

# Role of Procrastination in Mental Wellbeing and Academic Achievement through Academic Self-efficacy

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## ABSTRACT

Academic procrastination, a student's delay in studying or completing academic assignments is a common problem affecting the learning achievement and wellbeing of students. This challenge is important to address because procrastination can develop into a habit that can seriously impact student's ability to be productive. Therefore the present research was planned to examine the impact of procrastination on academic achievement and mental wellbeing of students; aiming also to investigate the role of self-efficacy as mediator. The study was completed with 857 college students aged 16-20 years ( $M=17.48$ ,  $SD=.95$ ); 582 girls and 275 boys. Participants provided data on the measures of procrastination, self-efficacy, and mental wellbeing (anxiety, depression, behavioural control, and positive affect). Results provided the significant findings for the total and direct effect of procrastination on academic achievement, self-efficacy, and mental wellbeing among college students. Findings pertaining to indirect effects of procrastination through self-efficacy showed the significant role of self-efficacy as mediator. These findings have the implications for students' learning achievement and mental health because their teachers and professionals can minimize the negative impact of procrastination on wellbeing by enhancing their self-efficacy

## Keywords

Academic achievement, Mental wellbeing, Procrastination, Self-efficacy,

## Introduction

Procrastination has been described by investigators as the shortage or absence of self-regulated overall performance and the behavioural tendency to put off what's important to attain goals (Ellis & Knaus, 1977; Knaus, 2000). The developing body of literature has tested that procrastination is not only a hassle of time control. It is a complex system that entails affective, cognitive, and behavioural aspects (Fee & Tangney, 2000). Blunt and Pychyl (1998) and Harriott and Ferrari (1996) have found procrastination to be a typical phenomenon in the general population, affecting a considerable portion of adults as well as university students chronically. Procrastination has been taken into consideration a self handicapping conduct that results in time lost, low productivity, and greater stress (Chu & Choi, 2005). Researchers such as Ferrari (2001) also described procrastinators as indulgent or lazy people who cannot self-regulate. In comparison, non-procrastination is also characterized as organizing, highly motivated individuals with high efficiency, productivity, and superior results (Bond & Feather, 1988).

This complicated issue is studied underneath 5 distinctive sub titles as follows; General Procrastination, Academic procrastination, Decision making procrastination, Neurotic procrastinate, Non obsessive or Non purposeful procrastination. While general and academic delays are linked to the avoidance of the mission, the other delays seem connected to decision-making. Overall, the behaviour of procrastination is defined as a problem a person is having daily tasks because he or she is unable to coordinate time and management effectively. Academic procrastination conduct as household activities, preparation for the tests or the last minute assigned term papers.

An analysis of the literature showed that procrastination is linked to poor academic performance, lack of learning, despair, lack of punctuation, trouble in following instructions, low attempt for fulfilment, susceptible self esteem, low potential, anxiety, insufficient motivation, modes of thinking and decision making, low consciousness, and perfection. When all the research above are taken into consideration, it is concluded that procrastination behaviours are a commonplace problem amongst college students and an influential component on their personalities, mental properly being, and instructional fulfilment.

A great frame of research exhibits the prevalence of educational procrastination as a self-perceived hassle for university students, which can range from decreased academic performance and success to higher pressures and poor quality of life (Rabin, Fogel & Nutter-Upham, 2011). Efficient methods could include learners setting up next targets and realistic expectations about how much effort they would have to complete a certain mission (Ariely & Wertenbroch, 2002; Lamwers & Jazwinski, 1989; Tuckman, 1998). A substantial amount of empirical research demonstrates the importance of academic delays in academic performance (Balkis, 2013). Jackson, Weiss, Lundquist, and Hooper (2003) argue that: Procrastination can in various ways disrupt academic success.

Academic procrastination behaviours are closely related to academic achievement. Kachgal, Hansen, and Nutter (2001) regarded academic procrastination as an obstacle to students' academic performance. Interestingly enough, Seo (2008) located that self-oriented perfectionism is positively linked to academic success and adversely linked to academic procrastination. We may thus argue that academic delay will impair academic performance and could avoid educational attainment, a notion backed by Tan, Ang, Klassen, Yeo, Wong, Huan, et al. (2008)'s finding that procrastination is

notably negatively related to semester grade point average (GPA).

