The Influence of Self-Leadership and Emotional Intelligence on Motivated Strategies for Learning among Undergraduate Students in a Public Higher Education

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**Abstract:** Emotional intelligence is one element in a broad spectrum of skills that enables an individual to create value for oneself and others. Increasingly, most of the higher learning institutions such as university and colleges are turning emotional intelligence as a predictor of ability or success to make student admissions and assessment decisions. This trend has to lead to a significant and growing body of literature investigating emotional intelligence and academic achievement. Emotional intelligence represents an ability to reason with emotions validly and to use emotions to enhance thought. Based on the ANOVA test, we can summarize that there is no significant difference between all courses (physics, chemistry, mathematics and biology) for each variable that has been tested (self-leadership, emotional intelligence and learning motivation). Based on finding the independent sample, t-test to determine the effect of two independent variables (males and females) and self-leadership that representing dependent variable shows that there is no significant difference between males and females in the influence of self-leadership in learning motivations. In contrast, the self-leadership among undergraduate students from the course of mathematics, physics, biology and chemistry is more affected by learning motivation than the emotional intelligence based on the multiple linear regression test.

**Key words:** self-leadership, emotional intelligence, motivated strategies, undergraduate students, public higher education

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1. INTRODUCTION

The rapid development of this era, where the continuous wave of globalisation is challenging students in an unprecedented way. Thus, self-leadership skills and emotional intelligence (EI) has become crucial for students to be not carried away by the flow of harmful and evil elements. The self-leadership and high emotional intelligence help to maintain a state of harmony in oneself and finally be more self-confident in dealing with the challenges of living and learning in higher education institutions. This study is an attempt to understand the influence of emotional intelligence and self-leadership towards motivation in learning among undergraduate students in a selected public university in Malaysia. The sample of the study includes 200 students (males and females) in a pure science school (Physics, Chemistry, Mathematics and Biology).

An extensive review of related literature on the influence of student's self-leadership and emotional intelligence towards learning motivation has been conducted in order to evolve a research study. Similarly, Drago (2004) examined the relationship between emotional intelligence and academic achievement in non-traditional college students. Results confirmed that emotional intelligence is significantly related to student grade point average (GPA) scores, student cognitive ability scores, and student age. In the broader perspective, Tamannaifar et al. (2010) conducted a study on 6,050 students at the University of Kashan to explore the relationship between emotional intelligence, self-concept and self-esteem with academic achievement. In this study, the sample of students was randomly chosen. The results drawn from the study revealed that emotional intelligence, self-concept and esteem, of students were found to be significantly related to their academic achievement.

Numerous studies show that the relationship between emotional intelligence and academic performance among business students was weak (Malik & Shahid, 2016). This study indicates that emotional intelligence did not influence academic performance among their students. Another study on the emotional intelligence level of the urban and rural students (Joiceswarnalatha, 2015), indicated that the level of emotional intelligence of urban students was high than rural students and the result of GPA among rural students is better and higher compared to urban students. It can be analyzed that there is no influence of emotional intelligence on academic performance and motivation for learning. Van Der Zee, Thijs and Schakel, (2002) in examining the relationship between emotional intelligence and academic performance of 116 university student demonstrated that there is a weak correlation between emotional intelligence and academic performance. However, the relationship of emotional intelligence with some characteristics such as extraversion was significant.
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2. LITERATURE REVIEW

2.1. Self-Leadership (SL)

The concept of self-leadership first emerged in the mid-1980s (Manz, 1983, 1986), as an expansion of self-management (Manz & Sims, 1980), which was rooted in clinical self-control theory (Cautela, 1969). According to the definition provided by Manz (1986), he calls self-leadership as a self-influence process which entails both proactive behaviours and thought processes geared towards engineering more productive and positive affective experiences. Further, he elaborates that a person utilizing self-leadership “chooses externally controlled situations to achieve personally chosen standards” (p. 589).

Self-leadership consists of specific behavioural and cognitive strategies designed to positively influence personal effectiveness. Self-leadership strategies are usually grouped into the three primary categories of behaviour-focused strategies, natural reward strategies and effective thought pattern strategies (Manz & Neck, 2004; Manz & Sims, 2001; Prussia, 1998). Behaviour-focused strategies strive to heighten an individual’s self-awareness in order to facilitate behavioural management, especially the management of behaviours related to necessary but unpleasant tasks (Manz & Neck, 2004). Behaviour-focused strategies include self-observation, self-goal setting, self-reward, self-punishment and self-cueing.

