

ACADEMIC ACHIEVEMENT OF HIGHER EDUCATION STUDENTS: INFLUENCE OF ACADEMIC PROCRASTINATION AND SELF-EFFICACY

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Academic procrastination is fairly common among college students and may negatively impact academic achievement (Ellis & Knaus, 2002; Solomon & Rothblum, 1984; Wesley, 1994). Self-efficacy is the measure of the one's own competence to complete tasks and reach goals (Ormrod, 2006). It directly influences academic performance through cognition and self-efficacy also indirectly affects perseverance (Multon, Brown & Lent, 1991). Academic achievement is one of the most important goals of education and has always been influenced by number of factors including academic procrastination and self efficacy. Keeping this in view a study was conducted to explore the academic procrastination and self efficacy of the higher education students and to analyse their relationship with academic achievement of the higher education students. The study was descriptive survey in nature and simple random sampling technique was used for selection of the sample. The participants in the study included 600 higher education students belonging to three different streams namely; arts, science and commerce (200 each, 100 males and 100 females). For analyzing data, parametric statistical techniques were used. The study revealed that, higher education students possess moderate level of academic procrastination, self efficacy and academic achievement. Male higher education students displayed higher level of academic procrastination than females. Students of commerce stream possessed low level of academic procrastination as compared to students of Arts and Science. Female higher education students have higher level of self efficacy and academic achievement as compared to the males. However, the students in different streams possess similar level of self-efficacy. In academic achievement students of science and commerce stream scored significantly high as compared to Arts students. Significant positive relationship was found between academic achievement of the higher education students with academic procrastination and self-efficacy.

Key words: Academic procrastination, Self –Efficacy, Academic Achievement, Higher Education

Introduction

Academic Procrastination: Procrastination is a problem related to each and every student. Academic procrastination is a special form of procrastination that occurs in the academic settings. Academic procrastination is defined as failing to perform an academic activity within a desired time frame or postponing until the last minute activities one needs to complete. Another definition includes the postponement of academic goals to the point where optimal performance becomes highly unlikely (Ellis & Knaus, 2002). Most procrastination behaviors in academic situations concern with completion of academic assignments such as preparing for exams, doing home work, and writing term papers (Schouwenburg, 2004). It involves knowing that one needs to carry out an academic task such as writing a term paper,

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studying for examinations, finishing a school related project, or undertaking the weekly reading assignments, but, for one reason or another, failing to motivate oneself to do so within the expected time frame (Ackerman and Gross, 2005). Several researchers agree that academic procrastination is a commonly occurring phenomenon among under graduate students (Day, Mensink and O'Sullivan 2000, Klassen, Krachuk, and Rajani 2008). Academic procrastination is fairly common among college students and may negatively impact academic achievement (Ellis & Knaus, 2002; Solomon & Rothblum, 1984; Wesley, 1994). One source of academic procrastination in students is the planning fallacy, where a student underestimates the time required to analyze research. Study results indicate that many students are aware of academic procrastination and accordingly set costly binding deadlines long before the date for which the task is due. Knaus (1973) argued that two beliefs are closely related to procrastination: believing oneself to be inadequate and believing the world to be too difficult and demanding. However, academic procrastination deters one's academic achievement.

Self Efficacy

Self-efficacy is the measure of the one's own competence to complete tasks and reach goals (Ormrod, 2006). Psychologists have studied self-efficacy from several perspectives, noting various paths in the development of self-efficacy. Self-efficacy refers to the confidence people have in their abilities for success in an assigned task. If an individual possesses the ability to successfully perform, then that task will be attempted. The task will be avoided if it is perceived to be too difficult by an individual (Bandura, 1986 and 1997). One's sense of self-efficacy can play a major role in how one approaches goals, tasks, and challenges. Self-efficacy affects every area of human endeavor by determining the beliefs of a person holds regarding his or her power to affect situations, thus strongly influencing both the power a person actually has to face challenges competently and the choices a person is most likely to make. Self-efficacy has influence over people's ability to learn, their motivation and their performance, as people will often attempt to learn and perform only those tasks for which they believe they will be successful (Lunenburg, 2011). Individuals with high self-efficacy feel highly motivated, work hard and it results in excellence. Self-efficacy affects how people approach new challenges and will contribute to performance since these influence thought processes, motivation, and behavior (Bandura, 1997). Self-efficacy directly influences academic performance through cognition and self-efficacy also indirectly affects perseverance (Multon, Brown & Lent, 1991).