Lay and Schouwenburg (1993) concluded that the lack of efficient time management and the absence of a postponement would make the workload difficult for students. Academic procrastination mainly, has been undoubtedly and drastically associated with many educational and personal variables, including: self-efficacy at some stage in the gaining knowledge of method impulsiveness, high levels of anxiety, pressure and feelings of weakness and ineffectiveness use of irrational beliefs techniques and perhaps most importantly, poor learning performance both in secondary school and university. Continuously uncontrolled thoughts about the mission avoided trigger fear.

Consequently, the duration of undergraduate training is a critical length in one's life span, and this period is appeared by way of many as essential for growing structures and intervention approaches that may prevent or lessen mental issues (Gjerde, 1993). Several studies have been meant to investigate the procrastination: with time control (Bowles 1999), with well-being (Raom & Tamta, 2015), and its nature and causes amongst college students. However a significant question concerning the connection between procrastination and mental health still needs to be addressed. Findings ideated that there is bad correlation among procrastination and university pupil's mental health (Hyun-Jung & Mi-Kyung, 2015).

In terms of emotional functioning, numerous studies have determined that anxiety, depression, and fear are related to procrastination (Antony, Purdon, Huta, & Swinson, 1998; Ferrari, Johnson, & McCown, 1995; Stoeber & Joormann, 2001; van Eerde, 2003). The consequences of daily procrastination are likely to be anxiety, disappearance, and depression as the individual is unsatisfied or fails to do tasks (Beswick, Rothblum & Mann, 1988). In contrast to non-procrastinators, Baumeister, Campbell, Krueger, and Vohs (2003) reported that procrastination employees experience less stress and have better mental wellbeing when time limits are a long way off. Procrastinators lose the behavioural control and don't experience the positive affect of their life.

Having a connection between procrastination and depression and stress and anxiety is also shown in a variety of studies (Sirois & Tosti 2012; Steel, 2007; Stöber & Joormann, 2001). As a result, college students procrastinating experience low contentment with overall life (Caldwell & Mowrer 1998; Deniz, 2006; Hinsch & Sheldon 2013; Özer & Saçkes, 2011; Steel, 2010) and educational life (Balkis, 2013; Chow, 2011). Taken collectively, it may be said that procrastination influences no longer most effective the educational lives of the students, however also their mental wellbeing negatively.

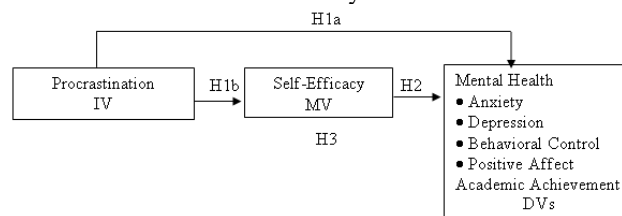
Review of the literature available on the impact of academic procrastination on mental wellbeing and academic achievement demonstrate the negative consequences that lead to the question of addressing the role of self-efficacy as mediator between the relationship of procrastination with mental wellbeing and academic achievement. Therefore the present research was planned to (1) To examine the relationship among procrastination, mental wellbeing, academic achievement, and self-efficacy, (2) To assess the

effect of procrastination on mental wellbeing, academic achievement, academic self efficacy among college students, (3) To measure the effects of self-efficacy on mental wellbeing and academic achievement, (4) To assess the mediating role of academic self-efficacy between the relationship of procrastination with mental wellbeing and academic achievement. On the basis of these objectives the following hypotheses were formulated:

### Hypotheses of the Study

1. Procrastination will affect mental wellbeing, academic achievement, and self efficacy among college students.
2. Academic self-efficacy will affect mental wellbeing and academic achievement.
3. Academic self-efficacy will mediate the relationship of procrastination with mental wellbeing and academic achievement.

**Figure 3:** Hypothesized Model for Mediation from Self-Efficacy



### Methodology

#### Participants

Using purposive sampling technique, the 10 public high schools; five girls' schools and five boys' schools from a list of 44 public schools of Multan city were first randomly selected. From these ten schools, a total of 857 students studying in 11<sup>th</sup> and 12<sup>th</sup> grade, aged 16-18 years (M=17.48, SD=.95) were the participants of this study. Of this sample (N=857), 582 were girls and 275 were boys. All the participants were of different demographic characteristics presented in Table 1.

