

## The Self-Esteem Among FPTP Students in Relation to Academic Stress and Academic Achievement

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**Abstract:** Self-esteem affects the thinking process, emotions, desires, values and goals in a person. Academic stress and academic achievement could develop the negative impact to self-esteem of every student in the all over the world. This study aims to find out the impact of self-esteem relation to academic achievement and academic stress. A quantitative research approach and a cross-sectional research design have been used to collect data from FPTP students in the target population through an online survey adapted and adopted from the previous study and shows a high-reliability value and gets validation from the previous study the expert. In this research data were used from 320 respondents. Finding shows that self-esteem and academic achievement has strong relationship ( $r=0.560$ ). Meanwhile, academic stress shows that ( $r=0.288$ ) which means positive relationship towards self-esteem. This study also proves that self-esteem significantly impact on academic stress ( $r=0.314$ ) and academic achievement ( $r=0.593$ ). In conclusion, this research shows good way on the academic achievement and academic stress among university students to the stakeholders, the ministry of higher education, and especially UTHM to overcome impact of self-esteem among university students. As well as the government could identify their future generation sufferings that they are there to help to overcome any psychological issues.

**Keywords:** Self-Esteem, Academic Stress, Academic Achievement, University Student

### 1. Introduction

The younger generation must be mentored and encouraged as they collaborate to shape Malaysia's future. A fundamental transformation of Malaysia's higher education system and higher learning institutions (HLIs) is required to prepare Malaysian students for success in this complicated and ever-changing future (Ministry of Education Malaysia, n.d.). In the study between self-esteem and university

students' academic performance by studying in government and private university show a positive but not significant relationship found between negative self-males and females with their academic performance. Self – esteem is the perception to do an assigned task more effectively. It is a positive attitude toward the self that any tasks given could be accomplished through a person's capabilities (Iivari *et al.*, 2020). In Malaysia, education is a never-ending struggle to accomplish to help students achieve the most significant potential, to grow knowledgeable, spiritually, mentally, and physically healthy (Fernández-González *et al.*, 2015). Through education students can develop self-esteem and the courage to face the world and society while discovering their true faces.

Self-esteem is not unusual place difficulty that each pupil populace has to address even on their lives and they may additionally affect different matters taking place in person`s life (HN & Pandey, 2015). Academic pressure and educational success take important element for the effect of vanity amongst college students that is quantity to the mental circumstance to reap in instructional. Self-esteem which might be taken into consideration to have impacts in explaining why college students enjoy pressure to reap on instructional. Self-esteem can have an impact on diverse factors of human behavior which include the extent of aspiration, studying and delinquency in instructional success. Academic success so that you can be categorized a vital function in thing for college pupil (Li *et al.*, 2018). Efforts to reinforce the vanity of students have now no longer been proven to enhance instructional success and can on occasion counterproductive. Education is often seen as an essential resource for people and civilizations. As competition in the higher education economy intensified, college student satisfaction has been recognized as an important factor in quality assurance (Mustapha *et al.*, 2021).

Self-esteem from a long period of time have been identified as one of the major concerns among university students worldwide on academic achievement and academic stress. According to El-Anzi, 2005, self-esteem is one of the factors associated with stress and depression. An important element of psychosocial intervention. Self-esteem is a subjective individual evaluation. It shows cognitive attitudes and emotions. Feel about your abilities, importance, and value. It has been reported depression rates and self-esteem vary by gender (Weisskirch, 2018). Women are prone to depression. Self-esteem was lower than boys. This was reported especially for women. Poor exam grades, poor future, limited personal relationships and low self-esteem factors affecting depression as women are consumed with a lot of energy to determine the future of the professional perform the expected role in time from the end of adolescence to early adulthood.

