

A Reciprocal Linkage between Self-Regulated Learning and Learning Related Emotions: Investigating Relations Differences across Gender and Study Tracks

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ABSTRACT

This study aimed to investigate the relationship between self-regulated and learning related emotions in a university context, and finding out the differences of self-regulated levels between males and females students. Furthermore, it also sought to exploring the relationship between self-regulated and learning emotions affected by gender and study tracks variables. The sample of the study consisted of (209) university students (120 females, 89 males) students. The results showed a positive relationship between self-regulated and learning related emotions. Moreover, it was found that there was no significant difference between males and females students in the relationship between self-regulated and learning related emotions, but significant differences were indicated due to study track. In light of these findings, it was recommended to focus on the significance of self-regulated and students learning emotions in the university environment.

Keywords: Self-Regulation, Learning Related Emotions, Study Tracks, University Students.

Introduction

In the past thirty years, researchers have shown that factors predict university students' academic success and outcomes are quit complex in a sense that a single factor may not significantly affect the adolescent's development, but instead the relationship among different factors would do so (e.g. Freund & Baltes, 2002; Kennett, Reed, & Stuart, 2013). In this regard, literature confirms that behavior, emotional and cognitive academic factors, affect a student's learning and their achievement growth in terms of social, emotional and personal development and that, such factors may be considered as predictors (e.g. Nguyen & Ikeda, 2015).

Self-Regulated and learning related emotions are for example very influential in achieving success. In their studies, (Duckworth & Seligman, 2006; Jdaitawi, 2015) demonstrated that self-regulated is an important factor in determining overall students' success and their learning process. Additionally, researchers illustrated that self-regulated learning could lead students to employ active learning strategies (Carr, Plamer, & Hagel, 2015), engage in more independent study time (Eccles & Wigfield, 2002), able to manage their learning (Ferrari, 2001), as well as use effective strategies that required effort and time (Howell & Watson, 2007). Self-regulation brings forth an inclusive method to student learning, including factors such as cognitive, motivational, affective and social contexts (Pintrich, 2004). Reviewing the literature has shown that researchers highlighted the importance of self-regulation in university environment (Roth bart, Sheese, & Ponser, 2007; Kuhl & Fuhrmann, 2008). In addition, several researchers stressed on the significance of self-regulation in influences adolescent social well-being, relationship with other individuals and understanding personality development such as traits related to goals, situational expectancies (e.g. (Fitzsimons & Finkel, 2010; Denissen, Wood, Penke & Aken, 2013).

Emotions are also highly important. On other words, emotions guide students learning behavior and well-being which

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impact on their general learning experience by extension their success (Pekrun, 2006). Emotions involve subjective experiences that vary between individuals and the differences in emotions experienced by different students within gender and academic domains. Goetz, Frenzel, Ludtke, and Hall (2010) stated that emotional experiences are generally assumed to have a high degree of domain specificity.

Previous studies have focused on the important of students' emotions in their learning processes (Linnenbrink, 2007; Pekrun, 2006). Pekrun et al. (2002) linked emotions to learning situation in general, and teaching, tests and achievement in particular. However, one has to point out that few researches have focused on the relationship between self-regulated and learning related emotions in the academic environment. Several researchers contended that emotional experiences of students are directly associated with their subjective well-being and, as such; it is a significant research topic (Goetz et al., 2010).

Researcher (Pekrun, 2006) stated that emotions can profoundly affect students' thoughts, motivation, and action. He furthered, such emotions are quite significant and are determining factors for students' learning behavior in the classroom. One example is that the level of enjoyment encourages self-regulated learning and impacts on achievements (Pekrun, 2006) as well as reflects on the well-being of the student (Pekrun et al. 2002).

