

**Motivation in self-regulated learning and learning strategies in self-regulated learning  
in relation to Academic procrastination among first year secondary school students**

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**Abstract**

**Purpose:** The purpose of this study was to explore motivation in self-regulated learning and learning strategies in self-regulated learning in relation to Academic procrastination among first year secondary school students.

**Sample:** 140 first year secondary school students participated in this study. The consent of the participants was sought before they participated in this study. The majority of the participants were female 80 (57.0%) and the rest male 60 (43.0%).

**Result:** The result of a Pearson correlation analysis revealed that intrinsic goal orientation, task values, rehearsal, elaboration, meta cognitive self regulation, resource management strategies, organisation and critical thinking as self-regulated learning components that have significant negative correlations with academic procrastination. In addition, anxiety was found to have a significant positive correlation with academic procrastination. Extrinsic goal orientation and control of learning beliefs were not significantly correlated to academic procrastination.

**Key Words:** Motivation in self-regulated learning, learning strategies in self-regulated learning, Academic procrastination, First year secondary school students

**الدايفية في التعلم المنظم ذاتيا واستراتيجيات التعلم في التعلم المنظم ذاتيا وعلاقتها بالتلکؤ الأكاديمي لدى طلاب الصف الأول الثانوي العام**

**الهدف:** هدف البحث إلى الكشف عن الدايفية في التعلم المنظم ذاتيا واستراتيجيات التعلم في التعلم المنظم ذاتيا وعلاقتها بالتلکؤ الأكاديمي لدى طلاب الصف الأول الثانوي العام. يسعى البحث الحالي إلى الإجابة على السؤالين هل توجد علاقة دالة بين المكونات الدايفية في التعلم المنظم ذاتيا والتلکؤ الأكاديمي؟ هل توجد علاقة دالة بين مكونات استراتيجية التعلم في التعلم المنظم ذاتيا والتلکؤ الأكاديمي؟

**العينة:** أجرى البحث على عينة قوامها ٤٠ طالبا وطالبة بالصف الأول الثانوي العام. وتم أخذ الموافقة بالمشاركة في البحث. وجاء غالبية المشاركين من الإناث ٨٠ (٥٧,٠%) والباقي من الذكور ٦٠ (٤٣,٠%). تم جمع البيانات باستخدام مقياس الدايفية واستراتيجيات التعلم ليننرتش، ومقياس توکمان للتلکؤ الأكاديمي.

**النهج:** تم استخدام التصميم الارتباطي العلائقي لتحديد العلاقة بين المتغيرات محل الدراسة. كما تم استخدام معامل ارتباط بيرسون للتحقق من العلاقة بين المتغيرات محل الدراسة. باستخدام برنامج الحزمة الإحصائية في العلوم الاجتماعية، تم عمل كل التحليلات.

**النتائج:** كشفت نتيجة تحليل ارتباط بيرسون أن توجه الهدف الداخلي، قيم المهمة، التسميع، الإسهاب، التنظيم الذاتي ما وراء المعرفي، استراتيجيات إدارة الموارد، التنظيم والتفكير الناقد كمكونات للتعلم المنظم ذاتيا ترتبط سلبا بالتلکؤ الأكاديمي. بالإضافة إلى ذلك، تبين أن القلق يرتبط إيجابا بالتلکؤ الأكاديمي. إلا أنه لم توجد علاقة ارتباطية دالة بين توجه الهدف الخارجي، وضبط معتقدات التعلم بالتلکؤ الأكاديمي.

**الكلمات المفتاحية:** الدايفية في التعلم المنظم ذاتيا، استراتيجيات التعلم في التعلم المنظم ذاتيا، بالتلکؤ الأكاديمي، طلاب الصف الأول الثانوي العام.

