

## EMOTION REGULATION AND ACADEMIC PERFORMANCE AMONG IUM STUDENTS: A PRELIMINARY STUDY

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### ABSTRACT

*Emotion regulation and academic performance are two important domains in achieving students' life's goals and objectives. It is crucial for students to have the right attitude and be fortified with effective emotion regulation strategies to handle the difficulties of daily life. Thus, a study to investigate the relationship between emotion regulations strategies, namely cognitive reappraisal and expressive suppression, and academic performance was carried out. Participants of the study comprised of 127 Psychology students, between the age of 21 to 25 years old, from international Islamic University Malaysia. A survey adapted from Emotion Regulation Questionnaires (ERQ) by Gross (2011) was distributed to the participants. Academic performance measures was derived from demographic background and students' CGPA. Results revealed that there are different findings between the two emotion regulation strategies. This study found there is a significant relationship between Expressive Suppression and CGPA ; however, no significant relationship existed between Cognitive reappraisal and CGPA. Regression model revealed that both cognitive reappraisal and expressive suppression did not predict students' academic performance.*

**Keywords:** *Academic performance, emotion regulation, cognitive reappraisal and expressive suppression*

### INTRODUCTION

Students in higher level education are seen as leaders of the future and are expected to accomplish various roles with competency and efficiency. Moreover, academic success is one of the major goals of students. Attaining this goal involves many factors such as enthusiasm, self-control, moral value and also a good relationship between students and educators. In relation to that, universities and colleges remain to be seen as rooms of opportunity that are concentrated on educating students in almost every aspect of life, including providing the fundamentals for underperforming students. The goal of universities is much wider than just granting students with degrees or providing general education. These institutions also assist students with pertinent learning skills and enhancing them with life abilities that can be used in the future. Nevertheless, teaching and

educating students is not a simple duty. The personality, age, gender, family background, culture and socioeconomic class of each student contributes to their exclusive strengths and flaws.

In education, emotions have been considered as supplementary to the learning process. Emotions come in many forms such as sad, joyful, and irritated and many more. However, each individual may define an emotion differently. Few understand that emotions can be defined as feelings whereas some might make a distinction between feeling and emotion. However, according to the earlier psychologists such as William James, he defined emotion as a collection of feelings that is different from sensation, and that they are feelings produced by changes in physiological circumstances (Sousa, 2003).

Moreover, human beings are known as complex creatures who live by rules and social norms that evolve and develop over time. With all the rules and norms engaged in each individual, with each passing day, the person increasingly generates a variety of emotions throughout their life. Thus, it is important for the individual to know the strategies to regulate their emotions and to continue life in harmony. By letting emotions go unregulated, the individual might increase the risks of violating their goals in life. Emotion regulation strategies are essential resources in improving students' learning, achievement and quality in education. As defined by Gross (1998), emotion regulation is a process that gives impact on the individuals' emotion as soon as they have them, and the way they experience and express the emotion. Furthermore, the process can be spontaneous or controlled, conscious or unconscious, and might have produce their own effects during the process of regulating emotions.

In this day and age, there are variety of resources such as articles, books and research that has been done to assist people in regulating their emotions (Gross, 2006; Bradley, Atkinson, Tomasino, & Arguelles, 2010). In addition, the emotion regulation process has the ability of affecting the quality of responses and can directly shape the emotional experiences (Thompson, 1994). Unfortunately one of the biggest challenges that most people face is to have an effective, functional emotion regulation strategy (Gross, 2003).

Currently, there are two main emotion regulation strategies that have been studied closely, which are cognitive reappraisal and expressive suppression (Gross & John, 1998). Cognitive reappraisal is defined as an effort to reinterpret an emotion-eliciting condition in a way that modifies its meaning and changes its emotional impact (Gross & John, 2003). On the other hand, expressive suppression is defined as an attempt to hide, inhibit or lessen constant emotion-expressive behavior (Gross & John, 2003).