**Table 1**

Demographic Characteristics of Participants (N = 857)

Characteristics	Groups	N	%
Gender	Girls	582	32.1
	Boys	275	67.9
Residential Area	Rural	245	28.6
	Urban	612	71.4
Family System	Nuclear	362	42.2
	Extended	495	58.8

	Labour		
	Farmer	389	45.4
	Govt	73	8.5
Father	Servant	135	15.8
Profession	Skilled	111	13.0
	Person	98	11.4
	Business	1	0.1
	Teacher	50	5.8
	Others		
	Housewife		
	Labour		
	Govt	808	94.3
Mother	Servant	19	2.2
Profession	Skilled	4	0.5
	Person	18	2.1
	Business	1	0.1
	Others	7	0.8

### Inclusion and Exclusion Criteria

Participants were the students of 12<sup>th</sup> classes studying in public secondary high schools of Multan. They all have been appeared once in examination of their existing class and were willing to participate in the study. Participants who were studying in private schools were not contacted for this study. Students of class below 9<sup>th</sup> and above 12<sup>th</sup> grade were not included in the study.

### Instruments

#### The Academic Procrastination Scale (APS)

Academic procrastination was measured using the Academic Procrastination Scale (McCloskey & Scielzo, 2015). It is self-reported questionnaire rated on 5-point Likert scale ranging from 1-5 wherein 1 indicates "Disagree" and 5 indicates "Agree". It comprises of 25 statements. Five items are reversed-keyed items: 1, 8, 12, 14, and 25. A composite score on this scale falls between 25 and 125. The original scale had high reliability with Cronbach's alpha of .75. To obtain a total score on scale, all the scores on each item responded by respondent is added up after reversing the scores on five items that are positively worded. Higher score suggested the high degree of procrastination existing among students.

#### Mental Health Inventory (MHI)

The Mental Health Inventory (MHI) is a widely-used inventory designed to assess the mental wellbeing and overall emotional functioning (Veit & Ware, 1983). This inventory measures not only psychopathology but also measures the major negative and positive emotions that an individual experiences. It is a short version of MHI with 18-items in a scale included in the Multiple Sclerosis Quality of Life Inventory (MSQLI) because it is pretty short with high reliability. 18-item version of MHI consists of four subscales; Anxiety, Depression, Behavioural Control, and Positive Affect. It gives four individual scores on each

subscale and one overall total score. Items are responded on a 6-point Likert scale; All of the time(1) = 6 Most of the time(2) = 5 A good bit of the time(3) = 4 Some of the time(4) = 3 A little of the time(5) = 2 None of the time(6) = 1. The total scores range from 18-108, with higher scores indicating high mental wellbeing. Reliability alpha coefficients for all subscales and whole scale have been reported as 0.93.

#### The Self-Efficacy Questionnaire (SEQ)

Academic self-efficacy of the participants was measured through the use of College Academic Self-Efficacy Scale (CASES) developed by Erikson, Soukup, Noonan, and McGurn (2016). The questionnaire contains 13 items rated on a 5-point Likert scale format ranging from 1= "Not very like me" to 5 = "Very like me". Items are added up to obtain a total score on questionnaire of self-efficacy. Higher scores indicate higher degree of self-efficacy. The authors posit an alpha coefficient of .82 and test-retest reliability of .85 within an 8-week interval.

#### Academic Achievement

Academic achievement of the participants was evaluated by asking them about their obtained scores in last examinations.

#### Procedure

The present research work was completed in following three phases: In phase-I, the research questionnaires used in the study were first adapted and translated into the participants' language of Urdu. In phase-II, the psychometric properties of all the questionnaires were determined. In phase-III, the main study was carried out to check the hypotheses of the study.

Using purposive sampling technique, the 10 schools of Multan district from a list of 44 public schools were first randomly selected. Among these 10 schools; five schools were of girls and five were of boys. A total of 857 students were studying in 9<sup>th</sup> and 10<sup>th</sup> grade classes in these schools. Participants of the study were approached during their class times after obtaining institutional permission and participant's consent. A booklet containing all the questionnaires along with a demographic variables sheet was administered to the participants of this study with the help of their teachers. All the participants were given instructions about how to complete the questionnaires. School principals, teachers, and students were provided the assurance of confidentiality of the data sought from the respondents on the questionnaires. They were clearly briefed that the information sought from students will only be used for research purpose. Results were analyzed using SPSS-22.