Based on the study conducted by Mohsen *et al.*, 2017, the researchers found that academic stress encouraged many students to enter college. Depression and despair, and in extreme cases suicide attempts. Their student`s life includes different commitments to success, uncertainties about the future, and more. Students due to stress ultimately do not carry out their plans as it is with decreased low self-esteem. Humans are greatly affected various psychological and physiological factors they experience in their daily lives due to stress. In addition, for academic concerts, especially for phones that discovered that stress is strongly correlated with student academic achievement. Despite the facts many educational institutions have witnessed intensifying competition in education reaching its limits. Laboratories that their students are not doing their best in their discipline. However, self-esteem seems to be an important factor in improving student achievement.

According to a study conducted over the years by Valizadeh *et al.* (2016), there is considerable evidence that indicates that excessive stages of pressure outcomes in unwanted outcomes, which include bad reminiscence and concentration cause of lower self-esteem, which cause useless getting to know and bad educational performance. (Hayat *et al.*, 2020) High stages of pressure also are related to decreased self-esteem amongst university students. Another instructional area that has been proposed to potentially affect getting to know is people getting to know style. Learning patterns are described as the composite of cognitive, affective, and mental elements that serve as distinctly strong signs of the way a learner perceive, interacts with, and responds to the getting to know environment. It has been

argued that matching coaching techniques with students` desired getting to know patterns can facilitate getting to know. However, there is proof that contradicts this claim. According to another study, researchers tried associate both self-esteem and family tasks with achievement, as measured by academic and extracurricular performance participation (Herrera *et al.*, 2020). According to a study in Malaysia students with high academic achievement tend to feel more confident in contrast to those who lack confidence in them achieves less (Ahmat *et al.*, 2018). There had been many studies on this self-esteem and academic achievement relationship has been carried out previously but the topic remains debatable and inconclusive.

According to a study investigate by Rosli *et al.* (2012), in Malaysia students with high academic achievement tend to feel more confident in contrast to those who lack confidence in them achieves less. There had been many studies on this self-esteem and academic achievement relationship has been carried out previously but the topic remains debatable and inconclusive. In Malaysia there are lack of research related to self-esteem due to academic stress and academic achievement. In addition, self-esteem can also be developed by achieving great successes and it can be maintained by avoiding failures.

In Malaysia there are lack of research related to self-esteem due to academic stress and academic achievement. In addition, self-esteem can also be developed by achieving great successes and it can be maintained by avoiding failures. Government actions in Malaysia have thoroughly higher to develop self-esteem among students, regulations like programs about academic achievement and work path advisor appointment that younger students can adopted fast to maintain their self-esteem and to overcome stress during in universities (Malaysia Today News, 2020).

Therefore, this study aims to determine the impact of self-esteem relation to academic achievement and academic stress The dependent variable of this study was the impact of self-esteem, whereas the independent variables were academic stress and academic achievement.

## **2. Literature Review**

### **2.1 Concept of Self-esteem**

For many years, self-esteem has received a great deal of attention in research and theory. In the first psychology textbook, the researcher spoke about the inherent strive to feel good about oneself as an important aspect of human nature. Indeed, the writings of self-esteem concepts are often held up as exemplary of the first writings on positive psychology. Researcher wrote that a person with high self-esteem has either accomplished a lot or expected very little from himself (Minev *et al.*, 2018).

### **2.2 Academic Achievement among University Students**

Achievement motivation is not a single composition, but a summary of different configurations such as self-concept of ability, task value, goal, and motivation for achievement. Some existing studies have examined various motivational components as predictors of cognitive ability and school performance of students beyond previous achievements, with most motivational components in schools beyond intelligence. Predicting grades and showing that students' self-concepts of ability and task scores are stronger than their predicted performance. The debate among researchers concerning whether prior academic self-esteem influences academic achievement, or, prior academic achievement results into subsequent academic self-esteem has been considered an egg-chicken question (Singh & Jha, 2013).

