b. Male / Lelaki
2. Age / Umur
a. Below 25 years old
b. 25-30 years old
c. above 30 years old
3. Race / Bangsa
a. Malay / Melayu
b. Chinese / Cina
c. Indian / India
d. Others / Lain - lain
4. Status/ Status
a. Single / Bujang
b. Married / Berkahwin
5. Study Status / Status Pengajian
a. Full-time / Sepenuh masa
b. Part-time / Separuh masa
6. Last semester GPA / PNG lepas
a. 2.0 or below
b. $2.1-2.5$
c. 2.6-3.0
d. $3.1-3.5$
e. $3.6-4.0$
7. What is your preferred delivery mode? / Apakah cara pembelajaran pilihan anda?
a. Face to face / Bersemuka
b. Online / Dalam talian
c. Intensive / Intensif
d. Flexible / Fleksibel (combination of face-to-face \& online)
e. Self-paced / Sendirian
8. Estimate the average hours per week you spend during semester /

Anggarkan purata jam seminggu yang anda gunakan sepanjang semester:
a. in classes/ di dalam kelas $\qquad$
b. sleeping / tidur $\qquad$
c. studying outside of classes/ belajar di luar kelas $\qquad$
d. socializing with family and friends / bersosial bersama keluarga dan rakan $\qquad$
e. doing recreation, sport, or leisure activities / melakukan aktiviti rekreasi, bersukan atau beriadah $\qquad$

Part 2: Time Management [adapted from Neills's (2016) University Student Satisfaction and Time Management Questionnaire version 9 (TUSSTMQ9)]

Listed below are some aspects of time management. Select number on a five point scale range; 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. For each item, please choose the item by circling the appropriate answer which best represents you. /
Disenaraikan di bawah merupakan beberapa aspek pengurusan masa. Pilih item dalam pelbagai skala lima "1= Sangat tidak bersetuju, 2 = Tidak bersetuju, 3 = Tidak pasti, 4 = Bersetuju, 5 = Sangat bersetuju. Pilih jawapan dengan membulatkan jawapan terbaik yang mewakili anda.

| 1 | My life is very well organised. / <br> Kehidupan saya sangat teratur. | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | I make effective plans for getting things done. / <br> Saya membuat rancangan yang berkesan untuk selesaikan <br> semua kerja. | 1 | 2 | 3 | 4 | 5 |
| 3 | I waste a lot of time. / <br> Saya membazir banyak masa | 1 | 2 | 3 | 4 | 5 |
| 4 | I accomplish what needs to be done each day. / <br> Saya berjaya sempurnakan apa yang perlu dilakukan setiap <br> hari. | 1 | 2 | 3 | 4 | 5 |
| 5 | I prepare a daily or weekly 'to do' list. / <br> Saya menyediakan senarai yang hendak dibuat secara harian <br> atau mingguan. | 1 | 2 | 3 | 4 | 5 |
| 6 | I spend too much time on trivial matters. / <br> Saya menghabiskan banyak masa untuk perkara-perkara <br> remeh. | 1 | 2 | 3 | 4 | 5 |
| 7 | Despite interruptions, I get important tasks done. / <br> Walaupun terdapat gangguan, saya berjaya siapkan tugas - <br> tugas penting. | 1 | 2 | 3 | 4 | 5 |
| 8 | I find myself procrastinating over tasks that need to be done. / <br> Saya mendapati diri saya menangguhkan tugas-tugas yang <br> perlu dilakukan. | 1 | 2 | 3 | 4 | 5 |
| 9 | I am in control of how my time is spent. / <br> Saya mengawal bagaimana masa saya digunakan. | 1 | 2 | 3 | 4 | 5 |
| 10 | I balance work, rest, and play. / <br> Saya seimbang dari segi kerja, rehat, dan bermain. | 2 | 3 | 4 | 5 |  |

Part 3: Perceived Stress Scale (PSS) [Adapted from work by Sheldon Cohen]

The questions in this scale ask about feelings and thoughts since starting your current college course. Select number on a five point scale range; $1=$ Strongly Disagree, $2=$ Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. For each item, please choose the item by circling the appropriate answer which best represents you. /
Soalan-soalan di dalam skala ini menanyakan tentang perasaan dan pemikiran sejak memulakan kuliah semasa anda. Pilih item dalam pelbagai skala lima "1= Sangat tidak bersetuju, 2 = Tidak bersetuju, 3 = Tidak pasti, 4 = Bersetuju, 5 = Sangat bersetuju. Pilih jawapan dengan membulatkan jawapan terbaik yang mewakili anda.