Self-leadership is the ability to use behavioural and cognitive indicators of the self to increase positive outcomes (Houghton, 2012). These indicators include specific strategies that fall within many classical theories, such as self-influence and self-motivation (Furtner, 2013). Self-leadership has been further defined through strategies that exist to increase performance, including behaviour, reward, and thought related strategies (Neck & Houghton, 2006). The theoretical foundation of self-leadership is built upon social learning theory (Bandura, 1977) and social cognitive theory (Bandura, 1986). Social learning theory (Bandura, 1977, 1997) explains how people can influence their cognition, motivation, and behaviour (Yun, 2006). The social cognitive theory explains that people and their environment interact continually (Satterfield & Davidson, 2000) and behavioural consequences serve as sources of information and motivation (Bandura, 1986; Schunk, 2001). In a different point of view, scholars pointed out that self-leadership explains how self-leaders think and how they behave according to cognitive, motivational, and behavioural strategies (Kraft, 1998; Prussia, 1998; Yun, 2006). On the other hand, Manz and Sims (1989), argue that self-leadership describes people who take personal responsibility, direct their efforts, motivate themselves, and renew their thinking patterns.
2.2. Emotional Intelligence (EI)

The concept of EI was first defined in the early 1990s by Salovey and Meyers as “a type of social intelligence that involves the ability to monitor one’s own and others’ emotions, to discriminate among them, and to use this information to guide one’s thinking and actions.” Further, Salovey and Meyers expanded their definition to include “the verbal and non-verbal appraisal and expression of emotion, the regulation of emotion in the self and others, and the utilization of emotional content in problem-solving. By drawing on the concept, Bar-On (2006) pointed IE as a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands and pressures. In the same vein, Kapp (2002) has indicated that EI is a part of the human spirit which motivates us to perform, which gives us the energy to demonstrate behaviours such as intentionality, persistence, creativity, impulse control, social deftness, compassion, intuition and integrity. Lam and Kirby (2002) believe that emotional intelligence involves perceiving, understanding, and regulating emotions.

There are a number of scholars who attempted to study the connection between high emotional intelligence and the learning process, and interestingly they found that EI can contribute in the student learning process (Goleman, 1996; Elias, Ubriaco, & Reese, 1992). Similarly, Drago (2004) revealed that students who are low on emotional intelligence may find failure more difficult to deal with, which undermines their academic motivation. In another small study, Farooq (2003) examined the effect of emotional intelligence on the academic performance of 246 adolescent students and found that students with high emotional intelligence show better academic performance than the students with low emotional intelligence.

In studies conducted by Parker et al. (2004), they discovered that various emotional and social competencies were strong predictors of academic success. Similarly, Parker et al. (2005) found emotional intelligence to be significant predictors of academic success. In the same vein, Low and Nelson (2004) reported that emotional intelligence skills are key factors in the academic achievement and test performance of high school and college students respectively. Likewise, AbiSamra (2000) reported that there is a positive relationship between emotional intelligence and academic achievement.

Emotional intelligence has been a favourite topic in the field of academic performance, organizational behaviour, student development and academic achievement. Increasingly, most of the higher learning institutions such as universities and colleges are turning emotional intelligence as a predictor of ability or success in order to make student admissions and assessment decisions. Emotional intelligence was clearly defined and conceptualized by Salovey and Mayer (1994) as “The ability to monitor one’s feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and action” (p.189).
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Research has shown that emotional intelligence is vital to the development of students and academic achievement (Al-Rabadi, 2012; Bar-On, 2006; Feldman et al., Parker et al., 2005). The mixed model introduced by Daniel Goleman emphasizes emotional intelligence in a wide range of competencies and skills that drive the performance. According to the mixed model, it encompasses 5 main emotional intelligence constructs (Goleman, 1998).

i. Self-awareness – It is the ability to know emotions, strengths, weaknesses, drives, values and goals and recognize their impact on others and also the decision-making ability of the individual.

ii. Self-regulation – It involves controlling or redirecting individual’s disruptive emotions and impulses and the capability to adapt according to changing circumstances.

iii. Social skill – It includes managing relationships to move people in the desired direction.

iv. Empathy – It involves the capability of considering other people’s feelings especially the time of making decisions.

v. Self-Motivation – It involves the power of being driven to achieve for the achievement of goals.