There are several theories that have been used in the aspect of emotion regulation strategies in order to explain the usefulness in human's life in every stage. One of the commonly used ones is the Process Model of Emotion Regulation theory that was first introduced by Gross in

2003. This theory illustrates that emotions can be regulated at five points in a process: (1) Situation Selection which involves in making a decision (2) Situation Modification; an effort to modify a situation (3) Attention Deployment involves directing one's attention towards or away from an emotional situation (4) Cognitive Change which involves changing how one appraise a situation and (5) Responses Modulation which involves an attempt to directly influence behavior, physiology and cognitive response system.

Returning to the issue of academic performance, it is also an essential instrument for a country's advancement. Gania and Muhammad (2013) have defined academic performance as both the curricular and co-curricular performance of the students. However, the issue of poor academic performance among students of public and private higher education institutions has become a serious issue. Datuk Dr. Mohamad Shahrum Osman, former Chairman of the National Higher Education Fund Corporation (PTPTN) said that 112,132 students were failing to obtain the minimum grade point average (GPA) of 2.0 until their study loans were ultimately frozen. Thus, this study intends to investigate if emotion regulation has a relationship with students' academic performance.

#### *Statement of problem*

Many previous studies have only focused on the biological aspects of emotion regulation, such as looking into the parts of the brain involved in the process (Gardener, Carr, MacGregor, & Felmingham, 2013), as well as gender and neuroanatomical aspects (Li, Huang, Wang, Song, & Liu, 2014). There is a lack of research investigating the emotion regulation mechanisms in university students' academic performance, and there is no study in Malaysia that has investigated the relationship between emotional regulation strategies and academic performance (Haryani, Sharifah & Rose, 2010). Emotional dysfunction was found to be related to poor academic performance, such as the growing number of students under the minimum requirement of academic performance across 17 universities in Malaysia. Because of this, there is an urgent need to inculcate good emotion regulation strategies

among university students. Therefore, with this background of recent studies, this research was conducted to study the relationship between emotion regulation and academic performance among undergraduate Psychology students of International Islamic University Malaysia (IIUM).

### *Research Questions*

The statement of the problem mentioned above led to a number of pertinent questions that has been examined in the present research:

1. Is there any relationship between emotion regulation (Cognitive reappraisal and Expressive suppression) and students' academic performance?
2. Is there any difference between high performance students and low performance students in emotion regulation strategies?

### *Research objectives*

The aims of this study are as follows:

1. To identify if there is any relationship between emotion regulation (Cognitive reappraisal and Expressive suppression) and students' academic achievement.
2. To find out if there is any difference between high performance students and low performance students in emotion regulation strategies.

### *Significance of the Study*

International Islamic University Malaysia (IIUM) is one of the universities that play as a medium for international and local students to learn. It supplies quality education towards international, multicultural students such as Egyptians, Pakistanis, Bangladeshis, Indians, Nigerians, Palestinians and students of many more nationalities. Thus, the educational institution has the responsibility to support students in handling their emotional aspect particularly those who have traveled from their home country, from far away. A strong level of emotional stability is needed to balance academics and adaptation to new environments. Due to that reason, this study is a significant endeavor in promoting the technique of

emotion regulation in the educational setting. It is important to know the relationship between emotion regulation and students' academic performance because a study by Marincas and David (2011) has found that dysfunctional emotion regulation can lead to low academic achievement. Furthermore, it will have an impact on the daily basis of an individual due to the notion that emotion regulation is a critical component in life development (Barlow, Allen & Choate, 2004). Therefore, by understanding the need of emotion regulation in academic performance, this research will be very helpful in educating students and teachers regarding the importance of emotion regulation.

### *Cognitive Reappraisal and Expressive Suppression, and Performance*

As mentioned above, cognitive reappraisal and expressive suppression are among the strategies people use in regulating their emotion. Leroy, Gregoire, Magen, Gross, and Mikolajczak (2014) have concluded that cognitive reappraisal could be used to effectively preserve performance in a task. In addition, other research have shown that cognitive reappraisal has a positive impact by decreasing negative emotion experience and negative emotion behavioral expression without much physiological activation. It was also found that expressive suppression has negative effect by decreasing positive emotion experience (Gross, 2002; Mauss et al., 2005; Hayes et al., 2010; Brans et al., 2013).

