The Impact of Emotional Intelligence Element on Academic Achievement

*Azizi Yahaya¹, Ng Sar Ee¹ Juriah@Daing Junaidah Bachok¹, Noordin Yahaya², Yusof Boon¹, Shahrin Hashim¹, Goh Mo Lee³

¹Faculty of Education , Universiti Technologi Malaysia*(Corresponding author)
²Faculty of Bussiness Management, Universiti Teknologi Mara (Melaka)
³Sekolah Kebangsaan Convent Infant Jesus 1

Abstract
The purpose of this study is to examine the impact of the five emotional intelligence elements identified as self-awareness, emotional management, self motivation, empathy, interpersonal skills towards secondary school students’ academic achievement. This study also aims to identify whether the five elements of emotional intelligence have been able to contribute to academic achievement. Statistical inference of the Pearson-r and multiple regression is used to analyze the data. The results showed that the significant relationship between self awareness (r = 0.21), emotional management (r = 0.21) and empathy (r = 0.21) at the level of p <0.05 with academic achievement. Multiple regression analysis (stepwise) result showed that only three elements of emotional intelligence which is self-awareness (β = 0.261), self motivation (β = 0.182) and empathy (β = 0.167) accounted for 8.7% of variation in criterion (academic achievement). Research also presented a model designed to reflect the relationship between the elements of emotional intelligence and academic achievement. These studies imply that the level of emotional intelligence contributes to and enhances the cognitive abilities in student. Thus, to produce a competent generation and successful country in line with the philosophy of education, persistence of the emotional intelligence in student is essential.

Key words: emotional intelligence, academic achievement, self-awareness, emotional management, self motivation, empathy, interpersonal skills

1.0 Introduction
With the rapid development in this century challenging times, especially school students and the general public to face the wave of globalization and secularism as well as various challenges. Thus, the ability of self-control of emotions is a important matter for not carried away by the flow of negative and evil elements. Therefore, a high emotional intelligence helps maintain a state of harmonies and quiet in oneself and finally be more self-confident in dealing with the challenges of living and learning in educational institutions. High emotional intelligence can contribute to a student in the learning process (Goleman, 1996; Elias, Ubriaco, Reese et al., 1992, Svetlana,2007). The purpose of study was conducted to determine whether the identified five elements of emotional intelligence as the self-awareness, emotional management, self motivation, empathy and interpersonal skills contribute to academic achievement.
1.1 Chronological development of emotional intelligence

In early 1940, David Wechsler has been discussing the concept of intelligence that encompasses both elements of the intelligence quotient of cognitive (intellectual) and non-cognitive intelligence (emotional). But only the cognitive aspects of the observations and the response received so rapidly, while non-cognitive aspects aside. Actually, earlier in the year 1920 E.L. Thorndike has talked about the concept of social intelligence that has been considered as the basic for the development of the theory of emotional intelligence (Goleman, 1995). Social intelligence is essentially the ability to understand other people what motivates them, how they work, how to work with them and the ability to act wisely in the relationship between human beings. Thus, self-awareness, empathy, and dealing with interpersonal relationships are the core of emotional intelligence is actually the basic elements of social intelligence.

In 1980, Dr. Reuven Bar-On began research to determine the success and the ability of a person in his life than anyone else. From the results of his research, he found a lot of intelligence and non-cognitive factors have contributed to the success of a person in his life. Later in 1985, Dr. Reuven Bar-On also coined the term EQ (Emotional Quotient) to reflect the approach in the assessment of general intelligence. He describes the emotional intelligence reflects one's ability to negotiate well with others and control over their own sense of self. He also displays emotional intelligence reflects one's ability to negotiate with the daily environment challenges and helps predict the life of him, including career and personal affairs. He also suggested there was a scale of five components of emotional intelligence is intrapersonal, interpersonal, stress control, the ability to adapt and general mood. The definition of emotional intelligence is widely understood sense of self and ability to handle those feelings without influenced by it, is able to motivate themselves to complete the work, creative, and strive to achieve the maximum level, notice the feelings of others and handle social relationships effectively (Higgs and Dulewicz, 1999). Therefore, they suggested that the seven elements of emotional intelligence is self-awareness, the preservation of emotion, motivation, interpersonal sensitivity, persuasion, firmness and prudence with integrity. Professor Howard Gardner is a study in the field of human intelligence has established a theory that explains the various intelligence quotient of the number owned by men. He discovered the existence of seven types of intelligence. Among the seven intelligences, two intelligence known as intrapersonal intelligence and interpersonal intelligence is a component that is included in emotional intelligence. Intrapersonal intelligence is the ability of someone to control himself through knowledge and understanding of feelings, desires, needs and personal goals. With the abilities of this, one can motivate himself, impulse control and bad faith, lack of acting hastily. While interpersonal intelligence is the ability and emotional sensitivity to the psychological state of others. This ability helps a person to choose an adequate response, to feel empathy and communicate well with others. Clearly seen that the person who has these both intelligence and will be shaping a high emotional intelligence.