According to Pekrun (2006), several assumptions in literature and empirical evidence revealed that several characteristics may play a role as major antecedents to the academic emotions experienced by students. For example, Goetz, Ludtke, Nett, Keller and Lipnevich (2013) demonstrated that several cognitive appraisals including personal control perceptions, situation value, and expectations of others are significantly linked to certain emotions in specific situations. Furthermore, Prior studies also suggested that study domain and gender plays a significant role in students' emotions and that different levels of specific emotions are experienced in different environments (Goetz et al., 2010) as justified by the fact that subject domain may encapsulate different domain value, content difficulty, self-concept and specific abilities that are concerned with the domain, classroom composition, peer support and classroom instruction. Therefore, it can be concluded that the reciprocal relations between academic emotion and self-regulated would significantly related to students in a variety of ways and interchanges (Pekrun et al., 2006).

For instant, Peklaj and Pecjak (2011) investigate the relationship of effective and motivational processes and self-regulation among students. Their study used cognitive and meta-cognitive strategies from emotional and motivational variables. A total of 397 Slovenia students 145 males and 252 females participated in the study. However, the results showed that there was a relationship between the study variables and the more significant correlations between emotional and motivational variables were found for girls than for boys. In the other hand, the relationship between emotional dimensions and strategies were noted for males' students. They also found that emotions explained a greater amount of variance in using cognitive and met-cognitive strategies in boy than in girls.

Villavicencio and Bernardo (2012) examined the self-regulation and the positive academic emotions of enjoyment and pride are positive predictors of achievement and the moderator effect of emotions on the relationship between self-regulation and achievement among (1345) university students. The result revealed that emotions positively predict student grades and both moderated the relationship between self-regulation and students achievement. In addition, the results found that students who reported higher level of both positive emotions, self-regulation was positively associated with grades.

Pekrun, Elloit and Maier (2006) have reported on their research carried out with 102 German college students and 167 American students which investigated the relationship between goals and discrete emotions. The results showed that a similar link between achievement goals and achievement emotions. Mastery goals were positively related to enjoyment of classroom instruction, hope and pride, and were negatively related to boredom and anger. Performance avoidance goals were positively related to anxiety and hopelessness. Performance approach goals were positively related to pride.

In another study, Linnenbrink et al. (2007) carried out correlation study to identify the goal orientations that students endorsed for specific tasks and examine the affective states that emerged during the tasks including emotions and moods among students from different background such as school and colleges. The results reported that mastery-approach goal

orientations were positively related to pleasant affect and negatively related to unpleasant affect. Furthermore, pleasant affect was positively correlated with behavioral engagement and unpleasant affect was negatively correlated with behavioral engagement.

Hall, Sampasivam, Muis and Ranellucci, (2016) also examined the linkage between achievement goals and achievement emotions as well as the mediating role of perceived progress, control and value on the relationship between achievement goals and achievement emotions. The sample was 273 undergraduate students from humanities, social science and STEM disciplines. However, the results revealed that there was a direct relationship between achievement goals and achievement motivation. Furthermore, the result showed that perceived progress, perceived control and perceived value mediated the relationship between mastery approach goal and positive emotions such as joys and hope and anxiety.

Jdaitawi (2015) examined the correlation between self-regulation with other variables as well as the effect of gender on the relationship between self-regulation and academic and non-academic factors among 209 undergraduate students in Saudi Arabia. The results revealed that self-regulation was correlated with other variables such as social connectedness, self-efficacy and self-control. Furthermore, the result showed that gender variable affect the relationship between self-regulation and other variables. For instant, significant difference exist in the relationship between self-regulation and self-efficacy among females' students but not for males' students.

In another study, Lawanto, Santoso, Goodridge and Law an to (2014) examined the relationship between task value, self-regulated learning and student performance among 57 undergraduate Engineering students. The results revealed that there were a significant positive relationship between self-regulated learning strategies such as goal setting and performance as well as positive correlation between self-regulated learning strategies such as goal setting, task strategies, help seeking and self-evaluation with task value.