### **2.3 Academic Stress among University Students**

Students will be the country's next generation of leaders. A variety of factors, however, influence their academic success and university experience. Students may experience stress as a result of these pressures. Undergraduate university students are a group of people who are growing up and becoming adults. Because university life differs from school life, many of them experience culture shock. Suicidal

thoughts, drug addiction, and dropping out of college are just a few of the negative consequences of high student expectations and stress. Academic stress is a major contributor to more serious disorders in students, such as depression and anxiety, as well as other types of stress. Lecturers, assignments, peers, and other factors can all contribute to academic stress. Exams, coursework, and other activities that students must balance have increased rapidly in recent years (Jain and Singhai, 2017). In short, it appears that stress is fairly common in the lives of college students, who must balance academic survival with future job readiness. It should come as no surprise that the majority of academic stress in college students stems from what they study and how they learn it.

In Malaysia, the major sources of stress among students are mostly difficulty in concentrating due to the presence of excessive information, the pressure of heavy workload, and examinations that cause harmful effects on their health and performance (Ramli *et al.*, 2018). Several studies have found that academic stress has a negative physical and psychological impact on students. According to Ramachandiran and Dhanapal (2018), 88 percent of respondents agree that their increasing academic stress is due to their academics, with 78 percent admitting to having moderate stress. If not addressed, academic stress can have a variety of negative physical and mental consequences. Academic stress is frequently associated with students' feelings of competition and motivation (Ali *et al.*, 2015). An event such as academic failure can be a source of stress and is known as a stressor for an undergraduate student. According to Obiageli Okechukwu *et al.* (2021), undergraduate life has been so stressful that adequate coping skills have become a cure for the possibility of incoming suicidal ideation and the dramatic behavior that has been noticed among students. Students are exposed to various stresses, including academic stress caused by testing and exams, parental expectations, homework, and other school requirements that may be beyond their abilities. Due to excessive parental expectations for greater academic performance, 77 percent of teenager's experience extreme stress (Pampa *et al.*, 2020).

#### 2.4 Relationship between Academic Achievement and Impact of Self-esteem

Achievement motivation is not a single composition, but a summary of different configurations such as self-concept of ability, task value, goal, and motivation for achievement. Predicting grades and showing that students' self-esteem of ability and task scores are stronger than their predicted performance. A quantitative study examines whether early social support protects against depression, anxiety, suicidal ideation, and suicide attempts later in life. The relationship between the impact of self-esteem and academic achievement was also seen in a study conducted by (Li *et al.*, 2018) that seek tolerate these variables and says that 0.30 is the average correlation found between self-esteem and academic achievement. Self-esteem and aspects that are often forgotten in research on self-esteem school grades are the motivation for maintaining or improving positive self-esteem (Körük, 2017) In fact, in some studies. Self-esteem when comparing students with poor academic achievement. Explanation of this lack of difference between the self-esteem that students of different ability levels usually feel it includes a self-esteem protection mechanism that is activated when a person's self-esteem is threatened.

*H1: Academic achievement has a significant relationship towards the impact of self-esteem.*

#### 2.5 Relationship between Academic Stress and Impact of Self-esteem

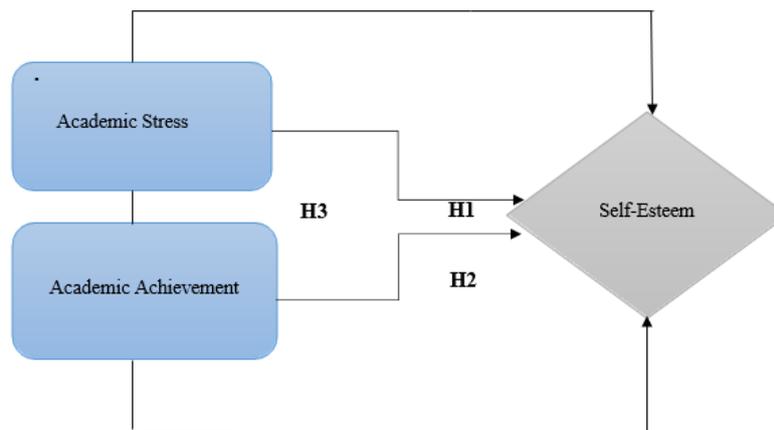
According to a study conducted by Pampa *et al.* (2020), they conclude that perceived parental expectations and teenage stress is related. As a result, counselling adolescents and their parents are critical. 180 adolescents in grades VIII – X were asked to complete a Perceived Stress Scale (PSS – 14) questionnaire. According to the study's findings, most of the adolescents (63.89 percent) had moderate parental expectations, and the majority (69.44 percent) had moderate stress. The perceived parental expectations of teenagers and stress positively correlated ( $r = 0.662$ ). This is supported by an increase in suicides linked to poor academic performance, particularly among high school students (Ahorsu *et al.*, 2021). There was a link between perceived parental expectations and socio-demographic factors