## Introduction:

Procrastination has typically been defined as a trait or behavioral disposition to postpone or delay performing a task or making decisions (Milgram, Mey Tal & Levison, 1998; Kachgal, Hansen & Nutter, 2001). Additionally, procrastination has been seen as an impediment to academic success because it decreases the quality and quantity of learning while increasing the severity of stress and negative outcomes in students' lives (Howell & Watson, 2007). The literature has examined procrastination because it involves affective, cognitive, and behavioral mechanisms (Chu & Choi, 2005).

According to Firouzeh and Jalil, (2011) procrastination is a weak point of personality and leads to low self-confidence. Perception of university students of themselves as procrastinator varies according to different researcher as it is 95% reported by Ellis and Knaus (1977), 46% by Solomon and Rothblum (1984) and 75% reported by Potts (1987).

Furthermore, studies also concluded that the most of the students demonstrate unrelenting and consistent procrastination in daily study activities (Day, Mensink & O'Sullivan, 2000; Onwuegbuzie, 2000). It is seen among university students that they use to bunk classes (Rothblum, Solomon & Murakami, 1986), have low academic performance (Fritzsche, Rapp & Hickson, 2003), and tardiness (Rothblum, Solomon & Murakami, 1986).

Procrastination dominates all areas of behavior and action but the most general form is academic procrastination which occurs in the academic settings. It is about having the knowledge that a student has to complete one or more tasks or administer any activity, for example solving a term paper, preparing for exams, completing a class project or concluding a reading assignment, but lacking in motivation to do in a specified time period (Ackerman & Gross, 2005).

Self regulated learning implies learning regulated by the students themselves, and is not motivated and regulated by external factors and people. The students' management of their own learning, the steering and directing of cognitive activities and motivation to the attainment of learning goals, are the main features of SRL.

Thus, SRL refers to the high involvement of the individuals themselves in their learning, and is characterized by the metacognitive, motivational and behavioral processes that enhance learning. Meta-cognitively, self-regulated students are students who plan, set goals, organise, self-monitor and self-evaluate their learning at different points in the process of the acquisition of knowledge. Motivationally, self-regulated students report high self-efficacy, self-attribution and intrinsic interest, while behaviorally they select structure and create an environment which contributes to optimum learning (Mourad Ali, 2015).

Motivation is a desire for certain outcomes. Expectancy or self-efficacy refers to the chance of success. Value refers to the reward received from the outcome. Impulsiveness refers to the sensitivity of a person to delay and Delay refers to the time to realisation. As an example for TMT, suppose a one month period is given to a student for a final exam. The

student has two options, namely studying or socialising. Even though the student enjoys socialising, he/she needs to perform well in the exam. The reward of studying is not immediate. Therefore, at the beginning of the given period the student is less motivated to study and prefers to partake in socialising. However, as time goes by there will be less time for exam preparation and thus, motivation for studying will outweigh the motivation for socialisation. The question is, when will this kick in? When students choose to go with their motivation to socialise over their motivation to study, they are actually putting off studying until it might be too late. In other words, procrastinating. (Yap Li San, Samsilah and Fatemeh, 2016, p.461).

Howell, Watson, Powell and Buro (2006) showed that academic procrastination was associated with lower cognitive strategies (students' use of rehearsal, elaboration and organisation strategies) and metacognitive strategies (students' use of planning, monitoring and regulating strategies) in terms of usage and also disorganisation. Howell et.al. (2006) also showed that usage of cognitive and meta-cognitive strategies and disorganization significantly predicts academic procrastination. The study by Klassen et.al. (2008) of the relationship between academic procrastination, metacognitive self regulation (involving the three general processes of planning, monitoring and regulating), academic self efficacy, self-esteem and self-efficacy for self-regulation (The confidence that a person has to select and implement self-regulation strategies).