Academic achievement

Academic achievement is one of the most important goals of education and has always been a crucial area and the centre of educational research. It refers to level

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of accomplishment or proficiency achieved in some specific area concerning scholastic or academic work. It is the educational goal that is achieved by a student, teacher or institution over a certain period. In the views of Mildred Murray-Ward (1996) academic achievement refers to the successful accomplishment of performance in particular subject's area or course usually by reason of skill, hard work and interest typically summarized in various types of grades, marks, scores or descriptive commentary. This is assessed either by examinations or continuous assessments and the goal may differ from an individual or institution to another. In other words academic achievement means the degree to which a pupil is profiting from instruction in a given area of learning. Academic achievement of an individual is influenced by many factors like his personality, intellectual ability and environment etc.

Academic procrastination and self-efficacy are two important factors which play a significant role in one's academic achievement. During the past few decades; there have been fervent researches to search into the variables which determine academic achievement. However, the conjoint influence of academic procrastination and self efficacy on academic achievement of the learners could be hardly found in literature. It is very important to know that how these two variables can influence one's achievement in academic activities. Keeping this in view the study was conducted to fulfill the following objectives:

Objectives

Following objectives were framed in the study:

- To explore the level of academic procrastination and self-efficacy possessed by the higher education students.
- To analyze the academic achievement of the higher education students.
- To find out the difference among higher education students in academic procrastination, self-efficacy and academic achievement on the bases of stream and gender.
- To analyze the relationship between academic achievement of higher education students with academic procrastination and self-efficacy.

Hypotheses

The following hypotheses were formulated to achieve the objectives of the study:

1. There exists no significant difference among male and female higher education students in academic procrastination.
2. There exists no significant difference among higher education students of different streams in academic procrastination.
3. There exists no significant difference among male and female higher education students in self-efficacy.

4. There exists no significant difference among male and female higher education students in academic achievement.
5. There exists no significant difference among higher education students of different streams in academic achievement.
6. There exists no significant relationship between academic achievement of higher education students with academic procrastination and self-efficacy.

Method and Procedure

Descriptive survey method was used in the study. Data collection was made from students studying in six colleges of Ferozepur district of Punjab, belonging to three streams namely: Science, Arts and Commerce by using simple random sampling technique. The sample comprised of 600 higher education students (200 hundred from each stream, out of which 100 males and 100 females). Two psychological tests were used to collect data, one was “self-efficacy scale” developed by Dr. Arun Kumar Singh & Dr. Shruti Narain (2014), the second tool “academic procrastination scale” was developed and standardized by the investigator. To study academic achievement, end term result of the higher education students was taken into consideration. Parametric statistical techniques were used for analysis of data. To explore the trend in terms of academic procrastination and self efficacy of the higher education students, mean, percentage and quartile deviation were calculated and for determining the effect of academic procrastination and self efficacy on academic achievement two way ANOVA was calculated. To analyze the relationship multiple co-relation was calculated. Sampling design of the study is given below:

Result and Discussion

Analysis of data, result and interpretation of findings has been done variable wise keeping in view the objectives of the study.

- **Result relating to Academic procrastination of the higher education students:**

The below given table depicts the data relating to academic procrastination of the higher education students:

TABLE 1

<i>Stream</i>	<i>Arts</i>	<i>Science</i>	<i>Commerce</i>	<i>Total</i>
<i>Gender</i>	<i>Mean score</i>	<i>Mean score</i>	<i>Mean score</i>	<i>Mean score</i>
Male	173.98	173.65	167.26	171.63
Female	164.85	165.95	161.15	163.98
Male+ Female (Total)	169.42	169.8	164.21	167.81

(Gender and stream wise mean scores of higher education students in academic procrastination)

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The above table reflects that both male and female students of different streams do possess moderate level of academic procrastination though there is little deviation in case of commerce students. It can be stated that the higher education students irrespective of discipline, moderately procrastinate in their academic activities and display task aversiveness. Reason may be that they lack the skill of effective time management and possess a tendency to postpone the completion of the academic task. This is further elaborated in the below given table:

TABLE 2

<i>Stream</i> <i>Gender</i>	<i>Arts</i>			<i>Science</i>			<i>Commerce</i>			<i>Composite</i> <i>All streams</i>		
	<i>High</i>	<i>Av.</i>	<i>Low</i>	<i>High</i>	<i>Av.</i>	<i>Low</i>	<i>High</i>	<i>Av.</i>	<i>Low</i>	<i>High</i>	<i>Av.</i>	<i>Low</i>
Male	34	47	19	28	58	14	23	53	24	28.33	52.67	19
Female	23	52	25	21	50	29	21	41	38	21.67	47.67	30.67
Total (male+ female)	28.5	49.5	22	24.5	54	21.5	22	47	31	25	50.17	24.83

(Percentage of students on different levels of academic procrastination in different streams)

The above table shows that referring to each of the three streams majority of students fall under moderate category of Academic procrastination followed by high and low. They have the tendency to avoid the academic task and lack sincerity.