like gender, class, age, father's education, mother's education, monthly family income, and adolescent academic performance, as well as a link between perceived stress and socio-demographic factors like gender, father's education, monthly family income, and adolescent academic performance.

*H2: Academic stress has a significant relationship towards the self-esteem.*

Academic stress has also been connected to depress and suicidal ideation in teenagers, with studies finding that those with poor academic achievement were more likely to commit suicide which is a psychological issue. (Castellví *et al.*, 2020). Other researchers have determined that education is a key source of stress for teenagers because of their parents' high expectations in terms of academic performance and student competition (Ahorsu *et al.*, 2021). All these subject teenagers to emotional pressure, especially when parents criticise their children for failing in school.

## 2.6 Conceptual Framework



**Figure 1: Conceptual framework of this research**

## 3. Research Methodology

### 3.1 Research Design

This study employed a quantitative research methodology, with a questionnaire functioning as the research instrument to identify the impact of self-esteem in relation to academic achievement and academic stress among FPTP students.

### 3.2 Data Collection

The researcher has collected the primary data through the survey questionnaire. The primary data was employed to collect data through questionnaires from the FPTP students. The questionnaire has been constructed by adaption and adoption from the previous studies on the variable. The total number of FPTP students followed by the department was 1,976 students as the population in this research. The number of populations was identified through the Assistant Administrative Officer of FPTP faculty by using an email platform.

This study adopted from the Krejcie and Morgan (1970) sample size calculation with 320 respondents. The targeted respondents of 320 sample size from FPTP students' data have been input to the statistical analysis software, IBM SPSS 26.0. to generate the descriptive research and calculate the correlation analysis and validity analysis to reach the research objective and question. This statistic software was simplified the data collected and summary for useful analysis in this research.

### 3.3 Construct Measurements

The questionnaire consisted of 5 sections, including the section of thanking the respondent for their response. Section A was the Demographic section that collected the respondent's profile data, 5 items such as gender, age, current year of study, department and CGPA. Section B was for the impact of self-esteem variable using the Coopersmith Self-Esteem Inventory (SEI) that was adopted from Tus & Paul (2020) which consists of 7 items with the measurement scale of 5 Likert's-scale (score 1-5).

Section C was for academic achievement variable consisted of 7 items. Each of these groups had four items, each with a five-point rating scale ranging from very strongly disagree to very strongly agree adopted from (Alves-Martins *et al.*, 2002). Section D was for academic stress variable has been measured the individual's perception of academic stress with modified with factor of psychological issue using (Mohsen *et al.*, 2017) with an adopted questionnaire from Azila-Gbettor *et al.* (2015).

### 3.4 Pilot Test

A limited group of respondents were used in this study to investigate the nature of the research development. 30 respondents' data were used for the reliability analysis to stimulate the data pattern before distributing it to the target population (In, 2017). Table 1 shows the reliable statistics on self-esteem, academic stress, and academic achievement. The table shows that the reliability test in this research is considered trustworthy and excellent reliable because the range is located more than 0.9 with total result shown 2.850. No item is deleted in this research, which indicates that all items were acceptable.