Since starting college, how often have you... / Sejak bermulanya kuliah berapa kerap anda...

| 1. | been not upset because of something that happened <br> unexpectedly? / <br> tidak kecewa kerana sesuatu yang berlaku tanpa diduga? | 1 | 2 | 3 | 4 | 5 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 2. | felt that you were able to control the important things in your life? / <br> merasakan bahawa anda mampu mengawal perkara-perkara <br> penting dalam hidup anda? | 1 | 2 | 3 | 4 | 5 |
| 3. | felt not nervous and "stressed"? / <br> rasa tidak berdebar dan tertekan? | 1 | 2 | 3 | 4 | 5 |
| 4. | felt confident about your ability to handle your personal problems? <br> l <br> berasa yakin dengan keupayaan anda untuk menangani masalah <br> peribadi? | 1 | 2 | 3 | 4 | 5 |
| 5. | felt that things were going your way? / <br> merasakan bahawa semua perkara berjalan mengikut cara anda? | 1 | 2 | 3 | 4 | 5 |
| 6. | found that you could cope with all the things that you had to do? / <br> mendapati bahawa anda mampu menampung semua perkara yang <br> perlu anda lakukan? | 1 | 2 | 3 | 4 | 5 |
| 7. | been able to control irritations in your life? / <br> dapat mengawal kegusaran dalam kehidupan anda? | 1 | 2 | 3 | 4 | 5 |
| 8. | felt that you were on top of things? / <br> merasakan bahawa anda berada di puncak? | 1 | 2 | 3 | 4 | 5 |
| 9. | been angered because of things that were outside of your control? <br> / |  | 2 | 3 | 4 | 5 |

Part 4: The Self - Efficacy Questionnaire [developed in 2015 by Research Collaboration]
The questions in this scale ask about students' self - efficacy. Select number on a five point scale range; 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. For each item, please choose the item by circling the appropriate answer which best represents you. /
Soalan - soalan di dalam skala ini menanyakan mengenai sikap pelajar. Pilih item dalam pelbagai skala lima "1= Sangat tidak bersetuju, 2 = Tidak bersetuju, 3 = Tidak pasti, 4 = Bersetuju, 5 = Sangat bersetuju. Pilih jawapan dengan membulatkan jawapan terbaik yang mewakili anda.

| 1 | I can learn what is being taught in class this year. / <br> Saya boleh memahami apa yang diajar di kelas pada tahun ini. | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | I can figure out anything if I try hard enough. / <br> Saya boleh memahami apa-apa sahaja jika saya mencuba sungguh - sungguh. | 1 | 2 | 3 | 4 | 5 |
| 3 | If I practiced every day, I could develop just about any skill. / Sekiranya saya mengamalkan setiap hari, saya boleh membangunkan apa sahaja kemahiran. | 1 | 2 | 3 | 4 | 5 |
| 4 | Once I've decided to accomplish something that's important to me, I keep trying to accomplish it, even if it is harder that I thought. / Setelah saya memutuskan untuk mencapai sesuatu yang penting bagi saya, walaupun ianya sukar saya akan terus berusaha untuk mencapainya. | 1 | 2 | 3 | 4 | 5 |
| 5 | I am confident that I will achieve the goals that I set for myself. / Saya yakin saya akan mencapai matlamat yang saya buat untuk diri saya sendiri. | 1 | 2 | 3 | 4 | 5 |
| 6 | When I'm struggling to accomplish something difficult, I focus on my progress instead of feeling discouraged. Apabila saya berusaha untuk menyelesaikan sesuatu yang sukar, saya memberi tumpuan kepada kemajuan saya dan bukannya berasa lemah | 1 | 2 | 3 | 4 | 5 |
| 7 | I will succeed in whatever college major I choose. / Saya akan berjaya dalam mana-mana major kolej yang saya pilih. | 1 | 2 | 3 | 4 | 5 |
| 8 | I believe hard work pays off. / Saya percaya kerja keras akan dibayar balik. | 1 | 2 | 3 | 4 | 5 |
| 9 | I believe that the brain can be developed like a muscle. / Saya percaya bahawa otak dapat dikembangkan sepertimana otot. | 1 | 2 | 3 | 4 | 5 |
| 10 | I think that no matter who you are, you can significantly change your level of talent. / <br> Saya fikir tidak kira siapa kita, kita boleh mengubah tahap bakat kita dengan ketara. | 1 | 2 | 3 | 4 | 5 |