Emotional intelligence concept has become a crucial indicator for student knowledge, abilities in university and college, skills and personal life. By applying emotional intelligence methodology in higher education, it not only fulfils their desire but also makes students more efficient in their field. According to different studies, it is shown that emotional intelligence affects success in academic and professional studies and also can contribute towards the performance of an individual student (Chamundeswari, 2013).

Several studies indicate that the relationship between emotional intelligence and academic performance among business students is weak (Malik & Shahid, 2016). This study indicates that emotional intelligence did not influence academic performance among their students. From the previous study on the emotional intelligence level of the urban and rural students (Joiceswarnalatha, 2015), indicate that the level of emotional intelligence of urban students was higher than the rural students but the result of GPA among rural students was better and higher compared to urban students. It can be analyzed that there is no influence of emotional intelligence on academic performance and motivation for learning. Van Der Zee, Thijs and Schakel (2002) when examining the relationship between emotional intelligence and academic performance of 116 university students demonstrated that there is a weak correlation between emotional intelligence and academic performance, however, the relationship of emotional intelligence with some characteristic such as extraversion was significant.

However, these findings are not consistent with the result of Aruna Kolachina (2014), who examined the relationship between emotional intelligence and academic performance of expatriate students. The result showed that there is a positive
relationship and it reveals that the level of emotional intelligence has influenced the high and low academic achievement motivation among students. The article ‘An impact of emotional intelligence on the academic performance of the students’ (Garima Tyagi, 2017), explored the relationship between emotional intelligence and academic performance using graphical and the qualitative methods. The result showed that there is a significant relationship between emotional intelligence and academic achievement. However, they do not only depend on a cognitive and conceptual aspect of intelligence, but also on the emotional abilities of a person or emotional awareness.

Tamannaifar and others in (2010) examined 6,050 students at the University of Kashan to identify the relationship between emotional intelligence, self-concept and self-esteem with academic achievement. In this study, the sample of students was randomly chosen, and the result drawn from this study revealed that emotional intelligence, self-concept and esteem of students were found to be significantly related to their academic achievement. Yahaya et al. (2011) studied the relationship between the five dimensions of emotional intelligence, i.e., self-awareness, emotional management, self-motivation, empathy, interpersonal skills and academic performance. The report revealed that there is a significant relationship between self-awareness, emotional management and empathy with academic performance.

The above study indicates that emotional intelligence and academic performance are significantly correlated. Moreover, there was a significant and positive relationship between creativity and academic achievement (Hossein, Shahidi, Elhamifar & Khademi, 2015). Sivakalai et al. (2017) in their study on emotional intelligence and its impact on academic achievement in Zoology among higher secondary students, reveals that there is a positive correlation between emotional intelligence and academic achievement. The overall results of researches suggest that emotional intelligence plays a significant role in academic performance, motivation, decision making, successful management and leadership.

Emotional intelligence literature reveals that the researchers are mainly focused on the students’ academic performance and academic performance rather than the motivation strategy for learning. Mustafa Afifi, (2016), focuses on the impact of emotional intelligence, self-efficacy and academic performance among university students. The sample consisted of 152 nursing students and 194 from media and mass communication college from Cairo University. The result indicated that emotional intelligence and self-efficacy are positively correlated to students’ academic performance. Villanueva and Sanchez (2007) also showed similar results: emotional intelligence could be a predictor to self-efficacy which in its turn lead to better academic performance. Jenaabadi et al. (2015), in their study revealed that there was a significant relationship between emotional intelligence and academic achievement of students at 95 per cent significant level. These findings are in line with the result of Rahnama and Abumaleki, (2009). In many cases, emotional intelligence plays an important role compared to cognitive intelligence.
From the above studies in the review literature, we can identify that emotional intelligence has a positive impact on the influence of academic performance and academic achievement of the students. Much of the previous research has focused on emotional intelligence, and academic success compared to the motivation strategy for learning. For preparing students to cope with a dynamic learning environment, it is essential to integrate emotional intelligence among students. Furthermore, we can also understand that students with a higher level of emotional intelligence to be able to better cope with the social and emotional demands of studies than students who score low on emotional intelligence abilities (Samuel Thavaraj, 2016).