**Table 1: Cronbach's Alpha value for reliability analysis**

Variable	Number of Items	Cronbach's Alpha	Interpretation
Academic Stress	15	0.966	High Reliability
The Self-esteem	10	0.964	High Reliability
Academic Achievement	5	0.918	High Reliability
<b>TOTAL</b>	<b>30</b>	<b>2.850</b>	<b>Excellent Reliability</b>

### 3.5 Data Analysis

#### (a) Descriptive Analysis

The descriptive research method was used to understand and characterize the qualities of a group of people, and the descriptive research method can also be used to acquire quantitative data. (Lubiano *et al.*, 2017). Descriptive analysis summarizes the data collected in numerical form that can be calculated as the frequency, percentage and mean to determine the level of self-esteem among FPTP students. In this study, descriptive analysis is to major and to analysis part demographic and objective 1.

#### (b) Inferential Analysis

The properties and characteristics of the population for interpreting a set of statistical hypotheses to match the research objective will help determine the level impact of self-esteem of FPTP students. Descriptive analysis and correlation analysis have been used in this research. Besides that, regression analysis was also being used in this research (Shaheen and Jahan, 2017).

#### (c) Correlation Analysis

The relationship between academic achievement and impact of self-esteem and the relationship between academic stress and impact of self-esteem among FPTP students are investigated using correlation analysis. The correlation research method is commonly used to understand the characteristics of a group of people by determining the cause-effect relationship between the variables

in the study (Yang *et al.*, 2014). In this study, correlation analysis is to major and to analysis objective 2 and objective 3.

#### *(d) Regression Analysis*

Multiple regression analysis was conducted with academic achievement and academic stress as the independent variables; and impact of self-esteem, respectively, as the dependent variables (Kimbrough *et al.*, 2016). Multiple regression is a statistical analysis that builds on linear regression by integrating multiple independent variables into an equation to understand better their connection with a dependent variable (Bland, 2017). Regression analysis enables the detection of prognostically important risk factors as well as the calculation of risk scores for individual prognostication.

## **4. Results and Discussion**

### 4.1 Response Rate

The sample size needed for this research to be conducted is 320 respondents. Therefore, the researcher distributed 450 survey questionnaires to obtain and collect the data from the respondents through Google Form. There were 496 respondents who participated in this research, which achieved and exceeded the expected sample size number. Therefore, the sample size in this research is adequate. Thus, the respondent's return rate from this research was 100%.

### 4.2 Data Cleaning

After collecting data from respondents, the researcher used the statistic software SPSS version 26.0 to input the data and recode the negative word questions. Then, data cleaning was performed to uncover statistical problems such as missing data. (Ridzuan & Wan Zainon, 2019). There was no any missing value in this research.

### 4.3 Descriptive Analysis

Descriptive analysis was conducted to analyses the demographic of the respondents and the first objective of this research. The first objective of this research is to measure the level of self-esteem among FPTP students. As an outcome, descriptive analysis in SPSS was used to collect data and accomplish the aim.

#### *(a) Demographic Analysis*

Demographic Information showed that 170 respondents (34.3%) are male, and 326 respondents (65.7%) are female, more than male among 496 respondents. As for the age categories, most respondents aged around 22 years old and above have 400 respondents (80.6%). On the other hand, 96 out of 496 respondents are 21 years old and below, equal to 19.4%. Furthermore, the highest number in the current year of study is year 3, with 181 respondents (36.5%). The year 2 and year 4 respondent number with 102 respondents, 20.6% and 127 with 25.6%, while only 86 of respondents were year 4 with 17.3%.