Part 5: Motivation [adapted from Neills's (2004) University Student Motivation and Satisfaction Questionnaire version 2 (TUSMSQ2)]

The questions measure both Intrinsic and Extrinsic motivation of students. Select number on a five point scale range; $1=$ Strongly Disagree, 2 = Disagree, 3 = Undecided, $4=$ Agree, $5=$ Strongly Agree. For each item, please choose the item by circling the appropriate answer which best represents you. /
Soalan ini mengukur kedua - dua bentuk motivasi intrinsik dan ekstrinsik pelajar. Pilih item dalam pelbagai skala lima "1= Sangat tidak bersetuju, 2 = Tidak bersetuju, 3 = Tidak pasti, 4 = Bersetuju, 5 = Sangat bersetuju. Pilih jawapan dengan membulatkan jawapan terbaik yang mewakili anda.

I attend college.. / Saya menghadiri kolej..

| 1 | because I don't know what else to do. / <br> kerana saya tidak tahu apa lagi yang perlu dibuat. | 1 | 2 | 3 | 4 | 5 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | to understand myself better. / <br> untuk memahami saya dengan lebih baik. | 1 | 2 | 3 | 4 | 5 |
| 3 | to gain valuable skills for my career. / <br> untuk mendapatkan kemahiran berharga untuk kerjaya saya. | 1 | 2 | 3 | 4 | 5 |
| 4 | 1 | 2 | 3 | 4 | 5 |  |
|  | because its fun place to be. / <br> kerana ia merupakan tempat yang seronok. | 1 | 2 | 3 | 4 | 5 |
| 5 | because others expect me to get a diploma. / <br> kerana orang mengharapkan saya mendapat diploma. | 1 | 2 | 3 | 4 | 5 |
| 6 | because I love learning. / <br> kerana saya suka belajar. | 1 | 2 | 3 | 4 | 5 |
| 7 | because it's a better alternative than working. / <br> kerana ia merupakan alternative yang lebih baik berbanding bekerja. |  |  |  |  |  |
| 8 | because I want to explore new ideas. / <br> kerana saya ingin meneroka idea baru. | 2 | 3 | 4 | 5 |  |
| 9 | so I can get a better job. / <br> jadi saya boleh dapat kerja yang lebih baik. | 1 | 2 | 3 | 4 | 5 |
| 10 | because I enjoy the social life. / <br> kerana saya menikmati kehidupan sosial. | 5 |  |  |  |  |