Moreover, cognitive reappraisal can enhance behavioral memory performance, while expressive suppression can have the opposite effect (Gross, 2000; Dillon et al., 2007; Sheppes and Meiran, 2007; Hayes et al., 2010). Furthermore, it was also found that cognitive reappraisal can improve the memory of a person but it depends on the levels of processing involved such as deep cognitive analysis of stimuli (Dillon et al., 2007).

Studies on expressive suppression have also been done in relation to studies of social memory, such as the memorization of names or facts (Richards & Gross, 2000). Results show that expressive suppression has led to memory impairment when social information was presented while the individual was regulating their emotions. This suggests that using

expressive suppression as a regulating strategy is cognitively tough. Butler, Egloff, Wilhelm, Smith, Erickson, and Gross (2003) suggest that suppression has the potential to undermine social functioning to a much greater extent than reappraisal. Students who use expressive suppression often encounter problem in socializing with other classmates or even lecturers, negatively impacting them from seeking help from others. Furthermore, Butler et al. (2003) also mentioned that the suppression of emotional expressive behavior by one partner of the interaction declines the quality of the relationship, indicated by less rapport and liking. In conclusion, both strategies play a vital role in students' academic performance but in different ways.

#### *High Performance and Low Performance Students and Emotion Regulation*

Academic achievement is a collaborative result whereby students, educators and the institution contribute efforts to achieve a similar goal. Academic achievement includes the degree of students in gaining knowledge and skills that the educators teach. Such achievement usually measured by examination or continuous assessment, yet there is no universal agreement on how it is best rated. Based on the study done by Gumora and Arsenio (2001), they found that although students' emotion regulation strategies and academic performance were related, each of these components made a unique contribution to students' GPA such as social influence. Thus, the current study intended to identify if there was any differences between high performance students and low performance students in emotion regulation strategies.

#### *Research Hypothesis*

Hypotheses in the present study are proposed below:

For the first research question, the hypothesis for determining if there is any relationship between emotion regulation and students' academic achievement:

Hypothesis 1: There is significant relationship between emotion regulation (cognitive reappraisal & expressive suppression) and academic performance.

The hypothesis tested for the second research question are as follows:

Hypothesis 2: There is significant different between high academic performance students and low academic performance students in emotion regulation strategies.

## **METHOD**

### *Participants*

The participants consist of approximately 127 students including male and female, regardless of their age and year of study. The sample was limited to Undergraduate Psychology students of International Islamic University Malaysia, Gombak who were recruited based on simple random sampling. For the purpose of the study, the participants were divided into two groups, low and high achiever groups.

### *Procedure*

127 of questionnaires were distributed to the students. Rules and regulation regarding the ethical handling of the data were used. Respondents were given an information sheet explaining the purpose of the study (i.e., to collect data about academic performance and emotion regulation) and providing details of data handling procedures, including their right to refuse to participate or to withdraw at any time.

### *Instruments*

The questionnaire survey used in this study was aimed to get information about students' academic performance and emotion regulation strategies that they used. The questionnaire was specifically designed to accomplish the objectives of the study. The survey instrument was divided into two sections:

#### i. Assessment of Demographics Background

The participants will be asked to provide information about the following: age, gender, year of study and report of their CGPA as a primary indicator of academic performance and will be measured on a scale of 1.00 to 4.00 (Zanariah, Ishak, & Nazihah, 2012). They will

also do a self-report on their performance in class.

ii. Emotion Regulation Questionnaire (ERQ)