2.3. Learning Motivation (LM)

An individual’s level of motivation is a crucial indicator of successful learning (Hattie, 2013). In the context of education, motivation may be considered as a measure of how willing a student is to participate in their learning (Martin, 2008). Motivation is what drives an individual’s effort to stay on task in the face of challenge and stems from an individual’s beliefs, values and goals (Howell & Buro 2009). Deci and Ryan (2000) discuss motivation in regard to satisfying psychological needs and report that the desire to satisfy innate needs pushes individuals to improve their current status by adopting behaviours that they consider meaningful to their development in relation to their current situation.

This perspective sees motivation as a contextualised construct where an individual’s natural psychological tendencies predict their motivation to satisfy needs. Such needs may be purely abstract (fulfilment, perfection, empowerment, etc.) but may also manifest in more tangible ways. Motivation may come in a number of forms, and these forms tend to fall under two umbrella terms: ‘intrinsic motivation’ and ‘extrinsic motivation’. A student who is intrinsically motivated makes an effort because they own their learning; their desire to learn is internal, and outcomes are understood. In another significant study, Eccles and Wigfield (2002) grouped motivation theories into four categories including theories focused on (1) expectancy, (2) reasons for engagement, (3) integrating expectancy and value (4) integrating motivation and cognition.

In this study, we will focus on student motivation. According to (Kim & Bennekin 2013), student motivation refers to the willingness to exert effort to work on a learning task. They further pointed out that motivation can be present without engagement; students can be willing to exert effort, but they do not always do what they are willing to do. For example, even when students are motivated to study for an exam, they can still be distracted from engaging themselves in studying the main ideas from study materials.
3. CONCEPTUAL RESEARCH FRAMEWORK

Based on the variables described in Sections 2.1 to 2.3, the conceptual research framework was developed (Figure 1). The framework has self-leadership and emotional intelligence as the independent variables (IVs). In addition, learning motivation is a dependent variable (DV).

![Conceptual Research Framework](Figure 1: Conceptual Research framework)

4. RESEARCH METHODOLOGY

In this study, a quantitative research method was adopted. It focuses on the primary data collection method; the questionnaire was chosen because it was comparatively timesaving and had the benefit of collecting respondents from a large group of subjects with a relatively low cost (Dahlberg & McCaig 2010). This study used descriptive statistics which is the presentation of statistical facts, or data, in either tables or graphs form, and with the methodology of analyzing the data. A statistical tool examines the multiple independent variables related to a dependent variable. Multiple regression techniques identified how these multiple variables relate to the dependent variable and derive information about all of the independent variables and use it to make much more powerful and accurate predictions about why things are the way they are. This study uses multiples regression which is \((x_1)\) self-leadership, \((x_2)\) emotional intelligent and \((y)\) is learning motivation. In addition, this study also uses the t-test which is a statistical method used to determine the effect of one independent variable (gender, male and female) on a dependent variable (motivation for learning). Furthermore, the independent variable consists of more the two categories to compare, and therefore the Anova, a test that will compare all categories simultaneously to determine the significant differences between the
learning motivation was used. The mean score of 4 courses which are Mathematics, Physics, Biological Sciences and Chemical Sciences of undergraduate students in Public Higher Education was studied.

The population of this study came from a public university in northern Malaysia. The sample of this study are undergraduate students from our schools which are School of Mathematics Sciences, School of Physics, School of Biological Sciences and School of Chemical Sciences. The sampling process is conducted with the cooperation of the administration of the four-schools who granted permission for distributing questionnaires among 50 undergraduate students from each those four schools. Three instruments which are: self-leadership questionnaire, motivation for learning questionnaire and emotional intelligence questionnaire were administered. The student self-leadership and emotional intelligent questionnaire were used to determine learning motivation among undergraduate students. The questionnaire was distributed to 200 respondents.

The distribution of respondents was done according to gender. Based on the table below, the number of male respondents was 48 students representing 24% and female respondents were 152 students that presenting 76% of the 200 respondents in the population. The number of respondents were also studied according to age. The respondents were from the age range of 19 to 27. The larger number of respondents were the age of 22 (that is: 88 students representing 44% of the total respondents). The lowest categories of age are 25 – 27 which consisted of 2 students and representing 1.0% of the total respondents. The distributions of respondent by race and it can be seen that majority of respondents are Malay which about 122 students and representing 61% and followed by Chinese 30.5%, Indian 7.5% and others 1.0%. The frequency of respondents was by year of study. It shows the majority are from year 3, which is 110 respondents and followed by Year 1 which is 56 respondents, Year 2 which is 31 respondents, three respondents in Year 4.