## APPENDIX B: KREJCIE \& MORGAN Table

Table for determining sample size of a known population

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

Noie: $A$ is Populaion Size; S is Sample Size

## APPENDIX C: Reliability Test Result

Case Processing Summary

|  |  | N | $\%$ |
| :--- | :--- | :--- | :--- |
| Cases | Valid | 30 | 100.0 |
|  | Excluded $^{\mathrm{a}}$ | 0 | .0 |
|  | Total | 30 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

| Cronbach's Alpha | N of Items |
| :--- | :--- |
| .863 | 41 |

APPENDIX D: Descriptive Statistical Analysis Result

Statistics

|  | Gender | Age | Race | Status | Study <br> Status | GPA | Delivery mode | In classes | Sleeping | Studying <br> outside <br> classes | Socializing | Recreatio <br> n and sport |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 361 | 361 | 361 | 361 | 361 | 361 | 361 | 361 | 361 | 361 | 361 | 361 |
| Missing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | 1.2853 | 1.1828 | 1.1136 | 1.1191 | 1.0249 | 3.3875 | 1.9446 | 10.6288 | 6.9363 | 2.6233 | 6.9778 | 4.1247 |
| Median | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 3.4000 | 1.0000 | 12.0000 | 7.0000 | 2.0000 | 5.0000 | 2.0000 |
| Mode | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 3.50 | 1.00 | 15.00 | 8.00 | 2.00 | 4.00 | 2.00 |
| Std. Deviation | . 45219 | . 49982 | . 39561 | . 32437 | . 15613 | . 31169 | 1.36920 | 4.32508 | 1.15654 | 1.88028 | 4.76906 | 3.79524 |
| Variance | . 204 | . 250 | . 157 | . 105 | . 024 | . 097 | 1.875 | 18.706 | 1.338 | 3.535 | 22.744 | 14.404 |

Frequency table
Gender

|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | Female | 258 | 71.5 | 71.5 | 71.5 |
|  | Male | 103 | 28.5 | 28.5 | 100.0 |
|  | Total | 361 | 100.0 | 100.0 |  |

Age

|  |  | Frequency | Percent | Valid <br> Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | Below 25 years old | 313 | 86.7 | 86.7 | 86.7 |
|  | 25-30 years old | 30 | 8.3 | 8.3 | 95.0 |
|  | Above 30 years old | 18 | 5.0 | 5.0 | 100.0 |
|  | Total | 361 | 100.0 | 100.0 |  |

Race

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | Malay | 330 | 91.4 | 91.4 | 91.4 |
|  | Chinese | 21 | 5.8 | 5.8 | 97.2 |
|  | Indian | 10 | 2.8 | 2.8 | 100.0 |
|  | Total | 361 | 100.0 | 100.0 |  |

Status

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | Single | 318 | 88.1 | 88.1 | 88.1 |
|  | 43 | 11.9 | 11.9 | 100.0 |  |
|  | Married | 361 | 100.0 | 100.0 |  |

Study Status

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | Full-time | 352 | 97.5 | 97.5 | 97.5 |
|  | Part-time | 9 | 2.5 | 2.5 | 100.0 |
|  | Total | 361 | 100.0 | 100.0 |  |

GPA

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | ---: | ---: | ---: | ---: |
| 2.80 | 10 | 2.8 | 2.8 | 2.8 |
| 2.90 | 14 | 3.9 | 3.9 | 6.6 |
| 3.00 | 35 | 9.7 | 9.7 | 16.3 |
| 3.10 | 32 | 8.9 | 8.9 | 25.2 |
| 3.20 | 46 | 12.7 | 12.7 | 38.0 |
| 3.30 | 38 | 10.5 | 10.5 | 48.5 |
| 3.40 | 30 | 8.3 | 8.3 | 56.8 |
| 3.50 | 50 | 13.9 | 13.9 | 70.6 |
| 3.60 | 21 | 5.8 | 5.8 | 76.5 |
| 3.70 | 19 | 5.3 | 5.3 | 81.7 |
| 3.80 | 38 | 10.5 | 10.5 | 92.2 |
| 3.90 | 18 | 5.0 | 5.0 | 97.2 |
| 4.00 | 10 | 2.8 | 2.8 | 100.0 |
| Valid | 361 | 100.0 | 100.0 |  |