Rational of the Study

Researchers reached the conclusion that self-regulated and learning emotions are important in the realm of student's learning and performance (Jdaitawi, 2015; Putwain, Larkin & Sander, 2013). In addition, researchers stated that emotions have the ability to influence students learning both positively and negatively (Pekrun et al., 2006; Linnen brink, 2007). However, emotions experiences influence interaction and affect learning and performance as well as personal growth for learners (Pekrun et al., 2006). On the other hand, researchers (Pekrun et al., 2006) confirmed that emotion regulation for learning encompasses both the cognitive and motivational processes that can give rise to emotions and emotion regulation strategies that can be employed to manage learner's emotion in general and negative emotions in particular. Nevertheless, there is an evident ambiguity as to the interrelations between self-regulated and emotion-related learning. This study was developed to minimize these gaps in literature by integrating important research domains. In sum, the main contribution of this study is to examine students' self-regulated and learning related emotions among university students. This should allow us to more closely understand the relative importance of these concepts for students' success. Furthermore, there is still much that we need to find out about the state of self-regulated experienced by students, and whether gender and study tracks are related to self-regulated and learning related emotions.

Problem of the Study

The university stage is a significant development phase wherein self-regulation and its elements' may indicate academic achievement (Duckworth & Seligman, 2006; Jdaitawi, 2015) allow students to gain confidence (Deeley, 2014) and good mental health (Boekaerts, 2005). Learning and study strategies are important factors in understanding students personality and academic performance at university (Prevatt, Petscher, Proctor, Hurst & Adams, 2006). However, when students enrolled to higher education settings, they are expected to employ active learning strategies (Carr, Plamer, & Hagel, 2015) engage in more independent study time (Eccles & Wigfield, 2002), able to manage their learning (Ferrari, 2001), as well as use effective strategies that required effort and time (Howell & Watson, 2007). Despite the fact that

enhancing self-regulated learning is at present deemed as a main objective of the research in adolescent life, a larger number of students encounter difficulties to regulate their learning such as managing their time, concentration, study habits and students experience negative emotions during classes, and motivational difficulties while they are studying, as well as in their tests and examinations (Lewis, Havil and-Jones & Feldman, 2008; Weiner, 2007). As a consequence of these emotions, the students may be not as inclined towards task completion, effective studying, memorization of details, work towards success, select effective performance settings, establish and achieve goals and exert effort for a period of time (Pintrich, 2004; Marl and, Dearlove, & Carpenter, 2015) student's self-regulation. Similarly, according to Flowers, Bridges, and Moore (2011), few studies examined self-regulation and additional studies are required concerning implementing self-regulated learning and vary efficiency among adolescents (Montalvo & Torres, 2004; Wigfield, Klauda, & Cambria, 2011). Therefore, based on the findings of prior studies (e.g. Soric et al. 2013; Putwain et al. 2013; Pekrun et al. 2002), the present study would contributed to the literature by examining both self-regulated and learning-related emotions experienced by students in order to improve the actual learning environment at the university.

Research Questions

Three main questions were formulated which are:

Questions One: What are the levels of self-regulated learning among students?

Questions Two: Does students self-regulated correlated with learning emotions?

Question Three: Does students self-regulated predicted by learning emotions, gender and study tracks?

The Aims of the Study

The present study served to obtain empirical evidence regarding the reciprocal relation between self-regulated learning and learning related emotions. Specifically, the aims were: to examine the relationship between self-regulated learning and learning related emotions; to investigate the difference of self-regulated learning and learning related emotions between males and females students; and to investigate the difference relations between self-regulated learning and learning related emotions among university's students based on their study's track.