The Emotion Regulation Questionnaire (ERQ) is adapted from a study done by Gross (2003). It consists of 10 items that will capture two types of emotion regulation strategies: (1) Cognitive Reappraisal and (2) Expressive Suppression, on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (Strongly agree). In addition, the Reappraisal scale and the Suppression scale both comprised at least one item asking about regulating negative emotion (demonstrated for the participants by giving sadness and anger as examples) and one item about regulating positive emotion (demonstrated by joy and amusement). Moreover, caution was taken by limiting the item content to the planned emotion regulatory strategy only. The participants were asked to rate the extent to which they typically try to think or behave differently in situation or to change their emotions. In the past research, the ERQ had an acceptable reliability of Cronbach's alpha; cognitive reappraisal, .81; expressive suppression, .73 (Wiltink, Glaesmer, Canterino, Wölfling, Knebel, Kessle, & Beutler 2011).

**RESULTS**

Academic performance has been an issue of attention and research for a very long time. Limitless amount of studies have been assumed which either focused specifically on academic performance or academic performance in relation to other factors. Most of these studies wanted to determined factors that improve academic performance. In past few years, many researchers have been studies about academic performance and it relation with other demographic and psychological features.

Thus, the current study will discuss the result; internal consistency, Pearson correlation and independent T-test. Based on table 1, the results shows that the Emotion Regulation Questionnaire (ERQ) has sufficient internal consistency with a Cronbach alpha ( $\alpha$ ) value of .804. The two factors' internal consistency are also acceptable. Factor 1 (Cognitive Reappraisal  $\alpha = .850$  and factor 2 (Expressive Suppression  $\alpha = .686$ ). With the satisfactory

internal consistency, the ERQ has an acceptable reliability.

**Table 1** Internal consistency estimates for overall Emotion Regulation Questionnaire (ERQ) scores and subscales by sample

Scale	No. of Items	Coefficient Alpha( $\alpha$ )
Overall	10	.804
Cognitive Reappraisal	6	.850
Expressive Suppression	4	.686

Table 2 displays Pearson correlation between emotion regulation and academic performance variables. Specifically, based on the two factors of Emotional regulation: Cognitive Reappraisal and Expressive Suppression, there are different findings between two of the factors. For Cognitive Reappraisal, the result indicated that there is no significant relationship between CGPA, with  $r(126) = .108, p > .05$ , however, for Expressive Suppression, the study found that there is a significant relationship between CGPA, with  $r(126) = .231, p < .05$ .

**Table 2** Pearson correlation between Emotion Regulation and academic performance variables

	1	2	3
1. Cognitive Reappraisal			
2. Expressive Suppression	.303**		
3. Emotion Regulation (General)	.874**	.728**	
4. CGPA	.108	.231**	.197*

\*\*  $p \leq 0.05$

\* $p \leq 0.01$

Table 3 displays Independent T-test for high achievers students and low achievers students based on emotion regulation strategies (General). For the independent T-test, the study found that there is no significant difference between high ( $X = 6.06, SD = 3.39$ ) and low achiever, with  $t(125) = -.948$ . The result indicated that, the level of CGPA did not indicated the strategies of emotional regulation. Thus, the hypothesis is rejected.

**Table 3** Independent T-test for high achievers students and low achievers students based on emotion regulation strategies (General).

	<i>df</i>	X	SD	t
High	125	6.06	6.06	-.948
Low		3.39	3.39	

## DISCUSSION

Based on the data collected and statistical analysis, the results revealed that there are different findings between the two emotion regulation strategies. The study found that there is a significant relationship between CGPA and expressive suppression but not for cognitive reappraisal. Consistent with the present research hypothesis, Figure 2 shows that emotion regulation has a definite relationship with students' CGPA but only in terms of expressive suppression. This result is supported by various studies done by Gross, (2002); Mauss et al., (2005); Hayes et al., (2010) and Brans et al., (2013), which also found that expressive suppression has a certain impact on emotion experience. Maintaining a favorable CGPA involves emotion experiences especially when students deal with stressors such as examinations and assignments. In the course of their academic curriculum, students go through several evaluations. Their level of achievement in these evaluations represents the primary criterion to determine if students meet the minimum requirement of certain CGPA score. Therefore, expressive suppression is related with students' academic performance as they might acknowledge the emotion experiences in academic assessment.