Result relating to Self-efficacy of higher education students

The below given table depicts the data relating to self efficacy of the higher education students of different streams:

TABLE 3

<i>Stream</i> <i>Gender</i>	<i>Arts</i>	<i>Science</i>	<i>Commerce</i>	<i>Total</i>
	<i>Mean score</i>	<i>Mean score</i>	<i>Mean score</i>	<i>Mean score</i>
Male	76.99	75.39	77.58	76.65
Female	77.42	79.37	77.38	78.06
Male +Female(total)	77.21	77.38	77.48	77.36

(Mean score of higher education students in self-efficacy)

A look at the above table shows that students of different streams (both male and female) fall under moderate level of self efficacy. This can further be explained that, they possess the average level of self-confidence and positive attitude. They keep a set of ideas, values and thoughts that tend to look for the good, to advance and overcome problems and difficult situations.

Result relating Academic achievement of higher education students

The below given table shows stream wise academic achievement of higher education students based on three different levels.

TABLE 4

Stream gender	Arts			Science			Commerce			Composite All streams		
	High	Av.	Low	High	Av.	Low	High	Av.	Low	High	Av.	Low
Male	7	43	50	15	43	42	12	60	28	11.33	48.67	40
Female	26	53	21	57	33	10	37	50	13	40	45.33	14.67
Total (male+ female)	16.5	48	35.5	36	38	26	24.5	55	20.5	25.67	47	27.33

(Percentage of male and female students on different levels of academic achievement in different streams)

It is evident from the above table that among all higher education students: 25.67% belong to the high, 47% to the average, and 27.33% to the low level of academic achievement. It is found that nearly half of the students possess average level of academic achievement. However, the females were found to possess higher level academic achievement as compared to the males.

- **Result relating gender and stream wise difference among higher education students in academic procrastination:** The below given table shows the analysis of variance among higher education students in their academic procrastination based on gender and stream.

TABLE 5
SUMMARY TABLE OF ANALYSIS OF VARIANCE AMONG HIGHER EDUCATION
STUDENTS IN THEIR ACADEMIC PROCRASTINATION

Source of variation	Df	Sum of Squares (SS)	Mean Sum of Squares (MSS)	F	Table value F
Gender	1	8770.73	8770.73	13.85*	6.69
Streams	2	3906.42	1953.21	3.08**	3.01
Interaction (Gender × Stream)	2	228.22	114.11	0.18	3.01
Error	594	376170.2	633.28		
Total	599	389075.57			

*Significant at 0.01% level ** significant at 0.05% level

The above table reflects that the calculated F value (13.85) for gender effect on academic procrastination of the higher education students, irrespective of their streams, for df 1 and 594 is higher than the table value of F (6.69) at 0.01 level of significance. This indicates that the male and female higher education students have significantly different level of academic procrastination. Further, to analyze

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the gender effect on academic procrastination of higher education students post hoc test is used. The result is given in the below.

TABLE 6: MEAN ACADEMIC PROCRASTINATION SCORES OF MALE AND FEMALE (ALL THREE STREAMS COMBINED)

<i>Gender</i>		<i>Mean difference</i>	<i>Critical difference at 0.01 level of significance</i>
<i>Male</i>	<i>Female</i>	7.65*	3.08
171.63	163.98		

*Significant at 0.01 level

It is observed from the above table that there is a significant difference between male and female higher education students in their academic procrastination though the mean scores of both male and females as stated earlier fall on the moderate level. The higher education male students as compared to the females possess higher level of academic procrastination. The males possess higher level of task aversiveness, lack of time management, less sincerity towards their study and low achievement motivation as compared to the female higher education students. Based on the above stated findings, it can be stated that the hypothesis no. 1, i.e. “there exists no significant difference among male and female higher education students in academic procrastination” is thus, rejected.