The Importance of the Study

Despite the importance of self-regulated and learning emotions and their contributions to students achievement and satisfaction, there is still a lack in studies dedicated to student's success in terms of self-regulated along with their learning related outcomes on the life of youth in the world (Soric, Penezic & Buric, 2013; Boekaerts, 2005; Pekrun et al., 2002) and particularly within the Arab world. In addition, evidence supporting the mean level differences in self-regulated and academic emotions in various domains exists, but it remains unclear whether the strength of the relationship between the student's learning self-regulation and emotions varies from one domain of studies to another. By doing so the research attempts to go beyond what prior studies had focused. Moreover, based on the findings of prior studies (e.g. Soric et al. 2013; Putwain et al. 2013; Pekrun et al. 2002), the present study would contributed to the literature by examining both self-regulated and learning-related emotions in a certain academic track and analyzing whether or not the relationship between the two constructs in each academic track. The findings of this study will provide an insight based on analyzing the relation between self-regulated and learning related emotions based on Saudi students. In addition, while previous studies focused only on the individual variable, the actual study goes further by exploring the differences of the relationship between self-regulated and learning related emotions of the tracks. The current study also focuses on gender differences in the domain of self-regulated-learning related emotions since gender is consider to be an important factor in the education environment.

Limitations of the Study

The limitations of the study were as follows:

1. First: this study was relied on data from self-report measures (quantitative) method only to highlight the actual perception of students of their university success.
2. Second, the study concentrates on a single university owing to the limited time appropriated for the subject.
3. Thirdly, this study depended on prior studies' findings urging to include students from undergraduate programmers studying in different levels, but being a non-longitudinal study, data was collected at a single time.

Study Variables

Learning related Emotion: academic emotion described as the temporary affective states experienced by students during their engagement in daily activities of teaching, learning, and the assessment. It can be felt and gauged in conjunction with classroom teaching, learning or testing. This makes academic emotions stand out from the other affective types such as mood, which lacks a specific referent and is described as less situation-specific, and generally not as intense or long lasting compared to emotions in general (Linnen brink, 2007; Pekrun, 2006).

Self-Regulation: is defined as the degree to which learners are meta-cognitively, motivationally, and behaviorally participate in their learning process (Zimmermann, 1990).

Research Method

This study used the descriptive correlational design using quantitative survey method. The descriptive correlational design is the most appropriate for the nature of the present study.

Population/ Sample

This study was conducted among Preparatory Year students (first year) at the University of Dammam, in Saudi Arabia. The research obtained approval from the Preparatory Year Deanship at the University of Dammam to conduct the study before collecting data and applying the research tools on the sample of the study. The study sample was obtained with the help of a stratified sample consisted of 209 (120 male and 89 female students), Saudi students studying in University of Dammam. The students were divided into study programs for different study tracks, namely Health, Engineering and Science as shown in table (1). Data collection was conducted among the students at the end of the second semester of 2014/2015. The method was used to ensure that a suitable proportional representation of the population subgroups was focused on. Stratified sampling is an appropriate option as its means are likely to be in proximity to the mean of the overall population (Robson, 1993) and also because it reflects the population characteristics as a whole.

Table (1)
Demographic Characteristics of the Sample

Gender	No.	Percentage
Females	89	42.6
Males	120	57.4
Study Track		
Health	72	34.4
Engineering	69	33.1
Science	68	32.5

Outcome Measurements

A self-report questionnaire was employed in the study for the data collection. The questionnaire categorized three sections; the first section aimed to acquire the necessary background information on the respondents like their gender and study track. The second section learning related emotions measure and the third section dealt with the self-regulated learning. The study applied Weinstein and Palmer (2002) measurement to measure self-regulation. The measurement consists of measuring 32 items via point likert-scale based on rank justification that ranged from 1 strongly disagree– 5 strongly agree. The scale also has proven to have high internal reliability and has been widely used in the previous study