#### Ethical Considerations

All of the ethics mentioned in the study protocol were taken into consideration throughout the recruiting the schools, approaching the administration of schools, selecting of participants, briefing, data collection, transcription and in subsequent processes. Permission Institutional permission was obtained from school principals after briefing them

about the objectives of conducting this research. It was made clear that participants would have full right to withdraw from the participation in research without any penalty. Participants were also informed about the rationale and significance of the current study, and were told about the importance of their participation. Their identity was not disclosed to anyone at any stage of research even at the completion of research.

**Results**

Results analyzed through process macro on SPSS-22 to check the mediation effects of self-efficacy on the relationships between procrastination, mental health along with its components, and academic achievement showed the significant findings presented in following tables (2, 3, & 4).

**Table 2**

Descriptive Statistics and Correlations among Study Variables

	M	S	1	2	3	4	5	6	7
1 Procrastination	6.75	1.24							
2 Self-efficacy	5.47	0.89	.19*						
3 Academic Achievement	2.94	1.06	.03	.11					
<b>Mental Health</b>									
4 Anxiety	1.90	0.85	-.18*	.08*	-.04				
5 Depression	2.20	0.97	-.18*	.23*	.00	.03			
6 Behavioural Control	1.68	0.88	-.13*	.18*	.04	.03	.07		
7 Positive Affect	1.68	0.84	-.13*	.18*	.04	.03	.07	.04	
8 Total Mental Health	7.56	1.09	-.21*	.22*	.00	.07	.07	.06	.05

\*p>.05, \*\*p>.001

Table 2 presents the significant relationships among all study variables. Findings revealed that procrastination was significantly negatively correlated with self-efficacy and mental wellbeing. All components of mental wellbeing are also found significantly negatively correlated with procrastination.

**Table 3**

Total and Direct Effects of Procrastination on Mental Health

	Effect	Coeff	t	p
AP on MH	Total effect	-.1885	-6.3205	.0000
	Direct effect	-.1567	-5.2395	.0000
AP on ANX	Total effect	-.0471	-4.5083	.0000
	Direct effect	-.0434	-4.0788	.0000
AP on DEP	Total effect	-.0585	-5.3690	.0000
	Direct effect	-.0456	-4.1893	.0000
AP on BC	Total effect	-.0444	-4.7795	.0000
	Direct effect	-.0359	-3.8395	.0001
AP on PA	Total effect	-.0391	-3.6828	.0002
	Direct effect	-.0322	-2.9890	.0029
AP on AA	Total effect	-	-	.0240
	Direct effect	1.0411	2.2615	.0455

\*p>.05, \*\*p>.001

Results indicated the significant total and direct effects of procrastination on mental wellbeing, and academic achievement. Findings reported that procrastination predicted mental health, four components of mental health; anxiety, depression, behavioural control, and positive affect, and academic achievement significantly.

**Table 4**

Total, Direct and Indirect Effects of Procrastination on Mental Health through Self-Efficacy

	Effect	Coeff	Boot SE
AP on MH through SEF	Indirect effect	-.0318	.0085
	Partially indirect effect	-.0029	.0008
	Complete indirect effect	-.0357	.0096
AP on ANX through indirect	Indirect effect	-.0037	.0019
	Partially indirect	-.0010	.0005

SEF	effect		
	Complete	-	.0062
	indirect effect	.0120	
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AP on DEP through SEF	Indirect effect	-	.0036
	Partially indirect effect	.0129	.0009
	Complete indirect effect	-	.0111
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AP on BC through SEF	Indirect effect	-	.0026
	Partially indirect effect	.0085	.0008
	Complete indirect effect	-	.0095
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AP on PA through SEF	Indirect effect	-	.0028
	Partially indirect effect	.0069	.0007
	Complete indirect effect	-	.0089
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AP on AA through SEF	Indirect effect	-	.0418
	Partially indirect effect	.1008	.0004
	Complete indirect effect	-	.0045
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Findings revealed that self-efficacy significantly mediated the effects of procrastination on academic achievement, mental health and its components; anxiety, depression, behavioural control and positive affect. Analyses of total and direct effects of procrastination on mental health and on its subscales individually are significant. Results regarding the indirect effects from self-efficacy for the relationships of procrastination with overall mental health; anxiety, depression, behavioural control, and positive affect, and academic achievement demonstrated significant mediation between procrastination and all criterion variables.