Regarding the department of FPTP faculty, there are 5 departments involved in this research. The results show out of 496 respondents. 106 of them are from BPA department (21.4%), followed by 183 (36.9%) respondents from BPB department. In this study, respondents from the BPC department consist of 86 respondents (17.3%) and 61 respondents (12.3%) from the BPD department. The BPP department had the lowest number of respondents, with 60 respondents (12.1%). In terms of CGPA, 365 (73.6%) majority of respondents have scored 3.0 – 3.5 CGPA. Meanwhile, 115 respondents (23.2%) scored >3.5 CGPA, and followed by 16 (3.2%) respondents scored < 2.5.

#### *(b) Level of Self-esteem among FPTP Students*

The study is aimed to evaluate the impact of self-esteem among FPTP students. Table 5 illustrate the mean score and level of self-esteem.

**Table 2: Mean score and level of self-esteem**

Dimension	Mean Score	Level
Self-esteem	3.9	High

#### 4.4 Correlation Analysis

The function of correlation is to determine the degree of relationship between two or more quantitative variables (Gogtay & Thatte, 2017). The correlation equipment used in this research was Spearman's rho correlation coefficient as a non-parametric test because the data distribution was not normal. The Spearman's rho correlation coefficient was generated using the IBM SPSS software to define the relationship between the independent and dependent variables in this research, showing the magnitude and degree of the relationship (Senthilnathan, 2019). The interpretation range of Spearman's rho correlation coefficient was acceptable between -1 and +1. However, zero meant no association because the data mirror distribution approximated a bell shape. The intensity of the relationship was a perfect positive correlation, which equaled a correlation coefficient of +1; the variable was negatively correlated if the correlation value was -1 (Akoglu, 2018). Table 3 shows the magnitude of Spearman's rho correlation coefficient interpretation, which measures the strength of the relationship between the variables in this study.

##### (a) Relationship between Self-Esteem and Academic Achievement

The Spearman's rho correlation coefficient shows a strong positive relationship between academic achievement and the self-esteem was 0.560. Moreover, the p-value (Sig) is less than 0.05, which means there was a significant relationship between the dimension of academic achievement and self-esteem. It shows the correlation coefficient of academic achievement was strong correlation and significant that the p-value (Sig.) was less than 0.05 relationship towards the self-esteem. The correlation coefficient data show that Hypothesis 1 were accepted as predicted, in concluded that the Hypothesis 1 is, that academic achievement has a significant relationship towards the self-esteem was accepted as shown at Table 3.

**Table 3: Correlation coefficient of availability of academic achievement towards the self-esteem**

		The Self-esteem	Academic Achievement
Spearman's rho	The Self-esteem	1.000	0.560**
	Correlation Coefficient	.	0.000
	Sig. (2-tailed)	496	496
Academic Achievement	Correlation Coefficient	0.560**	1.000
	Sig. (2-tailed)	0.000	.
	N	496	496

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

Research on students who higher self-esteem will get good marks and grades (Lim *et al.*, 2022). The result of the relationship between academic achievement and the self-esteem was the same with a study conducted by Asakereh & Yousofi (2018), which a reflective thinking of self-esteem in academic of students in schools and universities were positively related to the impact of the self-esteem among university students.

##### (b) Relationship between Academic Stress and the Self-esteem

Based on the collected and analyzed data as shown in Table 4, with the R-value (rs) for Spearman’s correlation coefficient of 0.288 and p-value is less than 0.05, it represents that there is a positive and weak relationship between the academic stress and the self-esteem. It is also supported by another research held by Universiti Teknologi MARA Malaysia, which found that between 15-19 years old with a total of 190 students from 2 different schools consisting of 103 males and 87 females shows 9.50% faces stress respectively which significantly correlated with self-esteem (Ahmat *et al.*, 2018). The finding was equally with several past studies, such as Maxwell Azila-Gbettor *et al.* (2015) that expressed their opinion where academic stress has also been connected to suicidal thoughts in teenagers, with studies finding that those with poor academic achievement were more likely to commit suicide. It is also supported by another research held by Universiti Teknologi MARA Malaysia, which found that between 15-19 years old with a total of 190 students from 2 different schools consisting of 103 males and 87 females shows 9.50% faces stress respectively which significantly correlated with self-esteem (Ahmat *et al.*, 2018).