After that, the term emotional intelligence and academic writing exists in a series of John D. Mayer and Peter Salovey in 1990, 1993 and 1995. Mayer and Salovey (1993) was the first to present an academic about their findings in the field of emotional intelligence. They define emotional intelligence as a kind of social intelligence that involves the ability to control the emotions of self and others, to distinguish between types of emotion, using information to guide thinking and actions of a person. According to them, emotional intelligence can be categorized into five aspects of the dominance of self-awareness, emotional management, self motivation, empathy and interpersonal skills.

(i) Self-awareness of the self-observation and identification of a feeling when it appears.
(ii) Emotional management is the feeling that it is sufficient to handle the behavior, recognizing the feelings behind.
(iii) Self-motivation is a move to the goal of positive emotions, better self-control and to delay gratification and impulse weakens.
(iv) Empathy is sensitive to the feelings of others, caring and accepting their perspective and appreciate the differences that exist in the feelings of others.
Interpersonal skills to control the emotions of other people, have social competence and social skills.

Later, Mayer and Salovey (1997) refine the definition of emotional intelligence as "the ability to detect emotions, to enter and create emotions that help thinking, to understand emotions and emotional knowledge acquired, always thought to control emotions to promote emotional and intellectual development." They believe the combination of the idea that emotion makes thinking smart and intelligent thinking about emotions. Again, Mayer et al. (2008) stated that some individuals have a greater capacity than others to carry out sophisticated information processing about emotions and emotion-relevant stimuli and to use this information as a guide to thinking and behavior. Derived from this statement, it seems that individuals with high emotional intelligence pay attention to, use, understand, and manage emotions, and these skills serve adaptive functions that potentially benefit themselves and others.

The term emotional intelligence became popular and mainstream in the discussion of intelligence exists only after the publication of Daniel Goleman in 1995. He discussed that IQ contributes only 20% in the success of life and the rest by other factors. These factors may include emotional intelligence, luck and social class. He believes that emotional intelligence has a stronger influence in IQ. Moreover, emotional intelligence can be enhanced if taught in a certain way. Goleman (1995) defines emotional intelligence as the ability to understand the sense of self and others, to motivate themselves and regulate emotions in both self and personal relationships with others. Based on the above statement, the researcher developed a model attempt to describe the relationship between five elements of emotional intelligence and academic performance. This model is built by showing whether the element of self-motivation to work as a mediator to contribute to academic performance.

In order to support the model mentioned above, discussion the past researches and literature reviews about relationship between emotional intelligence, in particular elements of emotional intelligence to academic performance are essential.

1.2 Relationship of Emotional Intelligence and Academic Achievement

There are some factors that cause a student's low performance. Among that dysfunction personality is part of the composition of the formation of emotional intelligence is the cause of students' low performance.

Diagram 2: Model of low academic achievement

From this model, dysfunction can be construed as an individual personality that is not motivated, lack confidence, have low self-esteem, lack of self control and have high anxiety. Students who have the above characteristics is said to have low emotional intelligence, and this will affect their academic performance.

Petrides et al (2004) have looked at the relationship between trait emotional intelligence, academic performance and cognitive ability found that emotional intelligence moderated the relationship between academic performance and cognitive ability. Parker et al (2004) in their studied concluded that various elements of emotional intelligence used as predictors of academic success. They found that highly successful students scored higher than the unsuccessful group on three subsets of emotional intelligence (interpersonal ability, stress management and adaptability).

