

**RELATIONSHIP BETWEEN THE PHENOMENON
OF ACADEMIC PROCRASTINATION AND
STUDENTS' ACHIEVEMENT AT UNIVERSITY
LEVEL**



Researcher:
SAIRA
74-FSS/PHDEDU/S11

Supervisor:
Prof. Dr. Samina Malik
Co-Supervisor:
Prof. Dr. N. B. Jumani

**DEPARTMENT OF EDUCATION
FACULTY OF SOCIAL SCIENCES
INTERNATIONAL ISLAMIC UNIVERSITY
ISLAMABAD**

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LEVEL**



Saira

74-FSS/PHDEDU/S11

A thesis submitted in partial fulfillment
of the requirement for the degree of
Doctor of Philosophy in Education

**DEPARTMENT OF EDUCATION
FACULTY OF SOCIAL SCIENCES
INTERNATIONAL ISLAMIC UNIVERSITY
ISLAMABAD
2018**

APPROVAL SHEET

Thesis titled “**Relationship between the Phenomenon of Academic Procrastination and Students’ Achievement at University Level**” submitted by SAIRA (Reg. No. 74-FSS/PHDEDU/S11) in partial fulfillment for the requirement of Ph.D. degree in Education with specialization in Curriculum Development is accepted by the Department of Education, Faculty of Social Sciences, International Islamic University Islamabad for the award of Ph.D. degree in Education.

Viva Voce Committee:

Supervisor:

Prof. Dr. Samina Malik

Co-Supervisor:

Prof. Dr. Nabi Bux Jumani

Internal Examiner:

Dr. Azhar Mahmood

External Examiner:

Prof. Dr. Muhammad Javed Iqbal

External Examiner:

Prof. Dr. Brig. (R) Allah Bakhsh Malik

Dated: _____

Chairperson
Department of Education,
**International Islamic University,
Islamabad**

Dean
Faculty of Social Sciences,
**International Islamic University,
Islamabad**

AUTHOR'S DECLARATION

It is hereby declared that author of the study has completed the entire requirement for submitting this research work in partial fulfillment for the PhD degree in Education. This thesis in its present form is the original work of the author expecting those which are acknowledgement in the text. The material included in the thesis has not been submitted wholly or partially for award of any other academic certification than for which it is being presented.

Saira

Reg. No. 74-FSS/PHDEDU/S11

CERTIFICATE

The thesis entitled “Relationship between the Phenomenon of Academic Procrastination and Students’ Achievement at University Level” submitted by Saira Reg. No. 74-FSS/PHDEDU/S11 in partial fulfillment of PhD degree in Education, has been completed under our guidance and supervision. We are satisfied with the quality of student’s research work and allow her to submit this thesis for further process, as per IIUI rules & regulations.

Supervisor:

Prof. Dr. Samina Malik

Co-Supervisor :

Prof. Dr. Nabi Bux Jumani

Date: _____

Dedication

This study is dedicated to

My Parents, Husband,

and Children

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I am humbly thankful to Almighty ALLAH who enabled me to complete this task. It's all about my Lord's Blessings. ALLAH always acknowledges the efforts of the Man and never wastes them. I have no words to express my gratitude, feelings and say thanks to my parents. They both prayed for my success day and night. My father (Ijaz Ahmad) and my mother (Nasreen Akhter) remained a great source of strength for me at every step. My husband (Malik M. Usman Waris) supported me and encouraged me to complete the task successfully. Moreover, I am proudly acknowledging the sacrifices of my loving brother (Usman Ijaz), sister (Rida Ijaz), my daughters (Eimaan Zahraa, Doua Usman and Hamd Usman). Throughout my research journey they sacrificed a lot and remained supported for me at every step.

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teacher and departments of the universities who provided me data, time and meaning to substantiate my undertaking.

ABSTRACT

Procrastination is a complex phenomenon referred towards the postponement of a planned task that can also be defined as an illogical and irrational delay. The study was an attempt to find out the relationship between the phenomenon of academic procrastination and students achievement at university level. The objectives of the study were to identify the tasks in which students procrastinate the most with an exploration of the causes for academic procrastination. Furthermore, the relationship between academic procrastination and students' achievement was explored. Students' interest in changing their attitude of academic procrastination was also assessed. The study was a co-relational study. The relationship between academic procrastination and students' achievement was explored. In typological context, five public sector universities were randomly selected out of 20 public sector universities in Punjab. Multi-stage cluster sampling technique was used and the total 365 M.Phil level students (All students studying in the sampled departments) and twenty five university teachers, teaching at M.Phil level (one teacher from each sampled department) formed sample of the study. Procrastination Assessment Scale for Students (PASS) was adopted to collect quantitative data from the students and semi-structure interviews of the teachers were conducted for qualitative section. Data were collected through mail and personal visits and analyzed by using SPSS. Both descriptive and inferential statistics were used. Major findings and conclusions of the study revealed that majority of the students at university level are the high procrastinators in all the six identified academic tasks. The main causes for academic procrastination were dependency and help seeking, risk-taking, socialization, pleasant verses boring tasks, fail to prioritize, lack of focus, socialization, poor time management, no check and balance from parents, leniency of the teachers, not clear goals, carelessness, and lack of motivation. Strong negative correlation was found between academic procrastination and academic achievement, furthermore, students' wish to change their attitude of academic procrastination. The study recommended that teachers, parents and students themselves take the responsibility to avoid academic procrastination and a course to overcome the attitude of academic procrastination may be introduced at university level within the framework of mentoring services for building up competency and commitment of students and teachers, through research based powerful programs, conducting empirical studies in sampling physical sciences and professional programs on a larger sample in Punjab and elsewhere, comparison of public and private universities, in-depth case studies of risk cases and developing research based training manual were suggested for further research in this area.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
CGPA	Cumulative Grade Point Average
CVI	Content Validity Index
GPA	Grade Point Average
HEC	Higher Education Commission
IUI	International Islamic University Islamabadp
LFT	Low Frustration Tolerance
PASS	Procrastination Assessment Scale for Students
RBS	Rational Beliefs about Studying
SD	Standard Deviation
SMEs	Subject Matter Experts
SPSS	Statistical Package for Social Sciences
UPPS	Urgency-Premeditation-Perseverance-Sensation
URC	University Requirement Course

CHAPTER 1

INTRODUCTION

Procrastination is an intricate and completely baffling phenomenon. That is why multiple researches have been conducted to justify its undisputed recognition. It can be said that in procrastination some essential tasks are consciously withheld or postponed without satisfactory argumentation. Steel (2007) explained procrastination as an act of delaying the tasks, projects or assignments due to the several reasons, up to the point where it becomes a hurdle or problem for the person involved in an activity. In addition, it may result in emotional disturbance and discomfort and many psychological problems such as high level of anxiety, depression and stress. Earlier, Lee (2005) defined procrastination as an internal motivational problem. While, Sirin (2011) explained procrastination as a personality trait deliberate for delaying existing work. He mentioned it as a behavioural disposition and an illogical delay.

Noran (2000) perceived the term procrastination as an averting behaviour towards an important task which needs to be completed soon. He pointed out the socialization as a hindrance for the focus of the person towards his work. In this way the people who are more social are more likely to postpone their work. Furthermore, people who are less social are found more focused and complete their work within the deadlines given to them. The people belonging to first category spend their time in socialization (meeting with friends, parties, family gatherings etc.) while the second

category spends maximum time to achieve the goals and to complete task in due time.

Procrastination is a multi-faceted phenomenon. Among one of its features the academic procrastination has prodigious relation with education, which causes the unjustified delay while completing academic tasks. It is a common phenomenon and a universal problem of the students at college and university level. Almost every student, at many stages of educational career experiences academic procrastination (Day, Mensink, & O'Sullivan, 2000; Wolters, 2003). It is conditioned with unfavorable and adverse behaviour and outcomes. According to Oweini and Haraty (2005), academic procrastination is an un-avoidable evil for the students at tertiary level. Learning Common Fastfact Series (2004) has indentified the procrastination as the common problematic factor of time management. Furthermore it was explained that every student at any stage of his/her academic career experience procrastination (the degree of procrastination may vary among the students). The common practice done by the students under the influence of academic procrastination is to delay some important academic activities till the last moment (Migram, Batin & Mower, 1993).

Popoola (2005) explained that students at university level have a number of academic activities and assignments (course registration, term papers, preparation for exams and daily assignments) to be completed within short span of time in semester. They are panicked by given deadlines by the teachers and the administrators. Many researchers have concluded academic procrastination as a behavioural problem which may result in a number of psychosomatic problems associated with depression, stress, fear of failure, lack of confidence, exam anxiety, poor time management, bad communication skills , bad study habits, lower grades etc (Lee, 2005; Ozer, Demir & Ferrari, 2009). Autonomy, independent study, internal control and high motivation level are associated with lower level of Procrastination (Deci & Ryan, 1991; Uzun

Ozer, Demir & Ferrari, 2009). Bridges and Roig (1997) claimed that academic procrastination and irrational thinking of the undergraduates has direct proportion. That is, as the irrational thinking increases among the undergraduate, tendency for procrastination increases and as the irrational thinking decreases among the undergraduates, tendency for procrastination also decreases.

Chow (2009) explored that in US about 95% students studying at college level were suffering from a notable degree of procrastination. Using the data, the conclusion drawn by Wolters (2003) mentioned that procrastination was a common phenomenon among students at college level. Wang and Englander (2010) surveyed that 50% students procrastinate their academic tasks most frequently and about 38% students procrastinate their academic tasks accidentally.

At the first stage, the studies related to academic procrastination mainly focused on the study habits of the students (minutes spent) (Ziesat, Rosenthal & White, 1978). With times, the area of focus related to this complex phenomenon of academic procrastination extended and many personal and social factors were examined. Procrastination is muffled in unspecified hues due to its diversity. Its temptations can appeal somebody to avoid his assigned task or to persuade him towards idle condition or impel him to dreadful delay till the last moment. Such things can cause so many psychological problems. Seo (2008) indicated that students having high degree of procrastination were less motivated and also had some serious type of personality problems. It was explained further that students suffering from academic procrastination had lower level of confidence, high degree of dependency, and were undisciplined.

Procrastination in academic tasks is not a phenomenon to be ignored. It has become the most powerful variable which can divert the student's attention from the

most important academic tasks and assignments. In results it could be much harmful than any other intervening variable. It can spoil the career of students in total. Moon and Lllingworth, (2005); Akinsola and Tella, (2007) explored that academic procrastination is clearly harmful in its impact on academic performance of the learners. Students at university level often experience academic procrastination. They cannot avoid it but the urge is to deal with it.