## Discussion

Academic success has always been critical for college students, whose goal in attending college is to reap the degree vital to go into a profession. Students' belief of their educational self-efficacy and their capacity to start and maintain their studies is also noticeably crucial. The student's ability to achieve an academic assignment is believed in academic self-efficacy (Solberg, O'Brien, Villareal, Kennel, & Davis, 1993; Zimmerman, 1995). Academic self-efficacy is a major variable in student performance assessment (Elias & Loomis, 2002). In the

light of the above, we think that students must make good use of the internet; otherwise they will find it difficult to show good academic performance and that their confidence in their academic self-efficacy will suffer and educational procrastination behaviour may also develop.

This study therefore, was carried out to examine the role of academic procrastination in mental wellbeing and academic achievement; and to assess the mediation through self-efficacy between these relationships. Findings revealed that all the study variables were found correlated with each other. Results showed that academic procrastination was negatively related with students' mental wellbeing, academic achievement, and self-efficacy. It was assumed that procrastination will affect mental wellbeing, academic achievement, and self efficacy of college students. Findings of the present study supported the hypothesis and demonstrated the significant adverse effects of procrastination on mental wellbeing, academic achievement. These findings are in line with the findings of Steel (2010); Stöber and Joormann (2001) suggesting a strong connection between procrastination and depression, stress, and anxiety. Correspondingly, Hinsch and Sheldon (2013) also stated that students engage in procrastination behaviour were found with low mental wellbeing and then experience failure in their academic life.

Another assumption of this study was about the effect of self-efficacy on mental wellbeing and academic achievement. It was assumed that academic self-efficacy will affect mental wellbeing and academic achievement. Findings provided the notion for significant impact of self-efficacy on students' wellbeing and academic achievement that is consistent with the study findings conducted by Pajare and Kranzler (1995). They evidenced that self-efficacy affects learning success and academic motivation. Bores-Rangel et al. (1990) also provided the consistent findings that support the findings of current study.

The main objective of the study was to explore the mediating role of self-efficacy between the relationship of procrastination with mental wellbeing and academic achievement. Results demonstrated that self-efficacy mediated the impact of academic procrastination on mental wellbeing and academic achievement. Findings revealed the significant total and direct effects of procrastination on mental health and academic achievement. The indirect effect through self-efficacy has also been found significant for the relationship of academic procrastination with mental wellbeing and academic achievement.

Prior literature examines the connection between academic delay and academic achievement and finds that academic delay is generally negative to academic success. Procrastination is likewise related to other adverse conduct and consequences, including pathetic learning habits, test anxiety, preparing for examinations, overdue submission of course work, worry of not being successful, fear of social disapproval via peers, decrease grades, feelings of guilt, and depression. The findings of the preceding research screen that the reports of students in their procrastination suggest a negative meaningful distinction with their academic overall performance the greater the students procrastinate, the decrease their grades are procrastinators have much less motivation to end up successful procrastination consequences the self-efficacy, self-actualization,

distractibility, impulsiveness, strength of mind, and organizational behaviour of college students, which makes them lazy and passive and makes them hesitate in taking projects or worry starting work or assignments academic procrastination is associated with tension and procrastination is associated with lower grades and route withdrawals.

### Conclusion

The present study has inferred the significant findings that have extended the literature on the investigation of impact of procrastination on mental wellbeing and academic achievement. Findings pointed out that academic procrastination was negatively associated with mental wellbeing and academic achievement. The total and direct effects of academic procrastination on mental wellbeing and academic achievement were found significant. The statistics of indirect effects through self-efficacy showed that impact of procrastination on students' wellbeing and academic achievement were mediated through self-efficacy significantly.

### Limitations & Suggestions

Though the findings of the current study are of worth considering, few limitations are also there to admit including participants' characteristics which were not homogenous on some of the demographic variables such as family system, residential area, and parents' professions. These demographics are important in a way that they could cause the lack of external validity of research findings. Though the questionnaires used in the study were translated into participants' language, but still a threat exists for the internal validity of research. Therefore, it is suggested that the indigenous scales should be developed for the better understanding of the comprehensive meanings of all the variables under study.

### Implications of the study

These findings carry meaningful implications for the role of self-efficacy within the context of minimizing the impact of academic procrastination on mental well-being and academic success. The teachers and professionals may get the benefits from the present findings if they find any student with procrastination behaviour. They may induce the techniques for increasing self-efficacy to handle their mental wellbeing and academic achievement...

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