Based on three variables in table 5, the higher score which is mean 158 (standard deviation 16.49) for learning motivation. It shows that most of the undergraduates from four different courses have high learning motivation during their study. Furthermore, the second is emotional intelligence that shows mean 145 (standard deviation 16.62). This shows that student in pure science courses have high emotional intelligence. The self-leadership show the mean is 132 (standard deviation 16.88) which had low mean scores. The students showed less self-leadership in the result.
5. RESULTS

5.1. Multiple linear regression

Multiple linear regressions are used to predict scores on one variable using scores from two or more different variables based on a multiple’s regression planes. The variable that is being predicted is known as the dependent variable which is learning motivation or known as $Y$, and the variables that are used to predict scores are known as Independent variable which is self-leadership, $X_1$ and emotional intelligence, $X_2$.

![Figure 2: Regression Standardized](image)

Figure 2 shows the histogram approximates a standard curve. Thus, the scores of the criterion variables are assumed to be normally distributed in the population for all possible combination of the level of the predictor variables.

![Figure 3: P-P Plot of Regression](image)

Figure 3 shows the normal plot shows the point fall more at the straight line and the scores of criterion variance are assumed to be normally distributed in the population.
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**Figure 4:** Scatter Plot of the dependent variable

The scatterplot of *ZRESID against *ZPRED is quite randomly and evenly distributed around zero. The scores of the criterion variable have the same variance in the population for all possible combination level of predictor variables. p-value for test F is 0.000, p < .05, so the null hypothesis is rejected because p-value is less than 0.05. The result shows the self-leadership, and emotional intelligence is significant predictors of learning motivation in the population. At least one predictor variable is a significant predictor of the learning motivation in the population F (2, 197) = 166, p < .05, R2adj = .62. About 62% of the variance in learning motivation can be explained by self-leadership and emotional intelligence in the population.

**Table 1: ANOVA test**

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>33979.771</td>
<td>2</td>
<td>16989.886</td>
<td>166.037</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>20158.224</td>
<td>197</td>
<td>102.326</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>54137.995</td>
<td>199</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Learning Motivation
b. Predictors: (Constant), Emotional Intelligent, Self-Leadership
Table 2: Model Summary

<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>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.792a</td>
<td>.628</td>
<td>.624</td>
<td>10.11563</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Emotional Intelligent, Self-Leadership
b. Dependent Variable: Learning Motivation

The self-leadership is a significant predictor of learning motivation, t(199) = 12.86, p < .05 and the emotional intelligence is not a significant predictor of learning motivation, t(199) = 1.95, p = .052. Even though, the p-value for emotional intelligence is .052, but it shows that the p-value is actually close to 0.05, and it gives the small effect to students learning motivation. The value for the beta for X1 is 0.719 indicating a change of one standard deviation on self-learning is associated with a change of 0.719 standard deviations of learning motivation. The value for the beta for X2 is 0.109 indicating a change of one standard deviation on emotional intelligence is associated with a change of 0.109 standard deviation of learning motivation. In conclusion, the value of beta for X1 is higher than the value of beta for X2. Thus, self-leadership among undergraduate student from a course of mathematics, physic, biology and chemistry is more affected of learning motivation than the emotional intelligence. Therefore, the independent sample t-test, ANOVA and multiples regression was used to test the hypothesis.

Table 3: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>50.097</td>
<td>6.671</td>
<td>7.510</td>
</tr>
<tr>
<td>X1, Self-Leadership</td>
<td>.702</td>
<td>.055</td>
<td>.719</td>
<td>12.865</td>
</tr>
<tr>
<td>X2, Emotional Intelligence</td>
<td>.108</td>
<td>.055</td>
<td>.109</td>
<td>1.956</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Learning Motivation

Table 4 shows that descriptive statistics done through quantitative data analysis. The following Table described the findings based on the analysis of quantitative data. Based on the findings, the following is a summary of the testing for this study.
Table 4: Summary of Hypothesis Study