As the phenomenon of academic procrastination is associated with the performance of the students, the aim of present study is to identify the academic tasks due to which students procrastinate at university level. Furthermore, it is attempted to explore the reasons behind academic procrastination and asses the interest of students in changing the direction and level of their academic procrastination. The core part of the current study is to determine correlation of the academic procrastination and students' Achievement. The deviations would provide the data and substance to improve academic programs and interventions for reducing undesirable impacts.

1.1. Rationale of the Study

Procrastination is such an attitude which may be conscious as well as unconscious attempt (Hoover, 2005; Gafni & Geri, 2010). Researchers in the field have claimed that procrastination is a common and universal tendency among general population (Ferrari & Tice, 2000; Popoola, 2005; Steel, 2007). This tendency of delay may have a number of plus and minus, but its harms are more than its benefits. This attitude of delay in academics is called Academic Procrastination which in general affects a student's academic career and in its severe impact, the academic career of a student may ruin (Tice & Baumeister, 1997; Wang & Englander, 2010; Ozer, 2011). To address this problem, concentrated efforts are necessary for mobilizing the student community and all the other stakeholders of education about the inherent causes of

academic procrastination involved and the grave consequences, as such.

1.2. Statement of the Problem

Academic procrastination is such a phenomenon whereby students tend to postpone and prolong their academic tasks and activities, which directly affect their academic achievement. More precisely, academic procrastination is wastage of time as it is viewed as self-handicapping behavior by the students that lead students towards increased stress and poor performance in academics. In its extreme consequences, this act of delaying academic tasks may ruin the academic career of a student. Focusing this serious problem related to academic career of the students at university level, the study aimed to identify the academic tasks where the students' procrastinate the most. Comparison of the level of academic procrastination among university students were made on the basis of gender and department, along with the exploration of the causes of academic procrastination. The study also explored the relationship between academic procrastination and students' achievement at university level. Furthermore, an effort was made to explore the students' interest in changing direction and level of academic procrastination.

1.3. Objectives of the Study

The objectives of the study were to;

1. identify the academic tasks for which students procrastinate at university level
2. compare academic procrastination level on the basis of gender, departments and ability of the students' at university level
3. explore the causes for academic procrastination at university level
4. find out the relationship between academic procrastination and students' achievement at university level
5. assess the interest of students in changing their levels of academic

procrastination

1.4. Research Questions

Following were the research questions of the study;

1. What is the level of students' academic procrastination in writing a term paper?
2. What is the level of students' academic procrastination in studying for an exam?
3. What is the level of students' academic procrastination in keeping up with assignment tasks?
4. What is the level of students' academic procrastination in performing academic administrative tasks?
5. What is the level of students' academic procrastination in attending classes?
6. What is the level of students' academic procrastination in performing academic tasks in general?
7. To what extent the students' academic procrastination level differ significantly from average?
8. To what extent the male and female students' academic procrastination level differ significantly at university level?
9. To what extent the students' academic procrastination level differ significantly across departments at university level?
10. To what extent the students' academic procrastination level differ significantly among low, average and high achievers?
11. To what extent the causes for academic procrastination predict students' academic procrastination at university level?
12. How far the Students are interested in changing their level of academic procrastination?

1.5. Hypotheses of the Study

Null hypotheses of the study were as follows;

H0: There is no significant relationship between students' academic procrastination and students' academic achievement at university level.

1.6. Significance of the Study

The results of the study may be helpful in many sections of education in particular and the society in general. The educational planners can get some insight into the matter and they can understand the positive and negative impacts of academic procrastination on the career of the scholars. They can plan how to utilize the positive impact of the phenomenon of academic procrastination to improve the direction and level of students' achievement and how to minimize its negative impact as the attitude of academic procrastination can spoil the academic career of a student in some severe cases.

The curriculum developers, who are the agents of change, can get help from the findings of the current research to modify the curriculum and incorporate powerful interventions in academic programs, task-based portfolios, strategic teaching learning and creative assessment demands. This may generate the interest and commitment of the students' to avoid the attitude of delaying their academic tasks. Moreover such partial changes in curriculum also discard the negative impacts which can destroy the educational career of a student. The findings of the study can also assist the educational administrators to implement and regulate such policies which can not only eliminate awful impact of Academic Procrastination on the academic career of the students but can also be helpful in getting maximum support from positive impact of the phenomenon of academic procrastination.

The study may also provide strong signals to the teachers at higher education

level to regulate the strategic teaching and methods of assessment. Equally, parents of the students studying at higher education level to become more concerned for the academic activities of the students suffering by the negative impact of academic procrastination. The primary group of student community, the finding may provide them the field based avoidance of the academic procrastination causing direct implications for changing their strategy, yielding strong commitment to higher achievement. The future researchers can also find new horizons of the trends and issues related to academic procrastination in relationship with students' achievement for further exploration.

1.7. Conceptual Framework of the Study

The main focus of the study was to explore the relationship between the phenomenon of Academic Procrastination and Students' Achievement at University Level. Relationship between two variables, academic procrastination and students' achievement was tested. The attitude of delaying academic tasks refers to academic procrastination that was studied under six academic tasks (Writing a Term Paper, Studying for an Exam, Keeping up with Assignment Tasks, Performing Academic Administrative Tasks, Attendance Tasks, and Performing Academic Tasks in General). Identification of the academic tasks, causes of academic procrastination, relationship between academic procrastination and students' interest about changing this act to postpone was explored by modified version of Procrastination Assessment Scale for Students (PASS) by Solomon and Rothblum (1984), and a semi-structured interview. Students' academic achievement record was collected in the form of Cumulative Grade Point Average (CGPA).

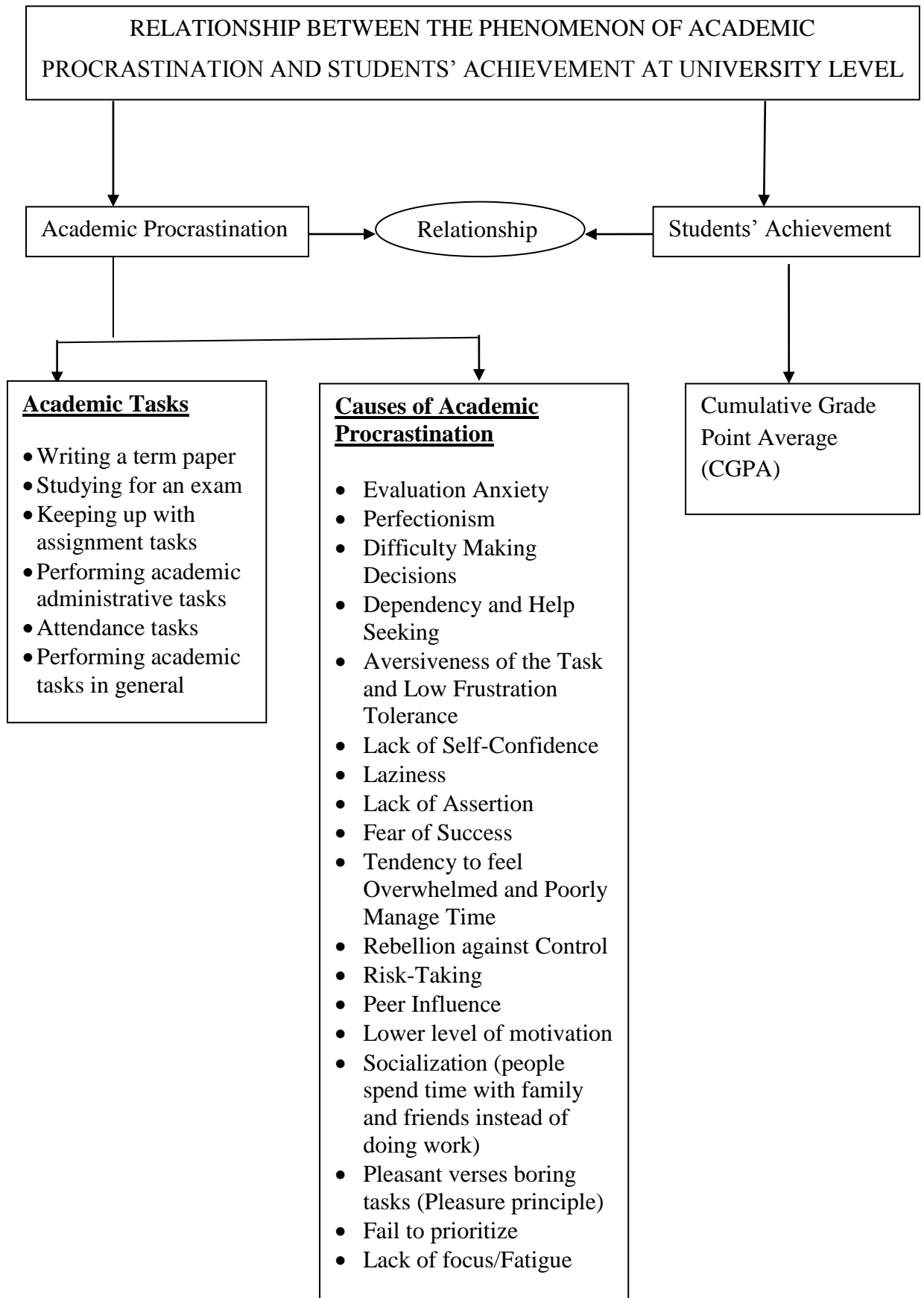


Figure 1.1: Conceptual Framework

1.8. Delimitations of the Study

The following table presents the delimitations of the study and the reasons:

Table 1.1

Description of the Delimitations of the Study

Sr. #	Delimitation	Reasons
1	General Public Sector Universities of the Province Punjab, Pakistan	To get a homogeneous and representative set of samples
2	Faculty of Social Sciences	To get a homogeneous and representative set of samples
3	MS/M.Phil Degree Level Students of the Session 2014-2016	To get representative and homogeneous samples

Table 1.1 shows that the study was delimited to General Public Sector Universities of the Province Punjab, Pakistan. To get a representative and homogeneous sample, Faculty of Social Sciences was included in the study. The study was also delimited to the MS/M.Phil Degree Level Students of the Session 2014-2016.

1.9. Methodology

The purpose of the study was to find out the relation between Academic Procrastination and Students' Academic Achievement. Following methodology was adopted to achieve the objectives of the study.