A study conducted by Rode et al.(2007) predicted that emotional intelligence was related to academic performance for two reasons. First, academic performance involves a great deal of ambiguity. Second, majority of academic work is self-directed, requiring high levels of self-management. Therefore, individuals with high emotional intelligence would perform better academically.

Svetlana (2007) suggests the need to incorporate emotional intelligence training into secondary
education curricula, due to a significant relationship between emotional intelligence and academic achievement.

1.3 Relationship of Self-Awareness Element and Academic Achievement
Self-awareness is to inform themselves of interest to identify feelings and how it affects performance. This self-awareness is the key to sensitizing a person of strength and weakness. This self-awareness allows one to obtain self-confidence. In a study conducted by Holahan and Sears (1995) for a period of 60 years to more than 1000 people who have a high IQ from childhood until the time they retire. It was found that those who acquire self-confidence during the first year was more successful in their careers.

Johnson (2009) agreed that emotional health is fundamental to effective learning. The most critical element of a student’s success is an understanding of how to learn. Student with self-aware and intrinsically motivated will definitely have very high academic performance.

1.4 Relationship of Emotional Management Element and Academic Achievement
In the context of the classroom, self-control on cognitive and behavior are important aspects of learning and academic performance (Corno and Mandinach, 1983; and Corno, Rohrkemper, 1985).

In the Sommerville study, a research on 450 men who grew up in Sommerville. Two-thirds of the men came from families that live and one-third of them had an IQ below 90. In this study, IQ showed little relationship success in their careers and their lives. One noticeable difference in their success is the ability of such concerns, emotions and friendly with other people (Snarey and Vaillant, 1985).

Self-control is the author or additions to the behavior, thoughts, feelings, positive and reduce negative or erode them. Self-control can bring some benefits in the following areas:
1. reduce the difficulties faced
2. prevent the problem by controlling the adverse action
3. achieve the desired goals
4. prevent erosion of a performance (Yates, 1986)

All students will experience frustration and failure to achieve their goals. They depend on the strength of fortitude to control their negative thoughts and feelings. If they are able to control emotions, they will achieve the academic goals as well. (Dweck, 1996).

Similarly finding in the study conducted by Walter Mischel on children aged 4 years. They are found that control the impulses of action have shown their ability in achieving good academic and good social skills when they are in their adolescence (Shoda, Mischel, and Peake, 1990).

Contribution of emotional management to academic performance also supported by research done by MacCann et al. (2011). The results suggest that better educational outcomes might be achieved by targeting skills relating to emotion management and problem-focused coping.

1.5 Relationship of Empathy Element and Academic Achievement
Allows an easy empathy on emotional and sensitise needs of others, thus showing their concern. Empathize with individuals who can read or understand non-verbal signs such as voice intonation, facial expression and so forth.

One of the functions played by the school is allowing the child freely describe particular emotions associated with sympathy and empathy for others and also help control the feelings that are not good enough and not particularly great anger and extreme excitement (Fontana, 1984).

Rosenthalet.al (1977) also found that people who are able to identify the emotions of others with the ability to empathize with both the gain was more successful in their work and their social life.

The study also showed low levels of empathy are associated with poor academic performance. When two
students who have intellectual intelligence that IQ is the same but different empathy skills, found that students with higher empathy get better grades (Nowicki and Duke, 1992).

Chow (2006) found that students' levels of empathy have positive connections with their academic motivation, thus help increasing their academic performance.

1.6 Relationship of Self Motivation Element and Academic Achievement

Motivation is the driving force that involves the raise, maintain and control the interest (Bernard, 1965). Said to be an element of motivation is important to encourage students to actively engage in the activities of teaching and learning, interested in encouraging students to continue learning, to create a fun learning process.

In this study, the motivation of priority is self motivation. It is the desires of the natural birth of the student and become a strong factor in learning activities. Self-motivation is one important element of emotional intelligence provides a boost in improving their academic performance. In the context of this research, self-motivation show interest in students to study and understand their learning objectives for obtaining good achievement.

Self-motivation is said on the emotions. Emotions affect the response of a person against another person and also on their environment, ultimately determine the pattern of adjustment that will be taken in their lives (Kamarudin, 1989).

The structure of emotion on children should be used to generate interest to learn. Students should feel the success and enjoyment in learning. When they get satisfaction, thus encouraging them to continue to be active in learning.

