

## Research Article

# SELF-REGULATED LEARNING AND ACADEMIC PROCRASTINATION AMONG YOUNG ADULT E-LEARNERS: MODERATING ROLE OF GENDER

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### Abstract

The purpose of this study was to examine the role of self-regulated learning and academic procrastination among e-learners. The study aimed to find out the moderating role of gender in relation between self-regulated learning and academic procrastination. Furthermore, it was hypothesized that students from rural areas would procrastinate more as compared to urban students. Two standardized scales *i.e.*, self-regulated learning questionnaire and academic procrastination scale were used to collect the data from 381 students (Male=132, female=249) including both urban (n=252) and rural (n=129) areas through purposive sampling. Analysis was carried out with process for SPSS which revealed that students who were more engaged in self-regulated learning they less procrastinate while students from rural areas were found to be more involved in academic procrastination as compared to their counterparts. Furthermore, gender moderating the relationship between self-regulated learning and academic procrastination. These results would benefit teachers, researchers and policy makers especially in e-learning setup to help students and to design programs for students to help them how to engage in self-regulated learning and to reduce academic procrastination. *ASEAN Journal of Psychiatry, Vol. 23(3) March, 2022; 1-7.*

**Keywords:** Self-Regulated Learning, Academic Procrastination and Moderation.

### Introduction

E-Learning is an emerging form of learning in current era. E-learning uses different mode of learning approach than classroom based learning. In this kind of learning, virtual interactions are made between learners and teachers with the help of advanced technological tools and interfaces. There are various researches conducted in the domain of E-learning such as academic achievement, self-motivation, students' perceptions about E-learning and etc. whereas there are scarce of researches on issues faced by E-learners. Students in online settings have lesser face to face interaction with their teachers and class mates. Due to this factor, they may find difficulty in motivating themselves towards studies. [1] Academic self-efficacy and academic motivation are the positive predictors of

academic achievement whereas academic procrastination has an inverse relationship with academic achievement. A similar study conducted [2] to investigate the relationship among self-efficacy, academic motivation and academic procrastination of Turkish university students. They found that academic motivation and self-efficacy have an inverse relationship with academic procrastination. Those students who scored high on motivation and self-efficacy scales reported less academic procrastination. It was also found that academic motivation plays a role of mediating variable in the relationship between self-efficacy and academic procrastination. Intrinsic motivation plays its important role in reducing academic procrastination and increasing self-efficacy among Turkish students.

E-learner adults' dynamics are different from conventional students; therefore, it is necessary to know the issues which are faced by e-learners. It has been observed that students procrastinate their academic activities. Due to this prevailing problem, students also face various issues such as low self-esteem and serious health issues etc. [3] Academic procrastination influences negatively on a student's self-esteem. Moreover, it was found that male students are more engaged in procrastination than female students. High self-efficacious students do not procrastinate frequently than students with low self-efficacy. Current study investigated academic issues faced by E-learners and it mainly focuses on two factors of self-regulated learning *i.e.*, learning goals and Meta- cognition in overcoming academic procrastination. It has been found through literature that e-learners possess high competency goals as compared to performance goals. They want to develop their own competencies through problem solving. Both kinds of learning goals are directly associated with meta-cognitive strategies. Meta cognition enables students to use their own skills in order to assess their performance [4].

Due to deliberate delays of activities completion, students usually experience anxiety which ultimately has a harmful effect on their academic performance and psychological well-being. [5] There are different approaches which define causes of procrastination in different ways. According to psychoanalytic approach [6] individuals avoid doing those tasks which pose a threat to their ego. Individuals assume that these tasks are difficult to complete so they start avoiding those tasks. Childhood experiences also play a significant role in developing procrastinating behaviour. Procrastination in the realm of behaviourist approach, classical learning theory [7] defines causes of procrastination in terms of reinforcement and punishment. Individuals usually avoid doing those tasks which seem unpleasant to them. It was stated in his specious reward theory that individuals avoid doing tasks when they reinforce [8]. This theory reveals that students procrastinate as they get reinforcement in present tasks such as internet surfing, hangouts with

friends rather than future benefits of completing any semester activity [9] Students' living status also plays an important role in procrastinating behaviour [10]. Students belong to rural areas procrastinate more as compared to students from urban areas due to lack of advanced internet facilities.