Delivery mode

|  | Frequenc <br> y | Percent | Valid Percent | Cumulative <br> Percent |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Face to face |  |  |  |  |  |  | 234 | 64.8 | 64.8 | 64.8 |
| Online | 17 | 4.7 | 4.7 | 69.5 |  |  |  |  |  |  |
| Ontensive | 16 | 4.4 | 4.4 | 74.0 |  |  |  |  |  |  |
|  | Flexible | 84 | 23.3 | 23.3 |  |  |  |  |  |  |

In classes

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | ---: | ---: | ---: | ---: |
| 4.00 | 43 | 11.9 | 11.9 | 11.9 |
| 6.00 | 62 | 17.2 | 17.2 | 29.1 |
| 7.00 | 17 | 4.7 | 4.7 | 33.8 |
| 8.00 | 33 | 9.1 | 9.1 | 42.9 |
| 10.00 | 12 | 3.3 | 3.3 | 46.3 |
| 12.00 | 35 | 9.7 | 9.7 | 56.0 |
| 14.00 | 51 | 14.1 | 14.1 | 70.1 |
| 15.00 | 72 | 19.9 | 19.9 | 90.0 |
| 16.00 | 36 | 10.0 | 10.0 | 100.0 |
| Valid | 361 | 100.0 | 100.0 |  |

Sleeping

|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid |  |  |  |  |  |
|  | 4.00 | 30 | 8.3 | 8.3 | 8.3 |
|  | 6.00 | 73 | 20.2 | 20.2 | 28.5 |
|  | 7.00 | 118 | 32.7 | 32.7 | 61.2 |
|  | 8.00 | 140 | 38.8 | 38.8 | 100.0 |
| Total | 361 | 100.0 | 100.0 |  |  |

Studying outside classes


Socializing

|  | Frequency | Percent | Valid <br> Percent | Cumulative <br> Percent |
| :--- | ---: | ---: | ---: | ---: |
| 1.00 | 12 | 3.3 | 3.3 | 3.3 |
| 2.00 | 45 | 12.5 | 12.5 | 15.8 |
| 4.00 | 78 | 21.6 | 21.6 | 37.4 |
| 5.00 | 51 | 14.1 | 14.1 | 51.5 |
| 6.00 | 37 | 10.2 | 10.2 | 61.8 |
| Valid | 10 | 2.8 | 2.8 | 64.5 |
|  | 10 | 2.8 | 2.8 | 67.3 |
|  | 100 | 63 | 17.5 | 17.5 |

Recreation and sport

|  |  | Frequency | Percent | Valid <br> Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 1.00 | 49 | 13.6 | 13.6 | 13.6 |
|  | 2.00 | 164 | 45.4 | 45.4 | 59.0 |
|  | 3.00 | 17 | 4.7 | 4.7 | 63.7 |
|  | 4.00 | 8 | 2.2 | 2.2 | 65.9 |
|  | 5.00 | 26 | 7.2 | 7.2 | 73.1 |
|  | 6.00 | 17 | 4.7 | 4.7 | 77.8 |
|  | 7.00 | 21 | 5.8 | 5.8 | 83.7 |
|  | 8.00 | 10 | 2.8 | 2.8 | 86.4 |
|  | 9.00 | 10 | 2.8 | 2.8 | 89.2 |
|  | 10.00 | 30 | 8.3 | 8.3 | 97.5 |
|  | 20.00 | 9 | 2.5 | 2.5 | 100.0 |
|  | Total | 361 | 100.0 | 100.0 |  |

## APPENDIX E: Regression result

Variables Entered/Removed ${ }^{\text {a }}$

| Model | Variables Entered | Variables Removed | Method |
| :--- | :--- | :--- | :--- |
| 1 | MeanTM $^{\text {b }}$ |  | Enter |

a. Dependent Variable: GPA
b. All requested variables entered.