1.9.1 Population of the Study

The Population of the study comprised the M.S/M.Phil students and Teacher of the Faculty of Social Sciences at General Public Sector Universities of the Province Punjab under the session 2014-2016. Approximately 3000 students were enrolled in MS/M.phill session 2014-2016 in Social Sciences at 20 public sector universities in Punjab. Approximate number of faculty members was 200. (Souise: universities

website data).

1.9.2 Sample of the Study

Multi-stage cluster random sampling technique was used for the study. At the first stage of sampling, five universities were randomly selected as sample of the study. At the second stage five departments were found as common departments among five universities. At the third stage of sampling selected five departments were considered as cluster. And all the students at M.S/M.Phil level for the session 2014-2016 among five departments of the faculty of social sciences were considered as the sample of the study. And one teacher from each department was also randomly selected as sample. In that way total 365 students and 25 teachers were included in the study as sample (details of sampling are given in Chapter 3).

1.9.3 Research Instruments

Research instruments of the study and sources of data are presented in the following table:

Table 1.2

Description of the Research Instruments of the Study and Sources of Data

Sr. #	Research Instruments	Source of Data
1.	Adapted version of PASS (Procrastination Assessment Scale for Students)	MS/M.Phil Degree Level Students of the Session 2014-2016
2.	Semi-Structured Interview	University Teachers
3.	Students' Academic Achievement Record in terms of C. G. P. A. (Cumulative Grade Point Average)	Department Offices

To collect data from the students, Procrastination Assessment Scale for Students (PASS) by Solomon and Rothblum (1984) was used after making amendments according to the objectives of the study in the light of the relevant/latest research-literature reviewed and the results of the pilot study.

One self developed semi-structured interview was conducted to collect data from the 25 teachers. Data of students Academic Achievement were collected from the concerned department offices.

1.9.4 Pilot Study

Procrastination Assessment Scale for Students (PASS) was adapted, so as to check the reliability of the scale, pilot testing was done. The degree of reliability was calculated by using Cronbach's Alpha on SPSS. For the overall research instrument the degree of reliability was 0.974. Factor wise degree of reliability was also calculated. Factor analysis was done to select reliable statements to be included in the final version of the research instrument. Validity of the Procrastination Assessment Scale for Students (PASS) and semi-structured interview was ensured via experts' opinion. Content Validity Index (CVI) value of the Procrastination Assessment Scale for Students (PASS) was 0.69. Details of pilot testing are given in Chapter 3.

1.9.5 Data Collection

Data were collected by personal visit. Procrastination Assessment Scale for Students (PASS) was distributed among the sample of the students by giving them clear instructions in writing and verbally too. Interviews of the randomly selected teachers were conducted by the researcher and were recorded by using audio recorder. Data of students' Academic Achievement were collected from the concerned department offices for cross checking. Students were clearly informed that their Cumulative Grade Point Average (CGPA) will be assessed and the purpose of the study was shared with them. They have provided their Cumulative Grade Point Average (CGPA) themselves and were cross checked by the data collected from their concerned departments. The researcher considered the ethical norms of the research and the individual data remained anonymous.

1.9.6 Data Analysis

The study has both quantitative and qualitative data. Quantitative Data collected from the students were analyzed by using SPSS. Mean, t-test, ANOVA, Regression, Pearson Correlation, Percentage, odd ratio, Bar and Pie Graph were applied on the data to analyze the PASS. Moreover, common themes were obtained from the interviews conducted by the teachers (the qualitative data). The research findings were drawn in light of data analysis and recommendation were presented and areas for future research were mentioned. Detailed data analysis is given in Chapter 4.

1.10. Ethical Code

This was an empirical study. It required a vigorous concern to follow ethical consideration. In the first place, ethical code refers to maintain privacy in collection the data. Both sets of respondents (students and teachers) were assured of privacy. They were assured that the data would be reported in group responses and no individually would be visible. In the second place, personal profile of the students would not be reflected. It would be used male or female to reflect gender cases. Third, the teachers were also assured of secrecy of their responses and interpreted in statistical terms as inferential statistics. Cumulative Grade Point Average (CGPA) is regarded a public document in the academic world. Fourth, Universities were not coded. As public institutions, they are expected to maintain open academic climate. Care was taken to abstain from probing personal history, family culture, anthropological issues, disadvantaged or denial tools.

1.11. Operational Definitions of the Variables

1.11.1 Academic Procrastination

Academic Procrastination refers to the postponement and delay of Academic Tasks knowing that this delay will be harmful and will not bear good results.

1.11.2 Academic Achievement

Academic Achievement was considered in terms of students Cumulative Grade Point Average (CGPA).

1.12. Chapter Overview

Chapter 1 describes an introduction regarding the need and scope of the study. The objectives of the study included (a) Identify the Academic Tasks for which students' Procrastinate at university level (b) compare academic procrastination level on the basis of gender and departments of the students' at university level (c) Explore the reasons for Academic Procrastination at university level (d) Correlate the Academic Procrastination and students' achievement at university level (e) Assess the interest of students in changing their level of Academic Procrastination. Statements of the problem, research questions, significance of the study, in the light of the objectives of the study provided the portrayal of the justification for the study. This chapter introduced the problem and sets out the objectives of the study. To get deeper insight of the problem, it is necessary to provide theoretical foundations for the study. For this purpose review of the related literature is presented in the next chapter (Chapter 2).

CHAPTER 2

LITERATURE REVIEW

The present study aimed at exploring the relationship between the phenomenon of academic procrastination and Academic Achievement at higher education level. It is an attempt to explore theoretical basis for the study. This chapter includes four sections. In the first section, the concept, need and scope of the phenomenon of procrastination is discussed. The second section traces the history of this phenomenon in the field of education. The third section reflects the types of procrastination, particularly presenting a portray of academic procrastination in a more detail.

2.1. Concept and Nature of Procrastination

2.1.1 Literary Meanings of the Term Procrastination

The term “procrastination” has been derived from Latin word “Procrastinus” (Pro + Crastinus). “Pro” means forth, onwards, forward and “Crastinus” means tomorrow (Klein, 1971; Apple, 2005).

2.1.2 Expressive Meanings of the Term Procrastination

The term Procrastination is defined by many researchers in a variety of perspectives. According to Steel (2007) Procrastination is such a phenomenon which

is not yet explored enough. An enormous quantity of work in this arena is theoretical unexposed to empirical findings, deals basically with the measurement of the phenomenon among the participants of a group or among the members of a team. While an attempt to explore the true sense of the term, abundant perceptions need to be disclosed.

Procrastination is as an unreasonable postponement and delay of a proposed program knowing that this delay will be harmful and will not bear good results (Simpson & Pychyl, 2009; Andreou, 2007; Steel, 2007). This interpretation also associates with the finding presented by Abbasi and Alghamdi (2015) and Steel (2007) that students make an idea or strategy to complete their proposed tasks in stipulated period of time but when the time for an action comes they start making irrational delays. However, according to Stead, Shanahan and Neufeld (2010) the traditional interpretation of the term procrastination is difficult because of its vague nature, depicting a number of mental disorders, including anxiety and depression.

Schouwenburg (2004) defined procrastination as to perform an alternative activity which is not synonymous with laziness. It can be permanent or temporary change and be defined as a function of mental output- putting off making a decision or behavioural output- holding off the action (Rosario et al. 2009). According to Shafran and Mansell (2001) Procrastination is putting back a task because the desire is to complete it with perfection and perfectionist standards are unlikely to be met.

Procrastination is a complex phenomenon meant by delaying, holding up or postponing some important tasks, activities or assignments required to be completed, finished or accomplished right away (Ferrari & Tice, 2000; Knaus, 2000). Procrastination is unrestrained phenomenon and has been proved a stable trait (Gustavson, Miyake, Hewitt & Friedman, 2014). That can also be taken as self-

determined, disallowed or an intentional withheld action with hovering threats of delay. Many psychological factors relate to it (Steel, 2007). This disposition can cause mental stress and these deferring practices become the part of their nature (Klingsieck, 2013).

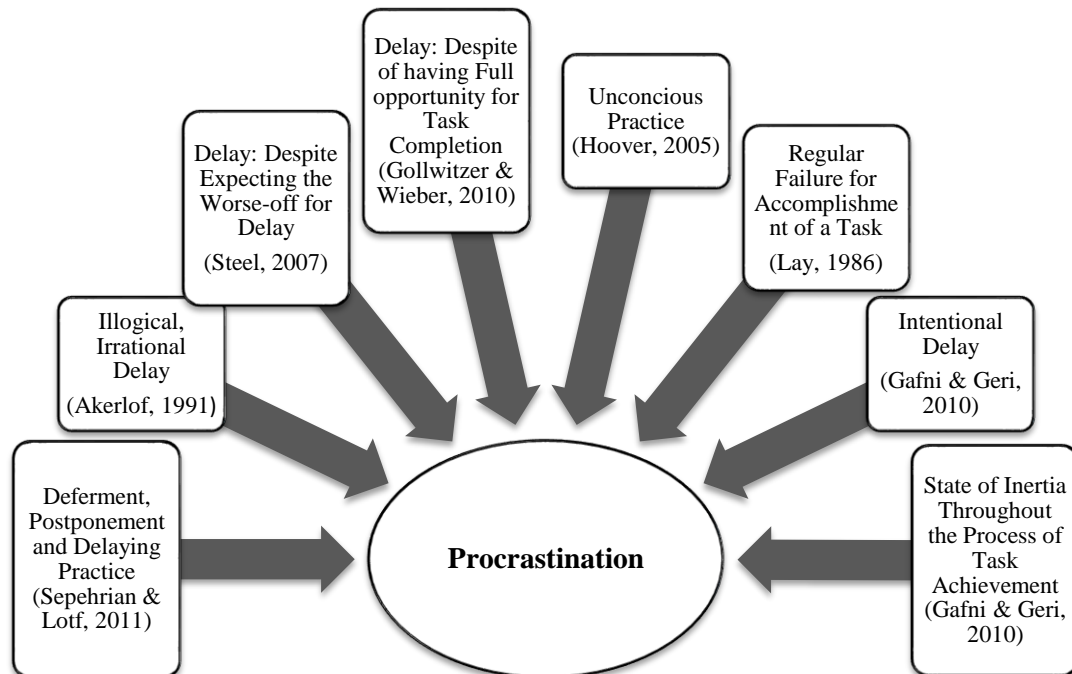


Figure 2.1: Nature and Meanings of Procrastination

2.1.2.1 Deferment, Postponement and Delaying Practice

It is obvious that all the researchers involved with the term “procrastination” recognized that it refers to unnecessary deferment, postponements, delay and putting off task/s of immediate attention up to a remarkable time period. Furthermore, Procrastination refers to postpone such important work that is to be done at the present time, but delayed for the future (Sepehrian & Lotf, 2011).