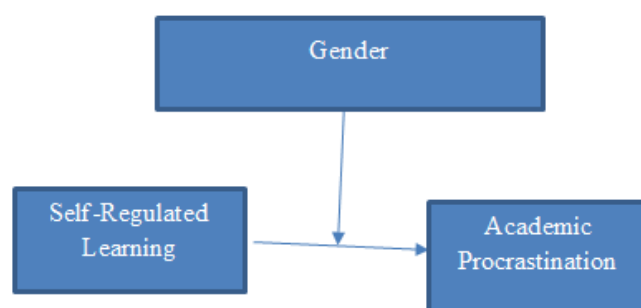
According to Hall et al. [11] model, individuals adopt maladaptive behaviours due to immediate benefits. This theory basically provides an account to health behaviour. It describes health behaviour in two stages *i.e.*, motivational and volitional stage. In the motivational stage, intentions are determined by three factors *i.e.*, connectedness, timing and valence of a behaviour's anticipated outcomes. Connectedness beliefs refer an individual's belief about a certain situation. Timing beliefs refers to the expected outcome of a certain task in terms of tasks occurrence. Valence beliefs are the outcomes which can be positive or negative. Second stage of this theory is volitional stage. It consists of two components. First is behavioural potency which refers the default response of an individual to environmental cues. Second component is self-regulatory capacity which refers an individual's ability of how they controls and monitors their thoughts in reducing undesirable responses. Individuals usually perform those behaviours that are in their common practice. Due to this, when a same situation occurs again then individual mostly elicits the same response. Students usually procrastinate as they are habitual to do procrastination as their past behaviour.

Self-regulated learning refers that learners monitor, regulate and control their own learning behaviours. There are different theories which tell about the self-regulated learning behaviour of students. Operant theorist defines the self-regulation of students in terms of external reinforcement. For instance, if students know that they will get appreciation or some other reward upon hard work then he will continue this behaviour and monitor his performance. Operant theorists view the self-regulation behaviour of students in terms of some physical reward. Self-instructive statements are available in written or

oral form and students use them to gain and use such statement whenever they will get tasks to perform [12]. Presented his social learning theory [9], applied his theory on self-regulation. According to this theory, a student's effort to regulate his learning is not only due to personal processes but it is also affected by behavioural and environmental factors.

Considering the significance of these factors, following hypotheses were examined in present study:

- H1: High level of self-regulated learning would be associated with lower level of academic procrastination among young adult e-learners
- H2: Students from rural areas would be procrastinated more as compared to students from urban areas
- H3: Gender will moderate the relationship between self-regulated learning and academic procrastination



**Figure 1. Conceptual framework hypothesis 3.**

## Method

### *Research design*

Cross-sectional research design was used in the current study to find the moderating role of gender between academic procrastination and self-regulated learning among young adult e-learners.

### *Sample*

Sample was recruited by purposive sampling technique.

It was comprised of 381 adult e-learners from Virtual University of Pakistan including both males (132) and females (n=429). Age ranged from 25-45 (M=25.95, SD=6.2). 129 students belong to rural areas while 252 students belong to urban areas.

## Assessment Measures

### *Academic procrastination scale*

Academic procrastination scale was developed by Bashir et al. It consists of 23 items. Its purpose was to measure academic procrastination among students.

It consists of four subscales. Sub-scales are named as 1) Time management 2) Task aversiveness 3) Sincerity and 4) Personal initiative.

Time management refers to the planning of academic tasks so they may be accomplished timely. Task aversiveness is used by students to postpone tasks because they do not like those tasks. Sincerity refers to students' dedication to accomplish tasks.