**Table 4: Correlation coefficient of academic stress towards the self-esteem**

		The Self-esteem	Academic Stress
Spearman's rho	Correlation Coefficient	1.000	0.288**
	Sig. (2-tailed)	.	0.000
	N	496	496
Academic Stress	Correlation Coefficient	0.288**	1.000
	Sig. (2-tailed)	0.000	.
	N	496	496

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

4.5 Linear Regression Analysis

(a) Impact of Academic Achievement Towards the Self-esteem Among FPTP Students

Table 5 shows the regression analysis between academic achievement and self-esteem can be indicated by the R-value, which is 0.593. The R Square for academic achievement is 0.352; 35.2% of the variance accounted for academic achievement by self-esteem. Therefore, the standard error of the estimate of academic achievement is 0.82802.

**Table 5: Regression coefficients of the self-esteem**

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
		B	Std. Error				Tolerance	VIF
1	(Constant)	1.756	0.138		12.735	0.000		
	Academic Achievement	0.561	0.034	0.593	16.387	0.000	1.000	1.000

a. Dependent Variable: Self-Esteem

The  $\beta$ -value of academic achievement is 0.561, which implies that when the academic achievement decreases by one-unit, the self-esteem will increase 56.1% simultaneously. The p-value (Sig) is less than 0.05, which implies that academic achievement will significantly impact of the self-esteem. The outcome of the study hypothesis 3 (a) is not acceptable and cannot be supported with past studies. This is because the current result shows a positive impact of academic achievement towards self-esteem among FPTP students. It means the academic achievement in UTHM contributes to the self-esteem among FPTP students. This finding shows that not align with past studies which conducted by Li *et al.* (2018).

*(b) Impact of Academic Stress Towards the Self-esteem Among University Students*

The overall result of the regression analysis as shown in Table 6 used to achieve the fourth objective of this research. The R-value can indicate the regression analysis between the academic stress and the self-esteem in the table, which is 0.314. The R square is 0.099 represents that 9.9% of the variance is accounted self-esteem by academic stress. The standard error of the estimate is known for identifying the accuracy of the prediction. The smaller the value for standard error of the estimate indicates that the higher prediction will be more accurate. The value for the standard error of the estimate is 0.97. Lastly, the better range for Durbin-Watson statistics value is within 1 to 4. The value for Durbin-Watson in this research is 1.696 which indicates that the independence of observations for the research data have been achieved.

**Table 6: Regression coefficients of the self-esteem**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.729	0.169		16.111	0.000		
	Academic Stress	0.318	0.043	0.314	7.354	0.000	1.000	1.000

a. Dependent Variable: Self-Esteem

The  $\beta$ -value as shown in table 0.318, which means that when the academic stress changes by one-unit, the self-esteem is predicted to increase by 31.8% at the same time. At the same time, the standard error is known for identifying the average distance between the observed values that have been observed fall from the regression line. The smaller the value for standard error indicates that the observations are closer to the fitted line. The standard error is 0.043, representing observed values are 1 closer to the fitted line. The p-value (Sig.) is less than 0.05, which indicates that academic stress significantly affects self-esteem among FPTP students. The outcome of this study aligns with past studies by Jain & Singhai (2017).

## 5. Conclusion

In conclusion, the hypotheses and objectives of this research were achieved by the overall findings and results. Next, according to Spearman's correlation coefficient, it is indicated that there is a significant relationship between academic achievement and self-esteem, academic stress, and self-esteem. Moreover, it is shown that the self-esteem among FPTP students will be affected significantly by implementing develop academic achievement and academic stress, which is shown as a result from the regression analysis. Therefore, the Ministry of Education and university management should pay attention to the findings of this research, which could help reduce mental health problems among university students.

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