2.1.2.2 Illogical, Irrational Delay

Most of the times, the delay is simply illogical, irrational and absurd (Akerlof, 1991). The Oxford Dictionary (2014) defined the term Procrastination as “The act of delaying or postponing something without a good reason”.

2.1.2.3 Delay: Despite Expecting the Worse-off for Delay

Procrastination also refers to the delay of an intended work or action voluntarily despite expecting to be worse-off for delay (Schraw, Wadkins & Olafson, 2007; Steel, 2007). Janse and Carton (1990) has explained that procrastination is a serious problem of secondary school students which they can face on daily basis.

2.1.2.4 Intentional Delay

Procrastination is about completion of different tasks in tough time or on deadline (Gafni & Geri, 2010). The Merriam-Webster dictionary (2014) explained the term Procrastination in a detailed and comprehensive perspective as:

- An attitude of laziness about doing something.
- A delaying attitude toward an assignment that is due to be completed soon.
- Putting off the assignments with intent or habitually.

The notable point is that the person (Procrastinator) is aware of it. He/she is doing it with intentions, and is habitual of holding-up compulsory tasks (due to be accomplished soon), because of having an attitude of idleness, sloth and sluggishness. This indolence has definitely harmful and destructive impact on the routine life of a person. Procrastination is not performing tasks as desired or as per requirement, delay makes it impossible to achieve targets and makes situation worse irrespective of the fact that people try to avoid being crushed by workload and also stay away from feelings of severe despondency and dejection for their peace and prosperity (van Eerde, 2003).

2.1.2.5 Unconscious Practice

Despite the fact that procrastination is conglomeration of various pitfalls people aspire to procrastinate with good intentions. The irrefutable example of college student can support this perception, who lingers on the tasks making new deadlines

with good motive and prioritizes the other tasks which cause the deterioration of his educational career by derailing him (Hoover, 2005). Procrastination is one of the common reasons of failure of things which ought to be done but left incomplete.

2.1.2.6 Regular Failure for Accomplishment of a Task

Procrastination is a regular failure for accomplishment of a task which has to be completed to reach set objectives (Lay, 1986). A procrastinator always considers himself ready to hit the target but refrains from taking action. Moreover, he shows undeniable association with his caliber and task. In spite of his cautious plans regarding his task he neglects his goal that is required to be completed in stipulated period of time and puts futile tasks in his priorities. Ultimately time is wasted and career is ruined. Some causes of procrastination are mismanagement of time, lack of prioritizing tasks and lack of concentration (Learning Common Fastfacts Series, 2004).

2.1.2.7 Delay: Despite of Having Full Opportunity for Task Completion

Gollwitzer and Wieber (2010) have demonstrated 'Procrastination' as a decisive hindrance to achieve certain goals and a stoppage for the goal-oriented tasks and activities. The important point is that the person has the intention to complete that task and also has sufficient opportunities to chase it. Furthermore they have pointed out four critical factors of procrastination:

- (a) Commitment (to achieve the goal/s)
- (b) Having full Opportunity (to act on the goal/s)
- (c) Awareness (of the worst consequences for having delay in action)
- (d) Affectionate Delay (delay with full intentions and willingly).

This interpretation indicates that procrastination is a person's intent behavior may occur due to certain reason, in certain situation. The procrastinators have the

conspicuous and patent view of the road map for accomplishment of the task/goal, also have feasible circumstances to achieve the goal.

2.1.2.8 State of Inertia throughout the Process of Task Achievement

Apart from the findings of several researches demonstrating procrastination as a failure to get start, Gollwitzer and Wieber (2010) went a step forward in their notion and present the widespread phenomenon in an extended exposure by relating it with all of the stages of Goal-orientation or Goal Striving. Their research findings demonstrated that throughout the process (start to end), the person may suffer with a state of inertia that is called procrastination.

2.1.2.9 Failure of Self-Regulatory Motives

The phenomenon of ‘Procrastination’ is associated with the failure of self-regulatory motives (Ferrari, 2000; Steel, 2000). Steel (2007) further defined ‘Procrastination’ as a widespread and insidious type of self-regulatory failure which is not completely understood.

2.1.2.10 The Most Undesirable Action

O’Brien (2002) claimed that almost 95% people experiencing procrastination wished to minimize or decrease the tendency of procrastination because they suffer from problem in their routine life due to delaying their activities.

2.1.2.11 Procrastination: A General Nature of Human Being

Popoola (2005) described the nature of the procrastinator as a person who clearly knows what he/she has to do in some or other way, put some effort to do it but still doesn’t able to complete it. He further explained procrastination as personality trait which contains behavioural, emotional as well as cognitive elements. He further disclosed that this type of personality trait increases behavioural problems like anxiety

and discomfort in an individual's life so there is need of the hour to mitigate this trait at minimum level. In that way procrastination is the general nature of human being. People satisfy themselves and others using lame excuses.

Everybody experienced it in his/her routine life. In other words (most interestingly) we all are the procrastinators to some extent. In the busy schedule of routine life, a number of assignments call for our urgent concentration. So most of the time, the deferment becomes an unavoidable evil. We reschedule activities or postpone them to the next time intentionally or unconsciously. Researchers claimed that if somebody declare that he/she never procrastinate then it can easily be concluded that he/she is defiantly lying or replying in a socially desirable mode (Koestner & Vallerand, 2001).

2.1.2.12 Procrastination is a Complex Phenomenon

Procrastination is a complex phenomenon (Steel, 2007) as a lot of work has been done to avoid its indistinctness but still it is carrying inevitable ambiguity and vagueness in it (Wilson & Nguyen, 2012). It encompasses cognitive, emotional and motivational factors. A fragmented anatomy had to be done due to its complexity and wide range (Pychyl & Flett, 2012).

2.1.2.13 Procrastinators Presents Justifications for their Irrational Delaying

Practices

Procrastination is unethical habit which a person wants to opt due to certain reasons which may not to be blamed of such habit. Because most of times the victim person try to satisfy him/herself by giving justifications (Ellis & Knaus, 2002). These justifications can be related to the person him/her own self and may be related to outer circumstances. Simply the person feel that his/her own-self and most of the times outer variables are the responsible for his/her task delay.

2.1.2.14 Environmental Factors also involved

Environment plays pivotal role for the accomplishment of a task. Striving in peaceful environment can be convenient and better than struggling in unfavorable conditions. Juggling with different tasks at the same time and hovering threats of failure can derail the diligent efforts and a person is compelled to procrastinate. Most of the times people adopt procrastination by avoiding long term activities and adopting short term activities or opting those activities which are more rewarding (Solomon & Rothblum, 1984).

Mental strength and ability cannot be denied while achieving any goal because with their assistance a man can emerge without losing confidence. Sometimes wrong assumptions may lead to the procrastination. For example when it is assumed that the specific work cannot be done successfully, a person will resort to procrastination due to the fear of failure lurking in mind and hence will lose his self-respect (Ferrari & Emmons, 1995). The study also reflected that procrastinators generally are due to the deficient in self respect, faith in self but are self critical. Mostly people, who procrastinates their tasks, spend most of their time in social activities with friends and relatives despite of having important and goal-oriented tasks (Noran, 2000).

2.2. Interpretations of Procrastination in Literature

According to one definition, procrastination has two types of interpretation:

- a) Procrastination by behaviour
- b) Procrastination as a trait

In the past, researchers who researched on procrastination remained more focused on behaviour and its behavioural characteristics. Researchers considered procrastination as avoiding a compulsory task (Schouwenburg, 2005). Broca and Yoen (1983) as cited in Zarick and Stonebraker (2008) described Procrastination as a

weak point in the personality of a procrastinator and it also notices that lack of self confidence is also responsible for procrastination. According to Ram (2005) the individual's motivation levels and motivational states are the threshold of procrastination. Being the inexplicable combination of emotional, informational, behavioural and intellectual processes the procrastination has always been taken as the impediment in the completion of academic task.

2.3. Procrastination and Various Departments

Procrastination is not solely related with the postponement of the day to day activities but has also been explored by researchers associated with variety of disciplines, such as Economics, Political Science, Banking, Medical, Education and other social sciences. Intensive research has been done in social sciences. This is because social sciences essentially deal with individual and group problems associated with processes. Briody (1980) outcome of procrastination has always been a terrible nightmare because it has annoying and disgusting impacts in the life of procrastinator. Thus, being unpleasant and unacceptable phenomenon the procrastination has always been denounced and procrastinators have always been discouraged.

O'Donoghue and Rabin (1999) associated with the field of Economics correlated the procrastinatory behaviour with retirement savings and found a state of inertia in this regard. In political arena procrastination represents the delay in decision-making even at the presidential level, where the bulk of work needs to be completed urgently (Farnham, 1997). Equally, it is political strategy. In psychology, delayed decisions are mental phenomena of an individual, a person of indecisive mind or behaviour. In legal education, delayed justice is denial justice. Like many other

fields, the phenomenon of procrastination has received active attention of the researchers in the field of education since 80s.

2.4. As a Widespread Phenomenon: Ratio of Procrastinators in General

Population

Procrastination emerges as a widespread phenomenon among the general population. 46% to 95% undergraduate students are the sufferers of academic procrastination (Gallagher, Borg, Golin, & Kellehr 1992; Jansenn & Carton 1999; Kachgal, Hansen & Nutter 2001; Ozer, Demir & Ferrari, 2009).

2.5. History of Procrastination

The issue of procrastination demands careful consideration because of its significance. There are no indications as yet that science will address it in the near future because of assigning it scientific treatment and brevity.