Emotions have a close relationship to the motif (McDougall, 1908). Emotions are usually accompanied by a motivated behavior. For example, if someone will continue to provide emotional excitement returns, while someone will try to avoid or stay away from if the return is not fun.

Self-motivation in emotional intelligence may be based on the model of motivation "expectancy-value ". The three components of motivation is the hope of components, component values and affective components. Expectations component is confidence on the ability to perform a task, the components are showing the aims and beliefs of students about the importance and interest to the task and the affective component of emotions is the act of assignment of students.

It is necessary to consider the influence of motivation and emotion in cognitive development. Both of these elements together to build the establishment of the cognitive achievement. This means that some of the personality development of the whole should be the main focus of education (Rauste-Von Wright, 1986).

The finding in Raineri (2010), clearly shows motivation was more predictive of achievement especially for Caucasian students.

1.7 Relationship of Interpersonal Skills Element and Academic Achievement

Low academic achievement can be attributed to social problems and emotions faced by the students, especially about the ability to use social skills to get support from teachers (MacMullin, 1994).

Scott-Jones and Clark (1986) said that the academic achievement of many depends on the capabilities and aspirations of individuals. As the social environment in which learning occurs can strengthen or eliminate behaviors that lead to achievement, the acquisition of interpersonal skills is essential to achieve excellence in learning. Some social skills such as attention, perseverance in work and compliance with the request and direction of teachers should be studied as social skills are important for academic success (Cartledge and Milburn, 1978).
A variety of social skills is critical for success in learning at school. Students with social skills usually show better academic achievement of friends his age who lack social skills (Grossman, et al., 1997). Students who do not master the skills of interpersonal difficulties in relationships with peers, who often behave badly, and eventually lead to poor academic performance (Sulzer-Azaraff and Mayer, 1986). A study was conducted by Stephen N. Elliott, a psychology professor at University Wisconsin found students who are enrolled in social skills from the period 1996-1997, showed an increase in social skills and this in turn leads to an increase in their academic achievements. His study shows that there is a correlation between social skills and academic achievement (Sadowski, 1998).

This finding also supported by Johnson (2009), he proposed that emotional intelligence enables the students to develop good interpersonal relationship and to have social support which also help students to perform well in their examination.

2.0 Research questions:
1. Is there a relationship between emotional intelligence and students’ academic achievement?
2. Is there a relationship between each emotional intelligence element and academic achievement?
3. Which of the emotional intelligence element would be the best predictor of academic achievement?

3.0 Hypothesis:
This study will test several hypotheses on the following:
1. Null Hypothesis 1: There is no significant correlation between emotional intelligence and students’ academic achievement.
2. Null Hypothesis 2: There is no significant correlation between each emotional intelligence element and academic achievement.
3. Null Hypothesis 3: All regression coefficients of the five elements of emotional intelligence is not zero when assigned to academic achievement.

4.0 Method
4.1 Participants
The subjects were secondary school form four students (N = 370) with 127 male students (34.32%) and 243 female students (65.68%). The research subjects are also categorized by the three main ethnic Malays (50%), Chinese (42.16%) and India (7.84%).

4.2 Measures
Methods used in this study was stratified random sampling based on population characteristics, and uses the form survey instrument questionnaire.

4.2.1 Instruments
The instruments used in this study is questionnaire. Among the modified test is as follows:

i. Test the ability of self-awareness (Dann, 2001). This test contains 20 questions that test one’s ability to recognize personal feelings. Researchers to modify the question by the students’ studies.

ii. Test the ability of emotion (Dann, 2001). This section also contains 20 questions that test one’s
ability to control his emotions.

iii. Empathy Scale (Caruso and Mayer, 1997). This scale has 30 items and the researchers chose 20 items and make adjustments to better fit the sample.

iv. Intrinsic Motivation Inventory (IMI). This inventory was done in a number of research related to intrinsic motivation and self-control (Ryan, 1982; Ryan, Mims, and Koestner, 1983; Plant and Ryan, 1985; Ryan, Koestner, and Deci, 1991; Deci, Eghrari, Patrick, and Leone, 1994).

This inventory includes several aspects, including assessment of the task, the perception of an activity carried out and so forth. A total of 20 items were selected and modified as the study questionnaire items.

v. Interpersonal Skills (Baer and Zimbardo, 1976). This test is a modification of Baer (1976) and Zimbardo (1976) includes several items that reflect interpersonal skills and a style. Researchers chose 20 items that match with this review.