Yap Li San et.al. (2016) aimed to investigate the relationship between the components of motivation in self-regulated learning as well as the components of learning strategies in self-regulated learning and academic procrastination. Academic procrastination creates problems for undergraduates such as stress and poor academic performance which should be investigated as a serious issue in the educational context. The participants included 100 undergraduates in Universiti Putra Malaysia. The result of a Pearson correlation analysis revealed intrinsic goal orientation, task values, rehearsal, elaboration, meta cognitive self regulation, resource management strategies, organisation and critical thinking as self-regulated learning components that have significant negative correlations with academic procrastination. In addition, anxiety was found to have a significant positive correlation with academic procrastination. Extrinsic goal orientation and control of learning beliefs were not significantly correlated to academic procrastination.

So, present research study seeks to explore Motivation in self-regulated learning and learning strategies in self-regulated learning in relation to Academic procrastination among first year secondary school students. It addresses the following questions:

1. Are there significant relationship between the motivation components in self-regulated learning and academic procrastination?
2. Are there significant relationship between learning strategy components in self-regulated learning and academic procrastination?

**Method**

**Sample:**

140 first year secondary school students participated in this study. The consent of the participants was sought before they participated in this study. The majority of the participants were female 80 (57.0%) and the rest male 60 (43.0%).

**Instruments:**

1. The MSLQ (Pintrich, 1991) has two sections: one of motivation and other of learning strategies. The first section is formed by 31 items divided into six subscales that measure the goals, beliefs, values, control thoughts, and beliefs about the skills to succeed and test anxiety. The second section includes 31 items relating to the use made by students of different cognitive and meta- cognitive strategies and also includes 19 items about managing different learning resources by students, with a total of 50 items divided into 9 subscales.
2. Tuckman Procrastination Scale (TPS) The Tuckman Procrastination Scale (Tuckman, 1991) is 16 items measure concerning academic behavior. Cronbach Alpha reliability coefficient of TPS is 90. It is a four point Likert rating scale. Responses ranged from "That's me for sure" to "That's not me for sure". Twelve Items are positively and four items i.e., 6, 12 14 and 16 are negatively worded. Low scores indicate high academic procrastination and vice versa.

**Design And Analysis:**

Correlational design to determine the relationship between variables was employed. Pearson's product moment correlation was employed to ascertain the relationship between the variables. All analysis was performed using Statistical Package for the Social Sciences

**Results:**

H1: There are significant relationship between the motivation components in self- regulated learning and academic procrastination. The Pearson correlation was utilized to investigate the relationship between the motivation components in self- regulated learning (intrinsic goal orientation, extrinsic goal orientation, task value, control of learning beliefs, self- efficacy for learning and performance, test anxiety) and academic procrastination. As detailed in Table (1), the results demonstrate a significant negative relationship between intrinsic goal orientation and academic procrastination ( $r = -0.34, p < 0.01$ ). Task value and self- efficacy for learning and performance are also significantly and negatively correlated to academic procrastination ( $r = -0.41, p < 0.01, r = -0.39, p < 0.01$ ) (Conversely, test anxiety was significantly positively correlated to academic procrastination  $r = 0.27, p < 0.01$ ). Also, the result indicates that there is no significant relationship between extrinsic goal orientation and control of learning beliefs with academic procrastination ( $r = -0.11, p = 0.232, r = -0.14, p = 0.271$ ). In addition, the result of the Cronbach Alpha values from each component is presented in the following Table (1).

Table (1) Results of Pearson correlation for the relationship between the motivation components in self- regulated learning and academic procrastination

Scale	1	2	3	4	5	6	7
Academic Procrastination	0.81						
Intrinsic Goal Orientation	-0.34**	0.84					
Extrinsic Goal Orientation	-0.11	0.52**	0.87				
Task Value	-0.41**	0.72**	0.54**	0.86			
Control of learning beliefs	-0.14	0.66**	0.72**	0.71**	0.82		
Self- efficacy for learning and performance	-0.39**	0.69**	0.48**	0.74**	0.53**	0.87	
Test Anxiety	0.27**	0.40**	0.45**	0.13	0.39**	0.17	0.63

Note: \*\*  $p < 0.01$  (1- tailed), diagonal line shows Cronbach Alpha values

H2: There are significant relationship between learning strategy components in self- regulated learning and academic procrastination.