While exploring the history of procrastination one may find some interesting facts which may surprise many, if someone searches through history and wants to find a book by Ringenbach, (1971), written on the subject of procrastination, titled as “Procrastination through the Ages: A Definitive History”, search will not be recommended as that book was never completed and it became the victim of procrastination and can be declared as procrastination itself procrastinated. Publisher of that book called it as elaborated joke. Despite of the fact that this book is not practically exist, is cited by Knaus (2000) and Steel (2007). In early 1980s procrastination behaviour was investigated by Solomon and Rothblum who introduced the Procrastination Assessment Scale for Students (PASS). These both authors created the PASS (Procrastination Assessment Scale for Students) to measure procrastinating attitude among students. This test has two parts; first part deals with frequency of procrastination of individuals on their academic task and second part

deals with the causes behind their procrastinating attitude. The authors identified two different groups of procrastination. The labels of these groups were “fear of failure” and “avoidance of task”. For measuring habits of procrastination they used Procrastination Assessment Scale for Students (PASS) for both labeled groups. Unwritten history or un-researched area also advances or records a third facet of procrastination whereby top scholars would defer their final cumulative examination for a year or so, as a deliberate decision. The intent would be to secure top position in the public examination, taken by thousands of students. This trend prevailed in early 40s. preparing for matriculation of Bombay university before partition.

The first actual historical analysis related to procrastination was written by Milgram (1992) who argued that many technically advanced societies made commitments, announced deadlines and declared objectives to be met at any cost. Similarly when compared with under-developed countries or societies we find it less afflicted. Ferrari, Johnson and McCown (1995) also defined it in the similar way as Milgram (1992) did. They have written a book on the subject of procrastination. In their work, they claimed that procrastination existed from ages but it was considered negative phenomena especially after industrial revolution. Before industrial revolution, it wasn't much agonizing. When look through history, views about procrastination are mostly in negative sense and now day's procrastination has become a modern affliction and prevailing problem of modern days. The procrastination has received greater pragmatic attention in the field of psychology. The procrastinating behaviour is negative behaviour and individuals who delay their task find it seriously negative and try to reduce it (Ferrari, 1991; Solomon & Rothblum, 1984).

Johnson (1751) as cited by Steel (2007) proclaimed procrastination is one of the common problems despite socially unacceptable phenomenon. It is found more or less in every human. A contemporary of Johnson, Philip Stanhope 1749/1968 advised, “no idleness, no laziness, no procrastination; never put off till tomorrow what you can do today”.

Around 800 BC a Greek poet Hesiod has written some golden words: “do not put your work off till tomorrow and the day after; for a sluggish worker does not fill his barn, nor one who puts off his work; industry makes work go well, but man who puts off work is always at hand-grips with ruin.” (works and days, 1.41). One of the spiritual texts of Hinduism Bhagavad Gita written in approximately 500 BC in which Krishna maintains unruly, offensive, mulish, immoral, mean, sluggish, dejected and procrastinating agent called Taamasika. In caste system of Hinduism Taamaiska people are placed among lowest castes (Gandhi, Strohmeier, & Nagler, 2000; Steel 2007).

Shakespeare (1997) was the first poet in the history who has presented the idea of Procrastination in the poetic way in his writing “Measure for Measure”. He wrote: “Our doubts are traitors, and make us lose the good we oft might win by fearing to attempt” (Act I, Scene IV). The glimpse of procrastination can also be clutched even in drama “Hamlet” by Shakespeare. There is soliloquy in which despondent hero (Hamlet) uttered his feelings in these words

“to be or not to be that is the question
Whether 'tis nobler in the mind to suffer
The slings and arrows of outrageous fortune,
Or to take arms against a sea of troubles”

These lines are not only the depiction of hamartia but are also naked proclamation of procrastination. Actually Hamlet the hero was reluctant to avenge immediately on his uncle and his hesitation persistently persuades him towards procrastination. At the initial stage, academic procrastination was perceived as a failure in time management but later on it was revealed that a number of Cognitive, Affective and Behavioural elements have been involved in the process of delaying the planned activities (Fee & Tangney, 2000). Time management holds a strong position in all spheres of undertaking.

2.6. Types of Procrastination

There are several types of procrastination, defined and explained in the relevant literature such as Academic Procrastination, Life Routine Procrastination, and Decision making Procrastination etc.

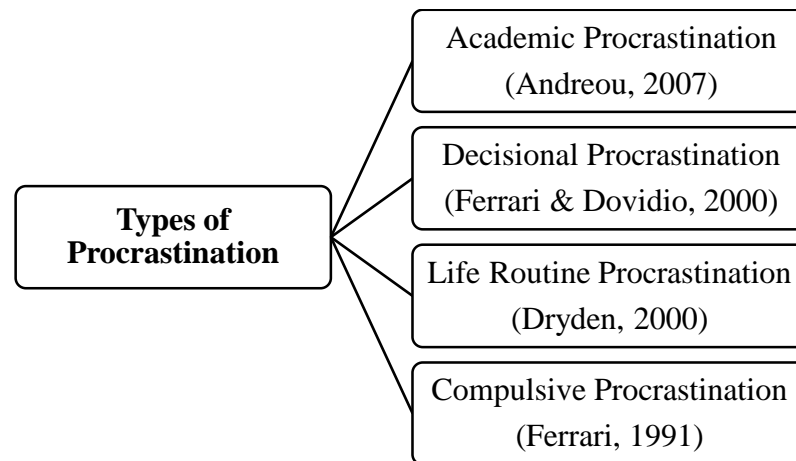


Figure 2.2: Types of Procrastination

2.6.1 Academic Procrastination

Academic procrastination can be defined in dynamic ways like Procrastination is a tendency to avoid duties and responsibilities which are compulsory (Andreou, 2007; Steel, 2007). Due to postponement of the duties and responsibilities, one can be afflicted with dejection and desolation (Solomon, Rothblum & Murakami, 1986), a

tactic for an individual to protect self-respect (Lee 2005), a reflection of deferment into school life (Rosario et al. 2009).

Academic procrastination is related to Academics, means relevant to the academic activities, educational experiences, and career of a student. As the term procrastination is defined as the postponement of some important task, so academic procrastination is related to the deferment, delay, postponement and suspension of academic tasks and activities till the last moment to come. For instance delaying the exam preparation related activities till the last night of exam comes, not starting work to complete an assignment till the last date of submission or deadline for submission of the assignment comes and to hold-up the academic activities due to un-necessary reasons (Milgram, Mey-Tal & Levinson, 1998). Academic Procrastination or deferment is an action to postpone the academic activities due to many reasons (Gafni & Geri, 2010). Ariely and Wertenbroch (2002) said that delay in work or procrastination usually deals in academic process where students have to achieve all their tasks within time facing all the other activities of the department.

Under the influence of procrastination a procrastinator puts back even the indispensable tasks due to irrational reasons. Lack of proper stimulation may be the reason behind the sluggishness of a student. That is why he always chases bootless tasks and wastes his time (Lay, 1986; Ferarri, 1998). Academic procrastination is also known as the reflection of the daily postponed activities of school, needless delay in schools' duties and responsibilities like assignments or other academic work, voluntarily delaying or completing the work in last moments (Haycock, McCarthy, & Skay, 1998 cited by Deniz & Aydogen, 2009).

Senecal, Koestner, and Vallerand (1995) as well as Schouwenburg (1992) considered academic procrastination to be situation specific; it may result from a fear

of failure and involves an intentional delay in completing tasks related to the academics. Schouwenburg (1995) defined procrastination as a tendency to delay important tasks to achieve a specific goal. Similarly, other researchers (Solomon & Rothblum, 1984; Milgram, Batori, & Mowrer, 1993) considered it as an unpleasant task or poor time management (Milgram, Marshevsky, & Sadeh, 1995). Ferrari (2001) epitomized procrastination as an avoidance strategy as well as a way to escape self-awareness, especially for those having “diffuse-avoidant identity”. Moreover, Lay (1986) described procrastination as a senseless tendency to suspend the tasks that should be completed.

2.6.2 Decisional Procrastination

Ferrari and Dovidio (2000) explained that decisional procrastination manifests itself as having difficulty in the selection of an appropriate option among multiple solutions and options. Janis and Mann (1977) have explained that when an individual feels that available alternative option/s are risky or unsatisfactory and it is hard to choose any better or suitable option than he/she get an escape from decision making process.

2.6.3 Life Routine Procrastination

Lay (1986) identified Life Routine Procrastination which deals with the postponement of planning and completion of day-to-day tasks and activities. For some people delaying a task which is necessary to be done can become a constant way of attitude that enters in daily routine life (Dryden, 2000). In addition to this interpretation, procrastination refers to delaying the assigned task willingly and knowing that the delay may have negative results. Such behaviour causes the delay in completing or beginning a commitment, up to the end or up to a deadline. Some

people faced difficulties when they began their task of self-examination (Dryden, 2000).

2.6.4 Compulsive Procrastination

Compulsive procrastination relates to the planning of the tasks and also linked with the practical performance of the tasks and activities. This type of procrastination is associated with the decisions to be taken and also linked with the tasks to be performed. These types of Procrastination can be categorized into two groups:

1. First category classifies the phenomenon of procrastination as a personality trait which mainly deals with the decision making procrastination and daily routine life procrastination.
2. Second category categorizes the widely spread phenomenon of procrastination as conditional. Academic Procrastination is grouped under this category (Ferrari, 1991).

2.7. Comparison between Procrastinators and Non-Procrastinators

While studying the complex phenomenon of academic procrastination, an interesting comparison between procrastinators and non-procrastinators was found, Identifying procrastinator's behaviour towards self-handicapping, laziness, wastage of time, poor academic performance and high level of stress. Contrary to procrastinator's behaviour, non-procrastinator's behaviour leads the individual towards better academic performance, higher level of motivation and well organised career (Ferrari, 2001; Kanus, 2000).

2.8. Types of Procrastinators

Kanus (2000) argued that all the delayed activities cannot be declared as awful, sometimes delay ensues some productive outputs such as planning for the coming up activities, and collecting some essential preparatory data or information

necessary for the successful completion of the planned activity. Most of the procrastinators state that the quality of their work enhances when they get closer to the deadlines and work under pressure. Tensed situation equips them with elevated ideas which provide the better quality.

Chu and Choi (2005) also concluded that not all kinds of procrastination behaviour have negative connotation. They have identified two types of procrastinators:

1. Passive Procrastinators
2. Active Procrastinators

2.8.1 Passive Procrastinators

The term passive depicts as the role of representative. Here, passive procrastinators refer the external factors to dictate the situation (Benware & Deci, 1984). Passive procrastinators may be called as traditional procrastinators and their behaviour is submissive. Passive procrastinators have associations with external locus of control (Trice & Milton, 1987; Brownlow & Reasinger, 2000) indicating an inclination of not taking responsibilities and blame external circumstances. They also don't have enough abilities to plan their future and manage the time (Ferrari & Diaz-Morales, 2007). They are different from active procrastinators on the basis of all cognitive, behavioural and emotional dimensions.