- **Stream wise mean difference in academic procrastination (both gender combined)**

TABLE 7

<i>Stream</i>	<i>Mean score</i>	<i>Comparison between stream</i>	<i>Mean difference</i>	<i>Critical difference at 0.05 level of significance</i>
Arts	169.42	Arts & Science	0.38	4.14
Science	169.8	Arts & Commerce	5.22**	
Commerce	164.2	Science & Commerce	5.6**	

**Significant at 0.05 level

The above table shows that there is no significant difference among the Arts and Science higher education students in academic procrastination. However, significant difference among Arts and commerce students; Science and Commerce students are found in academic procrastination. It can be explained that the higher education students of Arts and science streams compared to Commerce stream display higher level of academic procrastination, irrespective of the gender. Based on the above findings it can be concluded that the hypothesis no.2, i.e; ‘there exists no significant difference among higher education students of different streams in academic procrastination’ is thus, rejected.

- **Result relating difference among higher education students in Self-Efficacy**

The below given table shows the mean difference among male and female higher education students in their self efficacy.

TABLE 8
MEAN SELF-EFFICACY SCORES FOR MALE AND FEMALE (ALL THREE STREAMS COMBINED)

<i>Gender</i>		<i>Mean difference</i>	<i>Critical difference at 0.05 level of significance</i>
Male	Female	1.41	0.65
76.65	78.06		

A look at the above table reflects that the mean difference among male and female higher education students in self efficacy which is found to be significant at 0.05 level. It can further be explained that female higher education students compared to males possess higher level of self-efficacy. It infers that the female higher education students compared to males possess higher level of faith and confidence in their abilities to perform certain tasks. They are more positive than males. They tend to look for the good, to advance and overcome problems and to find opportunities in every situation. On the basis of the above mentioned finding it can be stated that the hypothesis no. 3 i. e. “there exists no significant difference among male and female higher education students in self-efficacy” is thus, rejected.

- **Result relating to difference among higher education students in academic achievement:** The below given table shows the difference among higher education students in their academic achievement.

TABLE 9

<i>(Summary table of analysis of variance among higher education students in academic achievement) source of variation</i>	<i>Df</i>	<i>Sum of Squares (SS)</i>	<i>Mean Sum of Squares (MSS)</i>	<i>F</i>	<i>Table value F</i>
Gender	1	5993.45	5993.45	121.04*	6.69
Streams	2	1433.54	716.77	14.48*	4.65
Interaction (Gender × Stream)	2	196.21	98.11	1.98	3.01
Error	594	29411.50	49.51		
Total	599	37034.70			

* Significant at 0.01% level

The above table shows the data relating to analysis of variance among higher education students in academic achievement based on gender and stream. A look at the table reflects that the male and female higher education students possess

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significantly different level of academic achievement. Further, to analyze the gender effect on academic achievement of higher education students post hoc test is used. The results are given in the below table.

TABLE 10
MEAN ACADEMIC ACHIEVEMENT SCORE FOR MALE AND FEMALE, ALL THREE
STREAMS COMBINED

<i>Gender</i>	<i>Mean difference</i>	<i>Critical difference at 0.01 level of significance</i>
Male 58.34	Female 64.66	6.32*

*Significant at 0.01 level

The above table shows the mean difference between male and female higher education students in academic achievement. It is found that there is significant difference between male and female higher education students in their academic achievement. Though the mean score of both male and female higher education students fall on average level but it is observed that female higher education students as compared to the males possess higher level of academic achievement. Based on the above stated finding, it can be stated that the hypothesis no. 4 i.e. “there exists no significant difference among male and female higher education students in academic achievement” thus, rejected.

- **Stream wise difference among higher education students in Academic Achievement**

TABLE 11
MEAN ACADEMIC ACHIEVEMENT SCORE FOR DIFFERENT STREAMS,
BOTH GENDER COMBINED

<i>Stream</i>	<i>Mean score</i>	<i>Comparison between stream</i>	<i>Mean difference</i>	<i>Critical difference at 0.01 level of significance</i>
Arts	59.33	Arts & Science	3.48*	1.06
Science	62.81	Arts & Commerce	3.03*	
Commerce	62.36	Science & Commerce	0.45	

*Significant at 0.01 level

The above table shows the group difference among higher education students of Arts, Science and commerce streams in their academic achievement. A look at the table reflects that the higher education students of Arts and Science streams significantly differ to each other in their level of academic achievement. This indicates that higher education students of science stream compared to Arts stream have higher level of academic achievement, irrespective of gender. Referring to the table values, the mean difference on academic achievement between higher

education students of Arts & Commerce is found to be significant further indicating that Commerce students compared to Arts stream have higher level of academic achievement, irrespective of gender. Among the Science & Commerce higher education students the mean difference is found to be insignificant and none of the group is superior to each other in academic achievement. This can be further explained that the higher education students of Science & Commerce streams possess similar level of academic achievement, irrespective of gender. Based on the above stated findings it can be concluded that, the hypothesis no. 5, “there exists no significant difference among higher education students of different streams in academic achievement”, is thus, rejected.