Weinstein and Palmer (2002) as well as used in different settings. The researcher examined the reliability and validity through translation the measurement into Arabic, since the instrument items were originally constructed in English, and the language of the subjects is Arabic. The questionnaire was translated into Arabic, and was evaluated by two referees of Arabic origin who were then teaching English and Psychology at the University of Dammam. The questionnaire then was evaluated by five referees who specialized in educational fields and educational psychology. Second, internal reliability was tested and the result of Cronbach Alpha towards the self-regulation instrument and its dimensions was proven to be reliable and valid with an alpha coefficient of 0.89. As for the learning related emotions, the research used the measurement of Pekrun, Goetz and Perry's (2006). The learning related emotions scale used in the present study is from Pekrun et al. (2006). The scale measured emotions experienced by students in their class and during tests. The measure comprised of 8 items such as (e.g. I look forward to studying), (e.g. I feel optimistic that I will make good progress in studying), (e.g. I have great hope that my abilities will be sufficient). The researcher examined the reliability and validity of the learning related emotions measure through translation method, since the instrument items were originally constructed in English, and the language of the subjects is Arabic. The questionnaire was translated into Arabic, and was evaluated by two referees of Arabic origin who were then teaching English and Psychology at the University of Dammam. The questionnaire then was evaluated by five referees who specialized in educational fields and educational psychology. Second, internal reliability was tested and the result of Cronbach Alpha towards the scale is proven to have a good reliability with an alpha coefficient of 0.84.

Construct Validity

The research applied Confirmatory Factor Analysis (CFA) to the study variables in order to assess the measurement model's adequacy. It focused on four latent variables and a CFA performed on them. The convergent and discriminant validity and Cronbach's alpha of variables were obtained. In addition, a structural equation modeling (SEM) analysis was performed to determine the overall acceptability of the measures through Chi-square statistics, ratio, and root mean square error of approximation (RMSEA), comparative fit index (CFI) and Tucker-Lewis index (TLI). These values used because of their reliability in obtaining a good model compared to other values (Fan, Thomson and Wang, 1999). Good model fit was indicated by confirmatory fit index and *TLI* values of $\geq .90$, *RMSEA* value of $\geq .08$ and ratio or normed of ($\chi^2 = chi \geq .5$). Consequently, the variables measurement model generated an acceptable fit statistics for the entire indices values. Additionally, scale reliability coefficients were found to be acceptable at $> .70$. Table (2) contains the results of the measurements models for the entire variables. All the variables descriptive statistics were obtained over average scores and skewness and kurtosis statistics fell within the acceptable value of 1.96, which indicate that the data was normally distributed.

Table (2)
Overall Measurement Model Fit for Research Model

Fit Index	Self-Regulated	Learning-Related Emotions
Cronbach Apha	.89	.84
(RMSEA)	.077	.070
(CFI)	.915	.967
(TLI)	.905	.956
Mean	3.27	3.30
SD	.867	.898
Skewness	-.341	-.517
kurtosis	.013	-.008

Results

To answer the research’s question one the descriptive statistic for the total and subscales of the self-regulated learning mean scores was calculated and the sample has an overall good use of self-regulation strategies in their learning process as shown in table (3) below.

Table (3)
Descriptive Statistics for the total Self-Regulated Learning

Subscales	No. of items	Mean	SD	Min	Max
Self-Regulated Learning	32	3.27	.867	1	5

To answer question number two, variables correlations for the entire sample were calculated and presented in Table 4. The result revealed that self-regulated correlated with learning-related emotions as shown in Table (4).

Table (4)
Inter-Correlations among Related Variables

Variable	Learning Related Emotions
Self-Regulated Learning	.689**
	.000

To answer questions number three regarding the relationship between the variables based on their gender, the variables correlations were calculated. The results revealed for the male samples, where it is evident from Table 5 that self-regulated and learning-related emotions found to be correlated. For the female sample, it is evident from Table (5) that self-regulated correlated significantly with learning-related emotions. Hence, the results shown that there were no significant differences in the relationship between self-regulated and learning-related emotions between males and females students.

Table (5)
Inter-Correlations among Related Variables based on Gender

Male Sample		Female Sample
	Learning Related Emotions	Learning Related Emotions
Self-Regulated Learning	.689**	Self-Regulated Learning .671**
	.000	.000

Furthermore, in order to achieve the fourth objective of this study which is to conduct a comparison of the relationship between the self-regulated and learning related emotions based on study track, the study used multi-group analysis. Health, engineering and science study tracks models and the correlation results are presented in the tables below. Although, the relationship between psychographic variables and learning-related emotions exists, both health and engineering models appear to be reliable paths between variables than science track and with significant differences between them as shown in Tables (6). However, the results showed that self-regulated significantly correlated with learning related emotions among health and engineering students but not for science track students. Therefore, it can be concluded that there were a significant differences in the relationship between self-regulated and learning related emotions based on study tracks.