When a passive procrastinator gets closer to a deadline he becomes unenthusiastic. His apathetic disposition can be noticed evidently. Subjugated by pessimism he acts like a sluggard. Eventually loses all his abilities to control the situation and fails to achieve his goal (Ferrari, Parker & Ware, 1992). All the things like pessimistic approach, mental stress, guilt, inactivity affect the progress of learner. His skills and abilities are regarded with suspicion even by him and his failure

becomes absolutely inevitable (Steel, Brothen & Wanbach, 2001). Passive procrastinators do not attempt to postpone the scheduled activities with intention but in fact they have lack of confidence in their abilities and unable to make quick and speedy decisions and finally their ability to keep on track suffers and they fail to follow the time frame set for the achievement of their objectives (Chu & Choi, 2005). Passive procrastinators are more prone to fail to complete the task. Submissive behaviour of procrastinators is due to the lack of pronouncement and they fail to complete their tasks lastly.

2.8.2 Active Procrastinators

Some scholars claim that academic procrastination does not have harmful impact on academic achievement of the students. To deal with these conflicts, scholars have defined an adaptive form of procrastination that is active procrastinators (Choi & Moran, 2009; Chu & Choi, 2005; Schraw et al, 2007). The active stands for the possession and pressure through which one acts (Frischkorn, 1999). Contrary to passive procrastinators the active procrastinators are more enthusiastic and efficient. They carry out plan with scrupulous attention. Tension caused by adverse or demanding circumstance cannot demoralize them. The situation like alarming deadline plays the role of stimulant for them. Moreover, in such situations they take the activity as a challenge and emerge in a devastating way. They can grab every opportunity due to their importunate behaviour.

Choi and Moran (2009), defined active procrastination as advantageous form of procrastination. They perceive the active procrastinators have conspicuous behavioural characteristics along with multidimensional personalities. Active procrastination is a versatile, complex phenomenon having cognitive, affective psychomotor behavioural components in its proceedings. It is linked with cognitive

aspects of a personality. Intentional delay caused by the procrastination of active procrastinators puts them under pressure and they utilize that pressure positively. They make the list of preferences cautiously without being nervous and complete the preferred tasks in time (Chu & Choi, 2005). Furthermore, they declared that both passive and active procrastinators procrastinate with the same tendency but there is similarity between active procrastinators and non procrastinators in the sense of control and effective use of time, coping with strategies for minimizing procrastination tendency and academic achievements.

2.8.3 Trait Procrastinators

This trichotomy of procrastination had first projected by Ferrari (1992). Three form of trait procrastination are as follows:

2.8.3.1 Arousal

It encompasses the conduct of those procrastinators who take the initiatives standing beside the imminent jeopardy. Under this behavior tasks are completed only in last moments. These procrastinators have sensation seeking behavior (Ferrari, 1992). To achieve goal under hostile and threatening conditions predicts the engagement in an effort to reach a most favorable level of Arousal. It is assumed that arousal procrastinators may be useful for academic stress. Chu and Choi (2005), also reflected in their study that some types of procrastinators could be useful for some people and their academic progress. Researchers have tried to find out the causation of this trait. Arousal procrastination has been linked to self-efficacy (Ferrari et al., 1992), perfectionism & sensation-seeking (Ferrari, 1992).

2.8.3.2 Avoidant

This trait encircles that behavior due to which a person avoids the task in extremely unpleasant way. Under the spell of this conduct an individual tries to

protect his self-esteem by mumbled excuses because to swallow the pride is always embarrassing. The causation factors related to the avoidant procrastination are impulsivity, depression (McCown, Johnson & Petzel, 1989) and self-handicapping (e.g. Ferrari, 1992).

2.8.3.3 Decisional

It is related to cognitive components caused by inability through which an individual tries to take or make minor decisions in timely manner. The causation related to the decisional procrastination are; locus of control, unfriendliness, opposition (Beswick & Mann, 1994), forgetfulness and self-esteem (Effert & Ferrari, 1989).

2.8.4 Implosive Procrastinators

Procrastinators who fail to pick up cues and do not understand the situation; they have no ability to achieve targeted goals because of lack of energy or organizational abilities (Ferrari & Emmons, 1994).

2.8.5 Perfectionist Procrastinators

These procrastinators pretend to be willing to undertake the assigned task but avoid being involved in any activity. The motivation behinds such procrastination are misapprehension, misconception, delusion, phobia and over consciousness which lead to avoidant. Secondly there is

- i. Miscalculation of time for performing a task
- ii. Under-estimation of time required to complete tasks.
- iii. Over-estimation of time for performing future tasks.
- iv. Irrelevance: work is sub-optimal when one is not in the mood to do it.

(Norman, 2000).

2.9. Characteristics of Students

Valadez (2006) has mentioned three categories of students according to their characteristics. These categories are given below:

2.9.1 Unconcerned Students

Such students long for uncomplicated and effortless tasks to avoid mental exertion. They show the indifference to studies and their only aim is to get through the exams by hook or by crook. Diligence finds little credence among such students. They believe in studying in last minutes.

2.9.2 Target-Oriented Students

Such type of students make the problematic tasks focus of their attention and get excellent grades. First they inculcate a specific attitude in them to come into sight as scrupulous persons. Then they complete their task attentively observing all formalities and earn the outstanding grades frequently with low level of procrastination.

2.9.3 Passionate Students

Passionate learners study so ardently to quench their thirst for knowledge that they can surpass even a bookaholic. They juxtapose the new ideas with old ones and always hanker after the discussions to reach a decision or exchange ideas. To attain the heights of insight has always been their ambition. They have no space for daily procrastination because of which they complete their task easily.

2.10. Academic Procrastination

Studies conducted in past preeminently show that among the other procrastinations the academic procrastination is the most significant and common phenomenon. A student has multiple tasks that must be accomplished before the deadline. Academic procrastination is very common among students whether they are at school or at university level (Harriott & Ferrari, 1996). Academic procrastination is

very influential as it depicts the personality of a student and has its effects in long term as student suffers during their academic tenure and their achievements failure can be linked to this (Beswick, Rothblum, & Mann, 1988; Tice & Baumeister, 1997).

Most of the researchers were keen to find the correlation between the academic procrastination and academic achievement. Findings of a number of researches showed that academic procrastination is negatively associated with academic achievement (Beswick et al., 1988; Owens & Newbegin, 1997; Steel, 2007; Klassen, Krawchuk & Rajani, 2008). Academic procrastination is inclination of a student to postpone his academic task consciously, such as homework, assignment and projects even though he/she knows its destructive results (Senecal et al. 1995; Howell & Watson, 2007; Steel, 2007).

Through different studies on procrastination different reasons are identified which cause the phenomenon of procrastination. Due to these reasons students fall victim to reluctance, delay and failure. Students become hostage to procrastination in so many ways. They seem distracted to give attention to their homework or exams. Procrastination leads a student to unfavorable conditions which have deleterious effects. It deprives a student of enthusiasm and energy by making him a sluggard. Among the prevailing values of education like autonomy, independency and accomplishment the procrastination being an illogical, irrational and lethargic act gets the hostile welcome (Knaus, 1973 as cited in Ferrari, 2001).

Onewuebuze, (2000) has discussed that the occurrence of academic procrastination has a gradual increase or an ongoing up shift from the junior level of education to the senior grades and also from undergraduate to graduate students. In most of the cases students may have the strong will to complete that task within the

required time frame but fail to concentrate and suffer with low level of motivation (Ferrari, 1998).

Academic procrastination is very common among almost every type of students and everywhere in world. Most of the students opt procrastination unintentionally and find safe heaven by procrastinating the academic tasks. Furthermore, some students procrastinate with the fear of being caught and punished as they feel no satisfaction by procrastinating the due activities but they still go for it to avoid severe conditions like punishment fine etc.

Academic procrastination can also be characterized as the propensity of deferring learning activities and also regarded as an upshot of post-modern ethics that are high-flying in post-industrialized societies. At that time, students endeavored to semi-structured and planned routines for academic tasks (Dietz, Hofer & Fries, 2007). Academic Procrastination is a time theft for the students. Procrastination among student comes under the heading of academic procrastination which can be defined as not performing tasks on time or using delaying tactics to postpone it. College students mostly suffer with it when they get failed to complete their educational (academic) tasks on time (Balkis & Duru, 2009). Sirois (2007) declared that as the result of delaying academic tasks in general, students provide poor grades and suffer with a number of psychological problems and health issues (like stress, anxiety etc.). Pychyl, Lee, Thibodeau and Blunt (2000) conducted a survey on the topic of Academic Procrastination and Students' Achievement and the students (of their sample) reported that over one third of their routine activities suffered because of procrastination and mostly they were found engaged in playing, watching T.V. or found sleeping. Surprisingly, Kachgal et al. (2001) reported a clear rise in that percentage. Some common habits which are there under the umbrella of academic

procrastination and of worse kind are like poor study habit, fear of examination, fear of failure, not complying with the provided deadlines, fear of success consequences, lack of decision making, cheating and plagiarism (Roig and De Tommaso, 1995), and fear of disrespect in social circle (Clark & Hill, 1994).

It is also explored that most of the times students adopt procrastination as strategy in order to avoid or manipulate with their responsibilities (Sokolowaska & Zusho, 2006). Solomon and Rothblum (1984) considered academic procrastination as a process in which student don't prepare for exams and different Academic Administrative affairs and delay it without any solid reason.

Chow (2011) revealed that there is close relationship between financial pressure and procrastination because rise in price puts extra pressure on them and they find it difficult to meet educational expenditures. He further explored that students with low self-esteem are more likely to procrastinate. Stober and Joormann (2001) claimed that worry and procrastination have strong relationship. Feeling of devaluing oneself and lower self esteem make oneself to avoid tasks and may result in failure. Students who procrastinate their academic tasks obtain low grades than those who don't procrastinate (Tice & Baumeister, 1997; Popoola, 2005). Tuckman, Abry and Smith (2002) also associated procrastination with poor academic performance.

Procrastinating in the academic tasks and activities, students bear dissatisfactory academic performance, poor grades and in extreme cases failure or deferment/ not opting particular courses (Semb, Glick & Spencer, 1979; Tice & Baumeister, 1997; Howell, Watson, Powell, & Buro, 2006; Klassen et al., 2008).