5.0 Procedure

5.1 Research Design

Studies conducted a survey with a focus on inference the relationship of emotional intelligence on academic performance of students in some secondary schools in Johor Bahru.

This study describes the relationship between emotional intelligence and academic performance. The study also looked in detail the relationship of each element emotional intelligence, where self awareness, emotional management, self motivation, empathy and interpersonal skills of the students' and their academic performance. This study was also conducted to determine the best predictors of academic performance.

6.0 Analysis

Data were analyzed using Pearson-r to test the relationship between the elements of emotional intelligence and academic achievement. Multiple regression (stepwise) was using to determines the predictor of academic performance. All data were processed using SPSS.

7.0 Results

7.1 Regression Analysis

Null Hypothesis 1: There is no significant contribution of the element of self-awareness, emotional management, self motivation, empathy and interpersonal skills and academic achievement

Regression analysis involving the five predictors (self-awareness, emotional management, self motivation, empathy and interpersonal skills), while the dependent variables of academic achievement as (criterion) for all five independent variables. Table 1 shows the results of multiple regression (stepwise). From the analysis carried out there was a significant variance of the factor elements (self-awareness, self-motivation and empathy) to criterion academic achievement.

Table 1 : Correlation matrix between the dependent variable and independent

<table>
<thead>
<tr>
<th></th>
<th>M (SD)</th>
<th>SD</th>
<th>KE</th>
<th>MD</th>
<th>EP</th>
<th>KP</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>3.47</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.449)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KE</td>
<td>3.54</td>
<td>.834</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.436)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD</td>
<td>3.38</td>
<td>.599*</td>
<td>.599*</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 1 shows the results of the correlation between the dependent variable (self-awareness, emotional management, self motivation, empathy and interpersonal skills) and independent variables (academic performance). Results can be viewed through three variations of the analysis (ANOVA) shows significant contributions.

There is a significant contribution of self-awareness and academic achievement, $F(1,368) = 16,958$, $p < .05$ where $p = .000$. For self-motivation and academic achievement is significantly contribute $F(2,367) = 12,193$, $p < .05$ where $p = .000$. And there is a significant contribution of empathy with academic achievement $F(3.366) = 11,564$, $p < .05$ where $p = .000$. While the emotion management and interpersonal skills do not have a significant contribution to academic achievement.

Based on Table 2, the analysis of $R^2$ for model 1 (self-awareness) is 0.044. The smaller the $R^2$, the less capable independent variables (self-awareness) to explain the dependent variable (academic achievement), $F(1,368) = 16,958$, $P = 0.000 <0.05$. When viewed on the Beta, elements of self-awareness ($Beta = 0.210$, $t = 4.118$, $Sig = 0.000$ and $R^2 = 0.044$). This means that the proposed model fit the data in the percentage of only 4.4 percent. The conclusion is also supported by analysis of variance is significant that the value of 0.000 is significantly lower than the specified significant level of 0.05. This finding means that the first predictor of self-awareness shown by the first model accounted for 4.4 percent increase in change criterion (academic achievement).

Value analysis of $R^2$ for model 2 (motivation) is 0.062. The smaller the $R^2$, the less capable independent variable (motivation) to explain the dependent variable (academic achievement), $F(2,367) = 12,193$, $P = 0.000 <0.05$. When viewed on the Beta, self-motivation element ($beta = -0.169$, $t = -2.673$, $Sig = 0.008$ and $R^2 = 0.062$). This means that the proposed model fit the data in the percentage is only 6.2 percent only. The conclusion is also supported by analysis of variance is significant that the value of 0.000 is significantly lower than the specified significant level of 0.05. This finding means that the second predictor of self-motivation demonstrated by the two models accounted for 6.2 percent of additional changes in criterion (academic achievement).

Through the analysis of $R^2$ for model 3 (empathy) is 0.087. The smaller the $R^2$, the less capable independent variables (empathy) to explain the dependent variable (academic achievement), $F(3,366) = 11,564$, $P = 0.000 <0.05$. When viewed on the Beta, the elements of empathy ($Beta = 0.167$, $t = 3.119$, $Sig = 0.002$ and $R^2 = 0.087$). This means that the proposed model fit the data in the percentage is only 8.7 percent only. The conclusion is also supported by analysis of variance is significant that the value of 0.000 is significantly lower than the specified significant level of 0.05. This finding means that the third predictor of empathy shown by the three models accounted for 8.7 per cent increase in change criterion (academic achievement).