Discussion and Conclusion

First Question: what is the level of self-regulation learning among Undergraduate University Students? The result revealed that the mean score of students based on self-regulation learning level was above average. Therefore, it can be concluded that Saudi students enrolled in the preparatory program at the University of Dammam have average level of

self-regulation. The result therefore supported that students implemented self-regulated skills in their study process. The result of this study was in line with some previous studies (Kitsantas, Winsler, & Huie, 2008). The result supported that self-regulated skills used by preparatory year students were significant as these elements are basic skills used within the classrooms. As this respect, students use the university e-learning facilities to revise prior to their lessons. In other words, students are not confined to acquiring knowledge during regular classes or to be in a certain place. Furthermore, the most crucial skill taught to preparatory year students at the university is taking notes that have to be summarized after their lessons. During the class, the students may manage their time by focusing on study aid skills as taking notes, underlining pertinent information and using charges and graphs to draw up reports. In addition, among the top teaching strategies used in the preparatory program is feedback in that the students who carry out their tasks in the class may underline unfamiliar ideas and obtain the answers from their instructors. It can therefore be contended that these strategies are extensively utilized by students while studying their materials and preparing for their tests and assignments which may lead them to have good level of self-regulation in their learning.

Table (6)
Correlations for the Variables in the Study Based on Study Track ($p < .05$)

		Learning Related Emotion
Health Track	Self-Regulated Learning	0.596*
		.000
Engineering Track	Self-Regulated Learning	0.565*
		.043
Science Track	Self-Regulated Learning	0.114
		.101

Second Question: Does students self-regulated correlated with learning emotions? This study also investigated the relationship between self-regulated and learning related emotions for the whole sample. The result supported that there was a relationship between variables. The result of this study was in line with some previous studies (Kitsantas et al., 2008). The result is not surprising owed to the class composition, classroom dynamics involving levels of competition and peer support which may leads students to implement self-regulated strategies and feel better in their classroom. In addition to this, university colleges' offer limited seats for students' acceptance following their preparatory year at the university and hence, this may urge students to concentrate during their classes and motivate them to make use of study aids to complete tasks, which will help them recall the information during test.

Question Three: Does students self-regulated predicted by learning emotions, gender and study tracks? As differences of the self-regulated and learning related emotions relationship between males and females, the present study revealed that the difference of the variables relationship between men and women did not exist. This may be explained by the notion that while both genders are concerned of their needs and others and their experiences lead to their greater involvement in the class and activities, and in general, students are more likely to take part in self-deprecating humor when tackling adversities and absurdities in order to gain the group support. This may be why both student's men and women are successful in choosing or developing contexts that suit their personal needs and values indicating that they have environmental mastery and feeling positively in their learning environment. In addition, this may be explained by the fact that both men and women are having high classroom support and high competitive classroom environment, motivating them to achieve higher which will, in turn, help them get competitive future careers depending on their achievement.

Therefore, men and women are similar motivated to their work and feel positive towards their learning environment.