Procrastination is much more than mismanagement of time and lack of study skills. Negative thinking, avoidance of tasks and only doing paper planning can cause

procrastination among individuals (Solomon & Rothblum, 1984). Moreover they claimed almost half of students procrastinate consistently. Beswick et al. (1986) also concluded that procrastination can be related with low self-esteem as well as nervousness.

Academic procrastination is the problem in which student delays his/her tasks which should be accomplished. It is a common flaw among many students and reason behind it is the lack of self-confidence (Firouzeh & Jalil, 2011).

2.10.1 Academic Procrastination and Gender

Ferrari and Beck (1998) revealed that procrastination among students is regardless of gender, race and caste. Results of a study conducted by Akinsola and Tella (2007) found significant correlation between academic procrastination and students' academic achievement in the subject of Mathematics and has concluded that the significant dissimilarities also exist in the levels of procrastination and Achievement level of the students in the subject of Mathematics. While examining this phenomenon among the students, no significant difference was found on the basis of gender and similarly no significant difference was found at different grade levels (Zhang, Chen & Huang, 2009). Yong (2010) summarized that female students had less procrastinate than male students, younger students less procrastinate than elder students and engineering students less procrastinate than business students.

2.10.2 Academic Procrastination: Secondary Vs. Higher Education

There is a difference between high school and university level. In high school study turns around the explanation of everything whereas in university level students learn through information which is carried to them according to lectures and in broader perspective (Miqdadi, ALMomani, Masharqa & Elmousel, 2014). Exclusively, students who are studying at higher level need to manage their time more

appropriately for effective learning. Students are mostly unaware of particular action at desired level, and are fully aware of about their time constraints (Gardiner & Kearns, 2011). Seniors students are found much involved in procrastination than the beginners (Onwuegbuzie, 2004).

High Achievers procrastinate once in a blue moon and perform well and those who procrastinate perform unsatisfactory. This research was irrespective of the effects of gender. Poor academic achievement is associated with procrastination (Tuckman, et al., 2000; Popoola, 2005).

Procrastination is an observable fact among students predominantly for those students who are at higher level. Through studies it has also been uncovered that procrastination causes great and irreparable damage to academic achievement of the students (Akinsola & Tella, 2007).

2.10.3 Academic Procrastination and Students Grades

Academic procrastination can be considered as anti- motivational term because individuals go towards the opposite direction of motivation and do not step forward for finishing the academic task (Wolters, 2003). Mostly high school and college students exhibit such kind of behaviours and most commonly it can be seen in writing weekly assignment, research projects and studying for examination (Solomon & Rothblum, 1984). For example 80%-95% college students engage themselves in procrastination (Ellis & Knaus, 1977; Schouwenburg, 1995). It results in poor academic performance and psychological problem such as low grades, depression and anxiety (Semb et al. 1979; Solomon & Rothblum, 1984).

2.10.4 Academic Procrastination Behaviour and Academic Achievements

Researchers and academic scholars were attracted find out the relationship between the phenomenon of Academic Procrastination and Academic Achievements

and a number of researches were conducted about it and the relevant literature was studied and analysed. Procrastination is wastage of time as it is viewed as self-handicapping behaviour that leads students towards increased stress and poor performance in academics (Solomon & Rothblum, 1984; Tice & Baumeister, 1997; Wang & Englander, 2010; Ozer, 2011). More than 50% of college students procrastinate consistently. In fact they are habitual of delaying their academic tasks (Day, Mensink, & O'Sullivan, 2000; Ferrari, O'Callaghan, & Newbegin, 2005).

Rothblum, Solomon and Mukarami (1986) found a significant negative correlation between academic procrastination and Grade Point Average (GPA). Furthermore also compared the performance of academic procrastinators and non-procrastinators and drew the conclusion that procrastinator students achieved lower grade point average as compared to non-procrastinator students. Cakici (2003) found the relationship between academic procrastination behaviour and students academic achievements and explored a significant negative relationship between the both variables. Another research to find out the relationship between academic procrastination behaviour and academic achievements has been conducted by Beswick et al. in 1988.

Milgram et al. (1995) conducted a research with the same topic to find out the impact of gender on academic procrastination behaviour and presented the findings that the females were less procrastinator than the males. In another study with the same theme, Kachagal, Hansen and Nutter (2001) concluded that there is no significant difference between the academic procrastination Behaviours of male and female students.

2.10.5 Active Procrastinators and Academic Achievement

Active procrastinators have high level of self-efficacy and also have the

tendency to acquire positive outcomes. Active procrastinators may have supple time schedule and can use their time for purposive tasks (Chu & Choi, 2005). Active and non-procrastinators usually have same characteristics and mostly give positive results. Active procrastinators seem to have more control on their time management and try to solve problems spontaneously. Active procrastinators can minimize the level of their stress, depression and can encourage themselves to make forceful effort for Grade Point Average (GPA) (Bond & Feather, 1998; Macan, 1994; Macan, Shahani, Dipboye, & Phillips, 1990).

As discussed earlier, active procrastinators compared to passive procrastinators are found more capable of dealing with problems while completing academic task. Due to extrinsic motivation, active procrastinators try to mitigate the stress and utilize the time more effectively. Best utilization of time guarantees the completion of the task. Because of task-oriented coping strategies, non procrastinators also face the same successfulness in the completion of their tasks. So the active and non procrastinators have the same academic performance and self satisfaction (Macan et al., 1990; Tice & Baumeister, 1997). It can be said that active and non procrastinators are not different in terms of outcome variables; life satisfaction, depression, stress and Grade Point Average (GPA).

2.10.6 Passive Procrastinators and Academic Achievement

Passive procrastinators perform worse under pressure and main difference emerges through the idea of flow that how much level of attention and efficiency an individual shows under ideal conditions (Crikszentmihalyi, 1990; Brinthaupt & Shin, 2001).

The individuals who passively procrastinate have low level of flow than active procrastinators (Brinthaupt & Shin, 2001; Mortensen & Miller, 2012). The connection

between passive procrastinators and academic achievement is negative. Passive procrastinators have low GPAs than active procrastinators.

2.10.7 Procrastination Behaviour in Individual and Collaborative Tasks

Procrastination in individual and collaborative tasks is one of the attention-grabbing areas. Gafni and Geri (2010) explored the area in terms of effective time management and concluded that in the case of a voluntary assignment, students are likely to carry out their individual tasks on time and tend to delay the collaborative part of the assignment and leave the compulsory assignments incomplete up to the semester end.

They further elaborated that the vigorous effects regarding tendency of procrastination on behaviour of students cannot be ignored. They proclaim that individually assigned tasks are fulfilled on time rather than any other collective task. They declare that individuals never cooperate in completion of any task but they provide moral support by observing them only. A major concern which affects the students in completing their task is disruption. Generally unsuccessful students describe that interruption is the main reason of incompleteness of their work on time (Miqdadi et al., 2014).

2.11. Psychological Factors related to Procrastination

Van (2002) described that like other factors, psychological factor also plays its role in academic procrastination. Psychological effects like losing concentration, diversion of attention and half-witted thoughts about avoiding task from time to time. Thoughts about delaying or incompleteness of the task cause the internal negative outcomes such as sorrow, disappointment, shame etc.

2.11.1 Conscientiousness and Impulsiveness

Psychologically the conscientiousness and high impulsiveness both look basic

motives of procrastination (Steel, 2007). But comparatively impulsivity has a stronger impact on procrastination (Gustavson et al., 2014). Under the light of cognition a genetic overlap has been noticed between two elements because procrastination and impulsivity both contribute to a general cognitive and goal management ability. Moreover evolutionarily it seems that procrastination has evolved from impulsivity. However to justify the function of impulsivity regarding procrastination, it has to be acquainted with its composition and should treat it as multi-dimensional construct (Whiteside & Lynam, 2001). The impulsivity is represented by Urgency-Premeditation-Perseverance-Sensation (UPPS) seeking.

- Urgency refers to a tendency of experiencing sturdy reactions under negative effects.
- Premeditation refers to thinking of results before taking any action.
- Perseverance refers to dedication under any condition.
- Sensation refers to an ability to be enthusiastic.

Procrastination is considered to be evolved from impulsivity that is represented by Urgency-Premeditation-Perseverance-Sensation (UPPS). When a person resorts to voluntary or intentional delay, sometimes he also experiences premediation, preservance and sensation too (Dryden, 2000). Premeditation embellishes him with wit and sanity and he can perform in better way after deliberation. Then Preservance equips him with dedication and adhesion. Sensation also encircles the optimism (Dryden, 2000). Moreover, the decrease in well-being, financial difficulties, lower performance and poor mental health can also frustrate one's ambition (Tice & Baumeister, 1997; O'Donoghue & Rabin, 1999; Sirios, 2007; Stead et al. 2010). The first three traits of impulsivity come under cognitive/self control mechanism, whereas sensation has its relation with motivational disposition

(Bechara & Vander, 2005).

Studies showed that urgency is a mood based rash action (Cyder & Smith, 2008) and urgency without premeditation remains deprived of preservice and lack of preservice leads to derailment and capriciousness (Schouwenburg, 2002). If there is no premeditation then there will be no potential to delay, whereas urgency showed inclination towards activities having no deliberation (Sirois & Pychyl, 2013). Voluntary delay is needed to manage the mood of procrastination (Stainton, Lay & Flett, 2000).

2.11.2 Rumination as a Medium between Procrastination and Negative

Thoughts

There is also a specific form of procrastination termed as rumination that acts as a medium between procrastination and negative thoughts, the frequent thoughts about self (e.g. what is wrong with me). It can cause poor cognitive emotion regulation strategies in procrastination which means procrastination encircles the self esteem because in this process protective strategy is muffled in self-esteem (Steel, 2007). Procrastination is considered to be evolved from impulsivity that is represented by Urgency-Premeditation-Perseverance-Sensation (UPPS). When a person resorts to voluntary or intentional delay, sometimes he also experienced Premeditation, Perseverance and Sensation too (Dryden, 2000).