Based on the value of $R^2$ for all three models can be concluded that this finding indicates that 4.4 percent elemental self-awareness contributes to academic performance, the percentage increase rose to 6.2 percent when contributions to elements of self-motivation are taken into account and further to 8.7 percent.
if the elements of empathy are into account the change in academic achievement.

### Table 2: Regression Analysis Results for Elements of Self-Awareness contributions, self-motivation and empathy with the Academic Achievement

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Sig.F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
<td>F Change</td>
</tr>
<tr>
<td>1</td>
<td>.210</td>
<td>.044</td>
<td>.041</td>
<td>.88307</td>
<td>.044</td>
<td>16.958</td>
</tr>
<tr>
<td>2</td>
<td>.250</td>
<td>.062</td>
<td>.057</td>
<td>.87579</td>
<td>.018</td>
<td>7.145</td>
</tr>
<tr>
<td>3</td>
<td>.294</td>
<td>.087</td>
<td>.079</td>
<td>.86556</td>
<td>.024</td>
<td>9.726</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), self awareness

b. Predictors: (Constant), self awareness, self motivation

c. Predictors: (Constant), self awareness, self motivation, empathy

d. Dependent Variable: Academic achievement

The results of the analysis also allow researchers to get a regression equation that can be used to predict the Y value in the future. The regression analysis results obtained as follows:

\[
Y = 1.438 + 0.21x - 0.169x^2 + 0.167x^3 + 0.549
\]

\[Y = \text{Academic achievement}\]
\[\beta_1x = 0.21 \text{ (Self Awareness)}\]
\[\beta_2x^2 = -0.169 \text{ (Self Motivation)}\]
\[\beta_3x^3 = 0.167 \text{ (Empathy)}\]

(\text{Constant Standard Error}) = 0.549

(\text{Constant}) = 1.438

From the analysis based on Table 2, it appears that there is a significant variance for the elements (self-awareness, self-motivation and empathy) to criterion academic achievement, F = 16.958, Sig = 0.000 <0.05 (self-awareness), F = 12.193, Sig = 0.000 <0.05 (motivation) and F = 11.564, Sig = 0.000 <0.05 (empathy). When viewed on the Beta, elements of self-consciousness (beta = 0.21, t = 4118, Sig = 0.000 and R^2 = 0044), self-motivation element (beta = -0169, t = -2673, Sig = 0.008 and R^2 = 0062) and elements of empathy (Beta = 0167, t = 3119, Sig = 0.002 and R^2 = 0087). The conclusion of that regression results,
i) When the elements of self-awareness increases per unit, then the scores of academic achievement will increase by 4.4 percent.

ii) When the elements of self-motivation to increase the unit, then the scores of academic achievement will increase by 6.2 percent.

iii) When the elements of empathy increase per unit, then the scores of academic achievement will increase by 8.7 percent.

It can be concluded that these findings show that 4.4 percent elemental self-awareness contributes to academic achievement, the percentage increase rose to 6.2 percent when contributions to take into account the element of self-motivation and increasing to 8.7 percent if the elements of empathy is taken into account the change in student academic achievement.

Table 3 : Regression Analysis Results for Self-Awareness contributions, self-motivation and empathy with Student Academic achievement

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Multiple R</th>
<th>$\beta$</th>
<th>Standard error $b$</th>
<th>Beta</th>
<th>t</th>
<th>Significance of t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self awareness</td>
<td>0.21</td>
<td>0.524</td>
<td>0.129</td>
<td>0.261</td>
<td>4.054</td>
<td>0.000</td>
</tr>
<tr>
<td>Self Motivation</td>
<td>0.25</td>
<td>-0.369</td>
<td>0.127</td>
<td>-0.182</td>
<td>-2.915</td>
<td>0.004</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.294</td>
<td>0.485</td>
<td>0.156</td>
<td>0.167</td>
<td>3.119</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Table 4 : Regression Analysis Results for Self-Awareness and Empathy contributions by self-motivation