The Pearson correlation was also employed to examine the relationship between the learning strategy components in self- regulated learning (rehearsal, elaboration, organization, critical thinking, metacognitive self- regulation, resource management strategies) and academic procrastination. As reported in Table (2), rehearsal, elaboration and metacognitive self regulation are significantly and negatively correlated to academic procrastination ( $r = -0.39, p < 0.01, r = -0.48, p < 0.01, r = -0.41, p < 0.01$ ). Moreover, there is a significant and negative correlation between resource management strategies, organisation and critical thinking with academic procrastination ( $r = -0.31, p < 0.01, r = -0.36, p < 0.01, r = -0.41, p < 0.01$ ).

Table (2) Results of Pearson correlation for the relationship between learning strategy components in self- regulated learning and academic procrastination

Scale	1	2	3	4	5	6	7
Academic Procrastination	0.81						
Rehearsal	-0.39**	0.79					
Elaboration	-0.48**	0.62**	0.87				
Organisation	-0.36**	0.71**	0.64**	0.83			
Critical Thinking	-0.41**	0.76**	0.82**	0.72**	0.82		
Metacognitive self- regulation	-0.49**	0.79**	0.78**	0.73**	0.53**	0.87	
Resource Management Strategies	-0.31**	0.60**	0.65**	0.43**	0.39**	0.58**	0.81

Note: \*\*  $p < 0.01$  (1- tailed), diagonal line shows Cronbach Alpha values

**Discussion:**

The purpose if this study was to explore motivation in self- regulated learning and learning strategies in self- regulated learning in relation to Academic procrastination among first year secondary school students.

The first hypothesis was that "There are significant relationship between the motivation components in self- regulated learning and academic procrastination". The Pearson correlation was utilized to investigate the relationship between the motivation components in self- regulated learning (intrinsic goal orientation, extrinsic goal orientation, task value, control of learning beliefs, self- efficacy for learning and performance, test anxiety) and academic procrastination". The results demonstrate a significant negative relationship between intrinsic goal orientation and academic procrastination. Task value and self- efficacy for learning and performance are also significantly and negatively correlated to academic procrastination Conversely, test anxiety was significantly

positively correlated to academic procrastination. Also, the result indicates that there is no significant relationship between extrinsic goal orientation and control of learning beliefs with academic procrastination.

The second hypothesis was that "There are significant relationship between learning strategy components in self-regulated learning and academic procrastination". The Pearson correlation was also employed to examine the relationship between the learning strategy components in self-regulated learning (rehearsal, elaboration, organization, critical thinking, metacognitive self-regulation, resource management strategies) and academic procrastination. Rehearsal, elaboration and metacognitive self-regulation are significantly and negatively correlated to academic procrastination. Moreover, there is a significant and negative correlation between resource management strategies, organisation and critical thinking with academic procrastination.

These findings are consistent with previous research by Yap Li San et.al. (2016) whose Pearson correlation analysis revealed intrinsic goal orientation, task values, rehearsal, elaboration, meta cognitive self-regulation, resource management strategies, organisation and critical thinking as self-regulated learning components that have significant negative correlations with academic procrastination. In addition, anxiety was found to have a significant positive correlation with academic procrastination. Extrinsic goal orientation and control of learning beliefs were not significantly correlated to academic procrastination.

#### **Implications:**

The results of this study have several important implications. This study adds to the literature on academic procrastination, the motivation components in self-regulated learning, and learning strategy components in self-regulated learning. Results appear to indicate that Based on this result, being a self-regulated learner may reduce academic procrastination.

Teachers may consider helping secondary school students who procrastinate. That may be by improving the components of self-regulated learning that the students lack that are found to be related to academic procrastination.

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