- **Result relating to relationship of academic achievement with academic procrastination and self-efficacy of the higher education students**

TABLE 12

<i>Stream</i>	<i>All three streams combined</i>			
	<i>Dependent Variable Academic Achievement</i>	<i>Independent Variable Academic Procrastination</i>	<i>Independent variable Self-efficacy</i>	
Male	r_{12} -0.81*	r_{13} 0.71* $R_{1,23}$ 0.83*	r_{23} -0.75*	N
Female	r_{12} -0.80*	r_{13} 0.75* $R_{1,23}$ 0.83*	r_{23} -0.74*	300
Male + female	r_{12} -0.79*	r_{13} 0.71* $R_{1,23}$ 0.80*	r_{23} -0.75*	600

*Significant at 0.01 level

The above table shows the relationship of academic achievement with academic procrastination and self-efficacy. It is observed there exists a negative relationship between academic achievement of the male, female and the total (male and female) higher education students of Arts, Science and Commerce streams with their Academic procrastination. This shows that academic procrastination has negative influence on academic achievement of the higher education students. Similarly, it is observed that there exists a positive relationship between academic achievement of the male, female and the total (male and female) higher education students of

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Arts, Science and Commerce streams with their Self-efficacy. This further can be explained that self-efficacy has positive influence on academic achievement of the higher education students. This indicates that higher the self-efficacy higher the academic achievement of the students. The above result shows that the calculated value of co-efficient of multiple correlation of academic achievement with academic procrastination and self-efficacy of higher education students is positive. This indicates that academic procrastination and self-efficacy in together influence the academic achievement of higher education students. This can further be explained that academic procrastination and self-efficacy conjointly affect the academic achievement of the higher education students. If students have high level of academic procrastination and their self-efficacy is low then students are likely to achieve lower level of academic achievement. If they have high level of self-efficacy and low level of academic procrastination then they appear to achieve higher level of academic achievement. This is evident from the group trend. On the basis of the above mentioned result, the hypothesis no. 6 i.e. “there exists no significant relationship between academic achievement of higher education students with academic procrastination and self-efficacy” is thus, rejected.

Conclusions

The study documents the following conclusions:

- ❖ The higher education students irrespective of gender possess moderate level of, academic procrastination, self-efficacy and academic achievement.
- ❖ Male higher education students display higher level of academic procrastination as compared to the females.
- ❖ Among Arts and Science higher education students similar level of academic procrastination is found, while Arts and Commerce stream students do possess significantly different levels of academic procrastination. At the same time it is observed that, the Science and Commerce student do differ to each other with regard to their academic procrastination.
- ❖ Female higher education students have higher level of self-efficacy as compared to the males. They have higher level of self confidence, positive attitude and high believe in outcome expectations.
- ❖ Students in all the three streams do not differ to each other in self-efficacy beliefs.
- ❖ Both male and female higher education students have significantly different level of academic achievement. Female higher education students score significantly high compared to the males.
- ❖ Students of Science stream have higher level of academic achievement than the Arts students. Students of Arts and Commerce streams possess

significantly different level academic achievement. Higher education students of commerce stream have higher level of academic achievement than Arts students.

- ❖ Significant negative relationship between academic achievement and academic procrastination of male and female higher education students of each stream separately and combined is reported. This is evident from the group trend that the student with high level of academic procrastination have low academic achievement and vice versa, because students with high academic procrastination tend more to avoid or delay academic activities, do not manage their work timely and all these result in low academic achievement. As in the case of male higher education students they score higher on academic procrastination lower on academic achievement and vice versa in the case of female higher education students.
- ❖ Significant positive relationship between academic achievement and self-efficacy of male and female higher education students of each stream separately and combined is also found.
- ❖ The academic procrastination and self-efficacy in together influence the academic achievement of higher education students. Students with high level of academic procrastination and low level of self-efficacy have low academic achievement. If students have low level of academic procrastination and high level of self-efficacy they will achieve higher level in academic activities.

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