The study also suggests that the reason expressive suppression has relations with CGPA may be due to how the motivation students have is affected by suppressing their emotions. This idea is supported by important research done by Eisenberg, Sadovsky and Spinrad (2005) whom found that emotion regulation can contribute to motivation, which is linked to students' academic performance. For example, if a person suppresses his or her positive emotion and manages it within him or herself, this increases their motivation to carry out their task or assignment. On the other hand, if a person has negative emotion and suppresses that emotion within him or herself without

finding a solution, he or she might feel demotivated, affecting his/her performance such as involvement in class and quality in coursework. Thus, expressive suppression can affect the motivation or determination that a student has, eventually impacting their performance.

Another factor that may have contributed to the relation between expressive suppression and academic performance is memory performance. Research done by Gross, (2000); Dillon et al., (2007); Sheppes and Meiran, (2007); Hayes et al., (2010) found that expressive suppression has negative effects on students' memory performance. And because memory is one of the crucial aspects in academic performance whereby students need to be able to retain the different types and amounts of information from their various and many classes. For instance, if a student knows how to handle his or her emotion using expressive suppression, he could memorize the information needed for him to perform in class assessment. This also indicates the reason why expressive suppression is related to academic performance.

In addition, expressive suppression is known as a strategy that does not allow a person to express the emotions which will lead to the incongruent feeling of self and behavior. The concept related to this is authenticity. Authenticity is defined as the extent to which individuals behave in ways that are congruent with their own inner feelings, attitude and beliefs, rather than a false representation (Sheldon et al., 1997). Based on the result that CGPA is related to emotion regulations, it can be noted that students might have suppressed their negative emotions in order to excel in their academics and that is called as inauthenticity. When experiencing a certain level of negative emotions, students might feel it is best to put their feelings aside in order to focus on their academics. Ignoring the sources of these negative feelings is as simple as deceiving themselves, with no guarantee that such a strategy will help them to focus on their studies. For example, if a student is anticipating an exam in the near future and, at the same time, is having personal problem, he or she might separate the two matters to increase focus on just one. The matters are divided into personal and academic or professional, and the focus is channeled through preparations for the exam

instead. At least for the time-being. In addition, students might also be concerned with becoming good students and being accepted into their favored social circles by ignoring and suppressing their own feelings or emotions. On the other hand, suppressing negative emotion can also lead to unsuccessful of goal if students shows the authenticity of their feelings and cannot handle it in a good way.

Based on the model of emotion regulation (Gross, 2003) mentioned above, cognitive reappraisal is the process that takes place before expressive suppression is involved. This model thus acknowledges the efforts of cognition techniques before proceeding to the expressive suppression techniques. Based on the above explanation, it is assumed that a person who uses suppressive suppression is already aware and conscious about the presence of his or her emotions. This is because the brain has already recognized the emotions and therefore decides to reconstruct the event. Only after that do the expressive suppression techniques come in. Based on this concept, expressive suppression might affect individuals negatively and positively in their moods depending on how seriously they take the awareness obtained through the cognitive reappraisal technique. For instance, if a student is totally aware of their negative mood and suppresses it for a while in order to focus on an exam later that day, they will know how to manage between emotions, using cognitive reappraisal, and perform better. Conversely, if they are aware of their negative emotions but decide to ignore them, their decision to do so may lead to bad performance, or expressing their negative emotions in an undesired way. This may occur because they do not know how to modify their emotions and make it fit into the current situation which, in this case, is to focus on their examinations.

Another reason that can also be related with the results is negative mood regulation expectancy by Catanzaro and Mearns (1990), which refers to generalized beliefs about one's ability to regulate negative moods. In relation to the present study, the reason why only expressive suppression is related to academic performance might be because students use their ability to generalize their talent to do well or badly based on their negative emotion. For example, if a student generalizes the failure in one subject to contribute to the failures in other subjects, and

suppresses his negative emotions without seeking help to resolve them, then the predictive thoughts he or she has will eventually take a toll on his or her performance. On the other hand, if he or she decides not to generalize future outcomes based on one bad event, it will more often result in positive emotions and it will cause less harm than suppressing negative emotions.