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the <br> Estimate |
| :--- | ---: | ---: | ---: | ---: |
| 1 | $.803^{\mathrm{a}}$ | .646 | .645 | .18581 |

a. Predictors: (Constant), MeanTM

ANOVA ${ }^{a}$

| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | :---: | :---: |
|  | Regression | 22.580 | 1 | 22.580 | 654.014 | $.000^{\mathrm{b}}$ |
|  | Residual | 12.394 | 359 | .035 |  |  |
|  | Total | 34.974 | 360 |  |  |  |

a. Dependent Variable: GPA
b. Predictors: (Constant), MeanTM

Coefficients ${ }^{\text {a }}$

| Model |  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | 2.222 | . 047 |  | 47.676 | . 000 |
|  | MeanTM | . 401 | . 016 | . 803 | 25.574 | . 000 |

a. Dependent Variable: GPA

Variables Entered/Removed ${ }^{\text {a }}$

| Model | Variables Entered | Variables Removed | Method |
| :--- | :--- | :---: | :---: |
| 1 | MeanPSS $^{\text {b }}$ |  | Enter |

a. Dependent Variable: GPA
b. All requested variables entered.

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the <br> Estimate |
| :--- | ---: | ---: | ---: | ---: |
| 1 | $.770^{\mathrm{a}}$ | .594 | .592 | .19898 |

a. Predictors: (Constant), MeanPSS

ANOVA ${ }^{a}$

| Model |  |  | Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | Regression | 20.760 | 1 | 20.760 | 524.363 | . $000{ }^{\text {b }}$ |
|  |  | Residual | 14.213 | 359 | . 040 |  |  |
|  |  | Total | 34.974 | 360 |  |  |  |

a. Dependent Variable: GPA
b. Predictors: (Constant), MeanPSS

|  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | B | Std. Error | Beta |  |  |
| onstant) | 2.650 | . 034 |  | 78.274 | . 000 |
| anPSS | . 257 | . 011 | . 770 | 22.899 | . 000 |

a. Dependent Variable: GPA

Variables Entered/Removed ${ }^{\text {a }}$

| Model | Variables Entered | Variables Removed | Method |
| :--- | :--- | :---: | :---: |
| 1 | MeanSE $^{\text {b }}$ |  | Enter |

a. Dependent Variable: GPA
b. All requested variables entered.

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the <br> Estimate |
| :--- | ---: | ---: | ---: | ---: |
| 1 | $.789^{\mathrm{a}}$ | .622 | .621 | .19181 |

a. Predictors: (Constant), MeanSE

ANOVA ${ }^{a}$

| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | :---: | :---: |
| 1 | Regression | 21.767 | 1 | 21.767 | 591.657 | $.000^{\mathrm{b}}$ |
|  | Residual | 13.207 | 359 | .037 |  |  |
|  | Total | 34.974 | 360 |  |  |  |

a. Dependent Variable: GPA
b. Predictors: (Constant), MeanSE

Coefficients ${ }^{\text {a }}$

| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | 2.959 | . 020 |  | 145.693 | . 000 |
|  | MeanSE | . 157 | . 006 | . 789 | 24.324 | . 000 |

a. Dependent Variable: GPA

Variables Entered/Removed ${ }^{\text {a }}$

| Model | Variables Entered | Variables Removed | Method |
| :--- | :--- | :--- | :--- |
| 1 | MeanM ${ }^{\mathrm{b}}$ |  | Enter |

a. Dependent Variable: GPA
b. All requested variables entered.

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the <br> Estimate |
| :--- | ---: | ---: | ---: | ---: |
| 1 | $.763^{\mathrm{a}}$ | .583 | .582 | .20157 |

a. Predictors: (Constant), MeanM

ANOVA ${ }^{a}$

| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | :---: |
|  | Regression | 20.387 | 1 | 20.387 | 501.742 | $.000^{\mathrm{b}}$ |
| 1 | Residual | 14.587 | 359 | .041 |  |  |
|  | Total | 34.974 | 360 |  |  |  |

a. Dependent Variable: GPA
b. Predictors: (Constant), MeanM

Coefficients ${ }^{\text {a }}$

| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  |
| 1 | (Constant) | 2.653 | . 034 |  | 76.945 | . 000 |
|  | MeanM | . 264 | . 012 | . 763 | 22.400 | . 000 |

a. Dependent Variable: GPA