<table>
<thead>
<tr>
<th>Test</th>
<th>Hypothesis (Ho)</th>
<th>Statement</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>Ho1</td>
<td>Self-leadership and emotional intelligence are significant predictors of learning motivation in the population.</td>
<td>Rejected</td>
</tr>
<tr>
<td>Anova – Test 1</td>
<td>Ho1</td>
<td>There is no statistically significant difference in the mean self-leadership scores in mathematics, physic, biology and chemistry.</td>
<td>Failed to reject</td>
</tr>
<tr>
<td>Test 2</td>
<td>Ho2</td>
<td>There is no statistically significant difference in the mean emotional intelligent scores in mathematics, physic, biology and chemistry.</td>
<td>Failed to reject</td>
</tr>
<tr>
<td>Test 3</td>
<td>Ho3</td>
<td>There is no statistically significant difference in the mean learning motivation scores in mathematics, physic, biology and chemistry.</td>
<td>Failed to reject</td>
</tr>
<tr>
<td>T-Test – Test 1</td>
<td>Ho1</td>
<td>There is no statistically significant difference in the mean self-leadership between male and female in the population.</td>
<td>Failed to reject</td>
</tr>
<tr>
<td>Test 2</td>
<td>Ho2</td>
<td>It is statistically different in the mean emotional intelligent between male and female, in the population.</td>
<td>Failed to reject</td>
</tr>
<tr>
<td>Test 3</td>
<td>Ho3</td>
<td>There is a statistical difference in the mean learning motivation between male and female in the population</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

6. DISCUSSION

The findings based on the analysis of quantitative data demonstrates a high score which is mean 158 (standard deviation 16.49) for learning motivation. It shows that most of the undergraduates from four different courses have high learning motivation during their study. Furthermore, the second is emotional intelligence that shows a mean of 145 (standard deviation 16.62). This shows that students in pure science courses have high emotional intelligence. The self-leadership shows
that the mean is 132 (standard deviation 16.88) which is a low mean score. The students showed less self-leadership.

The students of pure science show higher learning motivation and desire to participate in the learning process. The outcome of the results most probably is supported by personal and external factors. One of the personal factors might be driven by the goal to achieve an excellent academic grade in order to succeed in the studies. The learning environment at the university could be one of the external factors for their achievement. The pure science students also indicated a high level of emotional intelligence. One of the keys to obtaining success of learning is to give full attention and concentration during the process of teaching learning. High level of emotional intelligence can help calm the mind and thus to increase the absorption of information received. As a result, it will contribute to their academic achievement.

In this study, one of the reasons pure science students show a more significant influence of emotional intelligent in learning is because these groups of students are being enrolled in pure science degree based on their excellent academic results. In contrast, this group of students show a low self-leadership skill due to fewer training programs that can develop the leadership skills among the students.

7. CONCLUSIONS

This study has certain limitations that should be considered before generalizing its results. First, the study tested and verified the hypotheses using a questionnaire survey but will provide only a cross-section of the study in nature. Moreover, the sample population is limited to Undergraduate Students in a public higher education institution in Malaysia. In addition, the sample of this study is limited to three public universities. However, as private and public universities are different, the results of this study may not be applicable to undergraduate students of private universities. The results of this study tested the factors that affect undergraduate students in public higher education on learning motivation in Malaysia as a developing country. The conclusions of this study can be helpful for policymakers of higher education and top managers of public research universities in developing countries.

According to the output of the independent sample, t-test to determine the effect of two independent variables (males and females) and self-leadership that represent the dependent variable indicated that there is no significant difference between males and female in the influence of self-leadership in learning motivations. The results are similarly based on the test of emotional intelligence on gender. The independent sample t-test is used to determine the effect of one independent variable (male and female) on dependent variables (emotionally intelligence). Based on the test, the result shows the scores of emotional intelligence of males and females is equally distributed, and it indicated that there is no significant difference
between males and female in the influence of emotional intelligence in learning. However, the results are based on the test of learning motivation on gender. The results show that there is a statistically significantly difference in mean emotional intelligence between males (154) and females (160) in the population. The females show higher learning motivation than males based on the results. The self-leadership is crucial for students because it’s an essential process by which the students influence themselves to achieve their goals and objectives in their studies. Universities should provide students with an internal or external program that can increase their self-leadership such as team building programs or participating in Majlis Perwakilan Pelajar (MPP).
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