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Multiple R</th>
<th>$\beta$</th>
<th>Standard error $b$</th>
<th>Beta</th>
<th>t</th>
<th>Significance of t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self awareness</td>
<td>0.599</td>
<td>0.594</td>
<td>0.041</td>
<td>0.599</td>
<td>14.344</td>
<td>0.000</td>
</tr>
<tr>
<td>Empathy</td>
<td>-</td>
<td>0.059</td>
<td>-</td>
<td>0.070</td>
<td>1.335</td>
<td>0.183</td>
</tr>
<tr>
<td>(Excluded Variables)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 : Regression Analysis Results for Self Awareness With Empathy

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Multiple R</th>
<th>$\beta$</th>
<th>Standard error $b$</th>
<th>Beta</th>
<th>t</th>
<th>Significance of t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self awareness</td>
<td>0.348</td>
<td>0.240</td>
<td>0.034</td>
<td>0.348</td>
<td>7.122</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Null Hypothesis 2: There is no predictor of self awareness, emotional management, self-motivation, empathy and interpersonal skills are significant towards academic achievement.
Regression analysis (stepwise) involves five predictors (self-awareness, emotional management, self motivation, empathy and interpersonal skills). While academic achievement is as (criterion) on these five variables. Diagram 3 shows the results of multiple regression (stepwise). From the analysis carried out found that there is a significant variance for the elements of self-awareness, self-motivation and empathy to students' academic achievement (criterion).

### Diagram 3: Model Predictor Elements of Self-Awareness, Self Motivation and Empathy on Student Academic Achievement.

8.0 Discussion

The study was conducted to show a significant relationship between emotional intelligence dimensions and academic achievement. At the same time also see the dominance's elements and its contribution to academic achievement. The findings show only self-awareness, self-motivation and empathy elements have significant relationship as a predictor of academic achievement. Although just a small value contribution where the $R^2$ of self awareness = 4.4%, $R^2$ increased to 6.2% by taking into account the self-motivation element and $R^2$ continues to increase up to 8.7% when empathy is taken into account, to prove their role in determining the success of a person in the academic.

These results were further proved by Tapia (1998) in which his study showed empathy element has significant contribution to students' decisions. This view is also supported by Feshbach & Feshbach (1987) which states that higher capacity in empathy towards achieving good grades. Students who have empathy is sensitive to the environment and can adapt to the environment, such as happy, friendly, angry, sad or sick heart. The students will be better liked by friends and create conducive environment to face learning, which indirectly increased academic performance. (Azizi, Shahrin & Nordiana, 2009)

Similarly, the elements of self-motivation to show a strong significant on academic achievement.
The findings are consistent with Wentzel (1989) studies, where he also agreed that any goal-oriented to obtain good results. Wan Rafaei (1998) also succeeded in proving motivation in a person who will bring a positive impact especially good academic performance. Students who have a motivation to have the urge to success. They are more confident in taking action. (Azizi, Shahrin & Nordiana, 2009)

Holahan and Sears (1995) studied also supports this finding which stated that any person who is able to recognize themselves and feel themselves will be more successful in their careers.

9.0 Conclusion

The key to obtain success of learning is to give full attention and concentration during the process of teaching learning. Attention and concentration help students to develop their cognitive intelligence and make it easier to remember facts or information communicated (Cross, 1974). It is here that the high level of emotional intelligence can help calm the mind and thus to increase the absorption of information received. Thus, it will contribute to their academic achievement as a results. Maria (2004) indicate that there is positive relationship between emotional intelligence and academic performance. It is recommended that students academic achievement should be enhanced with the use of emotional intelligence training (Hammed, 2010).

Excellent performance in academic is the key targets and goals for each student regardless of ethnic group. In order to obtain good results, apart from effective learning techniques and well planned, students should be able to recognize themselves in particular of self emotional, so that it does not become a stumbling to success. Hence the need to identify themselves, emotional intelligence should be noted not only for academic interest but also of future success in life. With the aim of building a resilient and capable human face of globalization and changing demands, efforts to increase students’ emotional intelligence should be considered during the process of teaching and learning in the classroom.

References


Hammed, A. (2010). *Emotional Intelligence and Self Efficacy as Determinants of Academic Achievement in English Language Among Students in Oyo State Senior Secondary School*. Ife Psychologia.