Rumination is known as negative worries and can also be one of the reasons why expressive suppression has a relationship with academic performance. A student might have worries about their examinations and assignments, and that will lead to the suppression of his or her emotions. Therefore, the worries they keep within themselves can be the medium to motivate or demotivate them in performing well in studies. Worries that lead to suppressive expression can help students to behave oppositely of how they feel in order to distance themselves from the negative feelings they have. Thus, the feeling of worry or rumination can drive them to either improve their performance or not.

Furthermore, expressive suppression has the potential to undermine the social function of an individual. This has been supported by a study done by Butler et al. (2003). It was suggested that students who use expressive suppression often have a problem in socializing with their classmates and even lecturers. Should this problem continue, this will negatively impact them by preventing them to seek help from others in their academics. Similarly, students might decide to keep their feelings hidden and not express for fear of people judging and avoiding them. In addition, a person who inappropriately adjusts their feelings may emotionally deprive themselves. It is a notion that if a person feels sad, it is a signal for him or her to seek help from other individuals (Eisenberg, 2000). However, a person who always suppresses their sadness might hold themselves back from receiving or asking for help from others and therefore experience lower well-being and lead to weak performance in academics.

On the other hand, expressive suppression can also help students in their performance. For example, if one is elated to the point that the emotion distracts one from an initial focus or

priority, expressive suppression can help in controlling one's excitedness especially if one does not know how to manage one's emotions as well as the behavior that comes along with it. If the person suppress his negative emotions, it may decline the quality of the relationship as indicated by less rapport and liking (Butler, Egloff, Wilhelm, Smith, Erickson, & Gross, 2003).

Contrastingly, looking at the aspect of CGPA and cognitive reappraisal, this study's results contradict with the research done by Leroy, Gregoire, Magen, Gross, and Mikolajczak (2014), whose results concluded that cognitive reappraisal is one of the techniques that effectively preserve performance in tasks. However, the present study found no relationship between cognitive reappraisal and CGPA. This shows that even though students use cognitive reappraisal as their method to regulate their emotion, it clearly does not have any affect on their academics. However, this cognitive reappraisal technique may affect them in other spheres of their life. Based on the research done by Leroy et al. (2011), what they meant by people effectively preserving performance with the use of cognitive reappraisal might be referring to tasks other than those related to academics, such as cleaning or cooking. Furthermore, as stated by Brummer (2009), his research found that cognitive reappraisal can benefit a person's memory, but it depends on the level of the processing involved. The study suggests that maybe the level of processing involved in academic performance is not equivalent to the level of processing used otherwise, as explained in the research above.

Tamir (2005) wrote that personality traits can be one of the factors of distinct emotion regulation strategies. Personality traits such as neuroticism and extraversion have been linked with distinct patterns of emotion regulation which may have implications for performance. Concurring, research done by Davis, Woodman and Callow (2010) also suggested that regulation styles may be guided by other individual difference variables such as extraversion. From this, we can assume that the participants have different personalities and use different techniques in regulating their emotions, causing the cognitive reappraisal and expressive suppression strategies to have

different results in relation to academic performance.

Cognitive reappraisal is known to be one of the better emotion regulation strategies. Unfortunately, Kunzmann, Kupperbusch and Levenson (2005) found that people that overuse the emotion regulation ability may turn out to be less happy and less successful due to the physiological costs that occur while regulating their emotions. This is because adjusting emotions require a considerable physiological resource and an activation of the sympathetic branch of the autonomic nervous system.