Personal initiative refers to a proactive approach adopted by students to complete the tasks. Time

Management consists of 06 items, Task aversiveness consists of 05 items, Sincerity consists of 07 items and Personal Initiative consists 05 items. Scale consists of both items *i.e.*, positive worded items and negative worded items. The items in the scale were graded as "strongly disagree=1", "disagree=2", "neutral=3", "agree=4", "strongly agree=5" in accordance with the five-point Likert type scale.

There found a higher level of positive correlations among all dimensions of academic procrastination. Convergent validity of the scale ranges from 0.66-0.73. Internal consistency was determined by alpha value that is 0.89 [13].

**Self-Regulated Learning Questionnaire**

Self-regulated learning questionnaire was developed by [14]. Its purpose was to measure self-regulated learning strategies adopted by students.

consists of 39 items and five subscales. The items in the scale were graded as "never=1", "rarely=2", "occasionally=3", "mostly=4", "always=5" in accordance with the five-point Likert type. Its sub-scales are 1). Studying method, 2) Self-evaluation, 3) Receiving support, 4) Time management and planning and 5) Seeking information. Its scoring can be done

**Results**

**Table 1. Inter-correlation among study variables (N=381).**

S.No	Variables	1	2
1	Academic procrastination	-	-0.32***
2	Self-regulated learning	-	-

\*:  $p < 0.05$ . \*\*:  $p < 0.01$ , \*\*\*:  $p < 0.001$ .

Results revealed that academic procrastination was negatively significantly correlated with self-regulated learning as depicted in Table 01.

Hence it proves that due to academic procrastination self-regulated learning decreases. Due to procrastination individual delay their work and it have negative impact on their life.

in two ways. Sub-scales can be computed separately and total items can be computed. All items are positively worded items except item 35 *i.e.*, negative worded items. The scale Cronbach alpha value is 0.94 for current sample.

*Procedure*

Institutional approval was taken to collect data. Data was collected *via* online Google form. Demographic sheet prepared by researcher consists of participant’s age, gender, degree program, discipline, educational institute, living status, family system, monthly income, marital status, nature of job and job experience (if any), GPA in the last semester. Participants were given booklet comprised of demographic sheet, AP scale and SRL questionnaire *via* online.

Participants were clearly informed that data taken from them will be used only for research purpose.

They were also briefed about the analysis procedure that their responses will be analysed collectively with other participants so their individuality and anonymity will be maintained.

Average response rate was 40%. At the end, gratitude was shown to participants for their participation and time.

Further results of t- test as indicated in table 02 revealed that students that lives in rural areas procrastinate more as compare to students that lives in urban areas whereas it was also found as indicated in table 03 that gender was found to be significant moderator of academic procrastination.

**Table 2. Independent Samples t-test Comparing Study Variables in Students from rural areas and students from urban areas (N=381).**

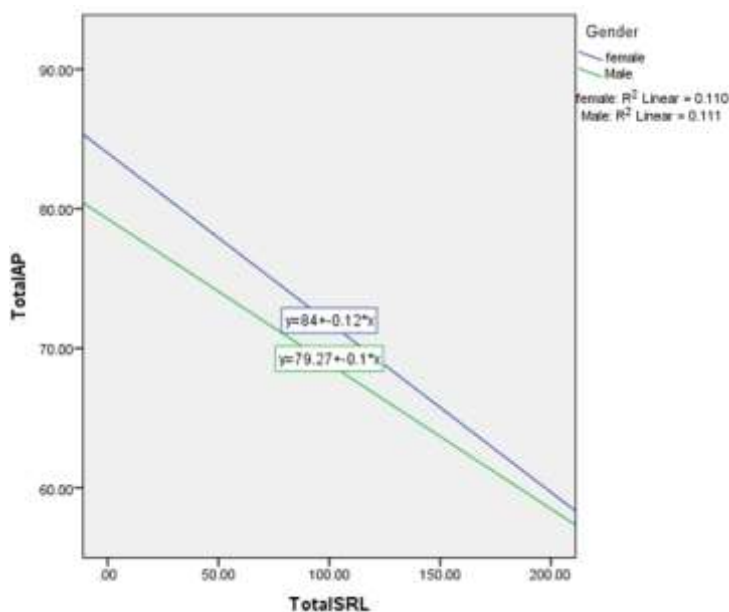
Variable	SR (n=129)		SU (n=252)		t (379)	p	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
AP	66.4	8.5	64.6	8.5	1.9	0.04	0.01	3.6	0.34