As differences of the self-regulated and learning related emotions relationship based on study tracks, the present study revealed that the difference of the variables relationship between health, engineering and science track students did exist. Earlier studies have demonstrated the different levels of certain emotions in varying domains (e.g. Goetz et al., 2013, 2010). The result was not surprising since health track students described to have high classroom support and high competitive classroom environment. Moreover, the health college offered limited seats for students following their preparatory year at the university. This may have encouraged students to concentrate during their classes and make use of study aids to complete tasks, which will help them recall the information afterward. Furthermore, health students characterized to have high level of self-control, more capable of coordinating their goals than other students. In addition, the differences in results may be due to that the learning environment for health track students. The results of the study supported Goetz et al. (2013). According to Goetz et al. (2013), these differences may be owed to the class composition, classroom dynamics involving levels of competition and peer support. The difference may also be attributed to the expectations of teachers that may have influenced health track students' emotions through communication. Hence, students' emotions may be influenced by the teachers' different emotions and teaching style. The teaching characteristics may thus play a role in the students' emotions. Further, the result supported that the competition status amongst health track learners. The competition status made students actively engaged in the learning tasks, had positive attitudes towards subjects, and had highly positive self-concept than learners in engineering and science tracks. Furthermore, preparatory year program classified students into their tracks based on their school grades. Since the students admitted to the health track got the highest grades in the high school, we assumed that they were also more successful in learning new concepts and showed better understanding of the learning materials than engineering and science students.

Implication

The variables are self-regulated, learning related emotions, study track and gender. By exploring these, the literature was extended in different ways; 1) by determining the levels of self-regulated among university adolescent students, 2) determining the relationship between self-regulated and learning related emotions 3) by examining whether or not relations exist between self-regulated and learning related emotions is different between genders and study tracks. The findings explain the emotional and learning outcomes of students as previous studies had only focused on diagnosing the relationship between the variables in individuals setting, with some providing a general discussion concerning the social connectedness level and overlooking the comparative analysis of the reliability of the various models employed in differing settings. Added to this, the results of the study also stressed the importance of self-regulated learning training programmers for students to increase their achievement which may lead them to feel positive towards their studies. The creation of formal and informal sessions through training programmers may facilitate the creation of the students' social network and the provision of individual and social support, which can encourage students to be successful in their learning goals.

Recommendations

In light of the results of this study, it is therefore important for education policy makers in the education sector to be aware that self-regulated and learning related emotions are significant in student success. Therefore, developing training program and formal and informal sessions to develop students learning self-regulation skills is needed. Furthermore, beyond its contributions to the studies in the field of education, future research may approached the case under study by using qualitative method to highlight the actual perception of students of their university success. This study concentrates on a single university owing to the limited time appropriated for the subject and hence, future studies could include students from other universities. Future studies can conduct a longitudinal study to provide a rich interpretation of the causal link results among the study variables. Finally, future research may add other variables not included in this study such as high and low achievement and students background.

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النموذج التبادلي بين التنظيم الذاتي المتعلم والانفعالات المرتبطة بالتعلم: التحقق من الفروق في العلاقات تبعا لمتغيري الجنس والمسار الدراسي

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ملخص

هدفت الدراسة الحالية إلى التحقق من علاقة الانفعالات المرتبطة بالتعلم والتنظيم الذاتي للتعلم، وأيضا الكشف عن الفرق في مستوى تنظيم الذات بين الطلبة الذكور والإناث. كما هدفت الدراسة إلى الكشف عن العلاقة بين الانفعالات المرتبطة بالتعلم والتنظيم الذاتي للتعلم بناءً على المسار الأكاديمي للطلبة. حيث تكونت عينة الدراسة من 209 طالبا وطالبة منهم 120 ذكورا و89 إناثا. وأسفرت النتائج عن وجود علاقة بين الانفعالات المرتبطة بالتعلم والتنظيم الذاتي للتعلم. كما أشارت النتائج إلى أنه هناك اختلافاً في العلاقة بين الانفعالات المرتبطة بالتعلم والتنظيم الذاتي للتعلم تعزى لمتغير المسار الدراسي، لكن لم تظهر النتائج فروقا في العلاقة بين المتغيرات تعزى لمتغير الجنس. وفي ضوء النتائج خرج الباحث بعدد من التوصيات منها الإشارة إلى أهمية التنظيم الذاتي للتعلم والانفعالات المرتبطة بالتعلم.

الكلمات الدالة: التنظيم الذاتي للتعلم، الانفعالات المرتبطة بالتعلم، المسار الدراسي، طلبة الجامعة.

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