Based on the statistical analysis in table 3, the independent t-test revealed that there is no significant difference between the results of the high and low achievers. There are several reasons for this, in relation to emotion regulation. According to the study done by Gumora and Arsenio (2001), they found that although students' emotion regulation strategies and academic performance were related, each of these components also made a unique contribution to students' GPA such as social influence. In the present study, the factor that could have contributed to the similarities between both groups -high and low achievers- may be the influence of peer groups. Peers are an effective social agent, from which students may have adopted techniques of emotion regulation. Peers with seemingly higher academic achievements are often more influential, thus making it easier for the respondents to look up to them, model after as well as adopt their strategies.

#### *Limitations*

This study is particularly concerned with the students of IIUM. The results should be taken in light of numerous limitations that reveal important guidelines for future research. Firstly, the current research only focused on two types of emotion regulation. Other kinds of emotion regulation strategies may display different suggestions with different criteria. Secondly, the current research examined one criterion which only focused on the aspect of academic performance. Thirdly, the participants were students of undergraduate level, therefore generalizing these results to other levels of study should be done with caution. Besides that, these findings are only

applicable to a small sample of IIUM Psychology students (30%), making an inaccurate representative sample of the whole population of IIUM. Therefore, these results cannot be generalized to all students of IIUM.

### *Implication*

There are several implications of this study in terms of its benefits to the students and society. Firstly, this study may help increase awareness among students about the importance in regulating emotions especially when it involves their studies and overall academic life. Secondly, the awareness of emotion regulation strategies is useful for the society at large because it may help to improve people's quality of life by knowing how to regulate their emotions effectively when dealing with everyday stresses, grievances and negative experiences.

Thirdly, the ability to adjust emotional expressive behavior will effectively help students to handle flexibility in situational demands and goals needed in a variety of conditions. The ability to handle situations successfully by using the suitable emotion regulation strategies can be associated with success. In addition, at the micro level, handling emotional behavior effectively aids people in managing the appropriate emotional response to various situations as governed by society's culture and norms. When equipped with this ability, individuals might also be more successful in communicating attitudes and conveying thoughts.

The study suggests conducting further research by considering different environments such as other universities. It is also important to conduct the future research in different settings, such as a laboratory setting, and compare it with the real-world, natural setting. A larger and more diverse sample of students should also be considered as it may give different and more precise findings. Another recommendation would be to conduct this study qualitatively such as interviewing the participants about the relationship between emotion regulation strategies and academic performance. Though qualitative responses often only report the perceptions of the respondents, the results however may offer alternative insights to the topic under study.

It is suggested to the universities or educational institution administrators to develop workshops that include positive emotion regulation skills among youths in order to start creating exposure. Firstly, it is in order to increase students' self-awareness by teaching students to recognize their own emotions and its effects on their thoughts and behavior, and to be conscious of their own strengths and weaknesses.

Secondly, it is to teach them to control their negative feelings and behaviors, manage it in the most effective ways and to change their negative feelings slowly. Thirdly, it is a necessity to teach students in understanding the emotions, needs and concerns of people surrounding them in order to create a good, cooperative environment in a group or organization. Furthermore, the educators that deal with students should concern themselves with and understand the fact that memory is also linked to emotion. By linking emotion and the techniques of learning, it will help students in improving their academic performance, as well as their performance in other aspects of their lives.

## **CONCLUSION**

In conclusion, this study has probed the correlation between emotion regulation and students' academic achievement, and also the differences between high achievers and low achievers in terms of their emotion regulation strategies. Based on the developed research questions, it is possible to state that emotion regulation is correlated with students' academic performance at university and yet there are no differences between high achievers and low achievers in how they regulate their emotions. Therefore, the findings of this study suggests that the emotion regulation strategies, specifically expressive suppression, may affect students' academic performance. The findings indicate that the students need to learn and be concerned about emotion regulation strategies as the results show correlation between academic performance and emotion regulation. It is also needed for their long-term life development as mentioned by Azizi (2003). Based on the results, academicians should realize that emotion regulation can assist in predicting students' behavior in university, as

students who are educated to be emotionally regulated might improve their academic performance in the future.

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