Note. SR: Students from Rural, SU: Students from Urban, AP: Academic Procrastination, CI: Confidence Interval, LL: Lower Limit, UL: Upper Limit.

**Table 3. Moderating role of gender between self-regulated learning and academic procrastination,**

Antecedent	Consequent		
	Academic procrastination		
	Coeff.	SE	p
Constant	65.2	0.41	0
Self-regulated learning	-0.12	0.02	0
Gender	-2.11	0.87	0
	R2= .342		
	F(3,377) = 16.7, p< .001		

Note: \*:  $p < 0.05$ , \*\*:  $p < 0.01$ , \*\*\*:  $p < 0.001$



**Figure 2. Graphical representation of moderating role of gender between self-regulated learning and academic procrastination.**

### Discussion

The present study examined the moderating role of gender between self-regulated learning and academic procrastination among adult e-learners.

Findings supported our first hypothesis that a negative relationship existed between self-regulated learning and academic procrastination (see Table 1, Figure 1 and 2). Our results are aligned with [2] reported that self-regulation and

self-efficacy negatively predict the academic procrastination. Those students who found difficulty in completion of academic tasks procrastinate more and previous bad results may become the reason of procrastination. Due to this, their self-esteem decrease and they start procrastinating tasks. They become unable to monitor and regulate their academic activities due to the low feelings of self-esteem. Findings are supported by [11] who suggested that when level of self-efficacy increases then individuals become determined in tasks completion. Due to this, their procrastinating behaviour reduces. If students are determined to self-regulate their academic tasks then their procrastinating behaviour would reduce. It has been observed that students with high self-efficacy are persistent in achieving the desired goals. Due to their continuous efforts, they develop academic proficiency [11].

Findings supported our second hypothesis in terms of differences in living status. It was found that students belong to rural areas were more indulged in academic procrastination as compared to students belong to urban areas. These findings were supported by previous research findings as [10] found the same differences. It is due to the fact that rural living students have lesser access of social network resources as compared to students from urban areas.

Findings supported our third hypothesis that gender was found to be positive significant moderator between self-regulated learning and academic procrastination. Findings are aligned with [10] who found that academic procrastination was negatively associated with academic performance. Moreover, they found a moderating relationship of gender between academic procrastination and learning.

### **Conclusion**

It was concluded that there is a negative relationship between self-regulated learning and academic procrastination. Moreover, e-learners from rural areas procrastinate more as compared to e-learners from urban areas. Gender plays a moderating role in relationship between

self-regulated learning and academic procrastination.

### **Recommendations**

The current study highlighted the importance of self-regulated learning and its effect on academic procrastination. However, here may be few possible limitations of the study that should be interpreted with caution;

- Current study was cross-sectional study. In order to see the real effects of independent variable on academic procrastination, it was recommended to conduct experimental and longitudinal based studies.
- Current study was based on quantitative approach. For future studies, it was recommended to take interviews from students in order to know different procrastination behaviours.
- Current study was conducted on the students of Virtual University. For future studies, it was recommended to conduct in conventional settings as well. Researches can make a comparison between two different settings. In such a way, they may know about procrastination behaviours exhibited by students in different settings. Different approaches of self-regulation adopted by students and which motivational beliefs are more prominent in each setting in order to reduce academic procrastination.

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