2.12. Causes of Academic Procrastination

People tend to delay their work and assignments. This conscious delay is not less than a catastrophe because by delaying a course of action one may suffer from a number of psychological problems (Klingsieck, 2013). Researches have demonstrated that personality traits manipulate the health of a person via direct and indirect pathways (Friedman, 2000; Segerstrom, 2000) and procrastination as a behavioural

disposition (Jansen & Container, 1999; Ferrari & Tice, 2000; Ferrari, 2001) is linked with the number of negative connotations as well as the health issues of the person/students such as anxiety (Ferrari, 1991; Haycock et al. 1998; Sirois, Gordon & Pychyl, 2002), Depression (Senecal et al., 1995; Martin, Flett, Hewitt, Krames, & Szanto, 1996; Sirois et al., 2002) and the highest level of stress (Tice & Baumeister, 1997; Lacey et. al., 2000; Segerstrom, 2000; Sirois et al., 2002). Finally, Tice and Baumeister (1997) reported that the anxiety, depression and stress put negative effect on the physical health (illness) and academic performance of the students (lower grades). Moreover, bad behaviour can be the cause of delay in treatment, a lack of compliance and exacerbation of distress, and above all it may cause physical illness (Sirios, 2004).

Numerous adults experience procrastination on regular basis (Jansen & Container, 1999), particularly on a task or assignment which ought to be completed within a specific time period (Oweini & Haraty, 2005).

Researchers recognized different types of academic procrastination such as lack of consciousness and nervousness procrastination (Emmons 1995). Noran (2000) identified academic procrastinators make four cognitive distortions which boost the thinking of avoidance of task which were irony of time, erroneous judgment of time, lack of motivation, emotional strength to complete specific task successfully. The research revealed certain causes of procrastination as being gathered from different studies such as mismanagement of time, lack of realization, inability to complete tasks, perfect thinking.

Tucuman (1990) has identified causes of procrastination associated with estimating oneself on doing task and external pressure while performing tasks. Flet, Blanckstein and Martin (1995) linked academic procrastination with lack of

resources, low level of self esteem, low level of efficacy and high level of self consciousness and pressure. Capability of a person for performing a task guides towards the successful completion of the task, whereas incapability leads towards the Academic Procrastination (Milgram, Marshevsky & Sedeh, 1995).

Gafni and Geri (2010) mentioned that procrastinators give new deadlines to satisfy not only themselves but also to the other people concerned to their process. As a result completion or achievement of the task is delayed or never completed. While studying the causes of academic procrastination, a wide range of studies links academic procrastination to factors of personal behaviour including poor time management, perfectionism, wastefulness, disorganization, lack of motivation and external locus of control (Ackerman & Gross, 2005; Phillips, Jory & Mogford, 2007).

Steel (2007) suggested some factors like aversion to the task, impulsiveness, depression or mood sadness, worry about failure, environmental factors, rebellion against control, time management issues, and enjoy working under pressure. According to Steele's survey, these are the factors that have impact on individual's response and to avoid the completion of the task in specific time.

2.12.1 Academic Procrastination and Evaluation Anxiety

Academic stress and test anxiety considered as negatively correlated with the undergraduates expectations of not performing better academically. It is not necessary or true that those students who are low achievers or show poor performance in examination, are less intelligent. Maybe anxiety is responsible for their poor performance. It is concluded by Onwuegbuzie and Wilson (2003) that almost 80 % of graduate level students perform poor in examination because of evaluation stress and anxiety.

Anxiety or Stress is a process in which a situation becomes critical and creates

worries for one's organ capability. The students who have high level of anxiety, come under the category of extreme procrastinators. These individuals are not persistent in their learning and mostly avoid difficult tasks (Solomon & Rothblum, 1984; Lay, 1994; Clark & Hill, 1994). High anxious students need more endeavour/efforts in contrast with low anxious students because these students seem ineffective learners who do not know how to use cognitive strategies for achieving their academic goals. Collectively, high level of test anxiety may lead them towards low grades and poor performance (Pintrich & De Groot, 1990). The characteristics of high level test anxiety relate with procrastinators. Noran (2000) further highlighted that procrastinators constantly worry about their forthcoming tests and spends more time in projecting and planning rather than completing them.

2.12.2 Academic Procrastination and Self-Efficacy

There is a close connection between self-efficacy and procrastination. Self-efficacy is a self-regulating learning. It has positive effects on the expectations of undergraduates. Bandhura (1986) was the pioneer of connection between Self-Efficacy and Academic Procrastination. In later work Bandura (1997) mentioned Self-efficacy represents an individual having faith in himself to do work successfully. Self-efficacy is also important in achieving a behavioural change (Chu & Choi 2005; Tsai and Tsai, 2010). Self-efficacy refers to the belief about capabilities and potentialities through which one can reliably perform the task. Ferrari and Emmon (1995) have found that procrastinators have low level of self-efficacy because they don't have belief in their abilities to perform a task.

An individual with high self efficacy will be eager to learn more and more and will perform tasks more efficiently as compared to other students and will also formulate effective strategies to face problems (Eggen & Kauchak, 1999). When a

belief of student is to achieve a target decreases than chances of procrastination increases (Odaci, 2011; Steel, 2007). Noran (2000) pointed out that over confidence, full assurance, full cognizance and complete perfection are the reasons of fear of success and failure and ultimately result in avoidance of tasks and students suffering with them have low level of self confidence and lack of self efficacy.

Academic procrastination includes two motivational variables; self-efficacy and self-regulating learning. Individuals who have self-efficacy for self-regulating learning set their goals and know how this learning will go forward for achieving these goals and apply suitable techniques for achieving these goals (Zimmerman, Bandura & Pons, 1992). The individuals who have high level of self-efficacy for doing self-regulating learning are expected to do well in the academic performance while on the other side, the individuals who have low level of self-efficacy for self-regulating learning are expected to not showing good performance in their academics (Ang, Yeo, Huan & Chang, 2008). This indicates that the individuals who have high level of self-efficacy, they set their goals at high level (Bandura & Wood, 1989; Locke & Latham, 1990). So, it is an empirical reference that there is a negative correlation between self-efficacy for self-regulating learning and procrastination.

The individuals who realize that they are capable of doing self-regulating learning would come in procrastination at lesser level than other students. Wolters (2003) suitably summarized three reasons of those students who have self-efficacy and self-regulating learning and effectively use their knowledge. Firstly, these individuals have such strategies related to cognition which enhance their learning with using these strategies. Secondly, these individuals control their behaviour because they possess meta-cognitive skills. Thirdly, for mastering their desired goals, these individuals have motivational beliefs and attitudes towards academics (Ang et al.,

2008).

2.12.3 Academic Procrastination and Self-Critical Behaviour

Academic Procrastination is an exposed difficulty for the learners (Onwuegbuzie & Jiao, 2000; Collins & Veal, 2004; Jiao, DaRos Voseles, Collins, & Onwuegbuzie, 2011). A procrastinator always feels that what others will think because he/she thinks that people are expecting too much from him/her. Damion and Shawn (2013) identified the attributes of academic procrastination, avoidance response or fear negative connotations stems from both teachers and learners. Act of procrastination towards negative attitude of students may increase stress. Akinsola and Tella, (2003) established that academic procrastination is a general phenomenon particularly at graduate level.

2.12.4 Academic Procrastination and Socialization

One of the major causes of procrastination is the inability to resolve the conflict between social responsibilities and Academic Tasks (Senecal, Julien, & Guay, 2003). This refers to conflict resolution. Geri and Gafni (2007) said that students mostly seem busy in many other tasks and have no time to take part intentionally in activities of learning process.

Thakkar (2009) stated that modern technology is cause of procrastination like chatting to friends on phone, reading messages again and again, love to listen music, watching news, playing games and keeping busy on face book. Miqdadi, et al. (2014) identified that wastage of time on social media is equally an important factor of procrastination. On the other hand use of technology like mobile phones, TV, music and computer constitute the growing reasons of procrastination in the behaviour of students. Beside the reasons of delay in academic assignments there are many students who get low percentage even though they have no interest in technology or

other such gadgets. The reason behind may be low percentage is lack of their concentration.

2.12.5 Academic Procrastination and Perfectionism

According to Burns (1980) perfectionism is a one-dimensional construct. Perfectionism is explained as setting goals that are out of range (Frost, Marten, Lahart & Rosenblate, 1990). Flett and Hewitt (2002) defined perfectionism as struggling for flawlessness as well as setting of excessively high standards for performance accompanied by tendencies for excessively critical evaluations of one's behaviour.

Usually unrealistic and high level standard of expectation lead towards procrastinating behaviour. Every procrastinator has irrational beliefs of perfectionism in his/her task (Beswick et al., 1988; Flett, Hewitt, Blankstein & Koledin, 1991). They consider that everything must go completely right (Burka & Yuen, 1983). When individuals try to do everything perfectly, this behaviour can put pressure on them and force them to procrastinate (Burns, 1989). The craving to expect everything completely perfect may create problems related to self-efficacy and self-esteem.

Many studies indicate that perfectionism consists of multidimensional factors which include social and emotional components (Hewitt & Flett, 1989; Frost, Marten, Lahart & Rosenblate, 1990). Perfectionism is a three dimensional phenomena: self-oriented perfectionism, other-oriented perfectionism and social-oriented perfectionism. Self-oriented perfectionism occurs when a student expects high standards beliefs about self for the attainment of perfection. Self-oriented perfectionism has less effect on procrastination. Other oriented perfectionism is a tendency to assume high standards for other people. Other-oriented perfectionism has no effect on procrastination. Socially prescribed perfectionism is associated with expectations of other people about an individual to perform best. It may be family and

friends. It allows society to place high standards on them. The study argues that the socially prescribed perfectionism has strong effect on academic procrastination because students feel indirect pressure from their fellows and teachers to produce good ideas about their task at very first attempt. Socially prescribed perfectionism impels students to delay their work (Onwuegbuzie, 2000).

Perfectionism increases the level of disappointment and nuisance because it is difficult to perform best earlier such type of expectations increase the number of procrastination (Burka & Yuen, 1983). Socially prescribed perfectionism has high level of fear of failure (Flett, Blankstein, Hewitt & Koledin, 1991).

Relationship between perfectionism and procrastination has been suggested by many researchers. For example, Burka and Yuen (1983) noticed that the intellectual features linked with perfectionism are determined by procrastinators, including the tendency to advocate the importance of constant success. Increased endorsement of senseless assumptions has been related to both procrastination and perfectionism (Beswick et al., 1988; Flett, et al., 1991). Likewise, a link based on the fact that both perfectionism and procrastination associated with excessive fear of failure would also be observed (Flett, Hewitt, Blankstein, & Mosher, 1995; Solomon & Rothblum, 1984). Despite of that some association exists. The available research recommends that the relationship between perfectionism and procrastination is more confused than past theorists would conclude. This confusion is due to latest findings which reveal that the perfectionism construct has many dimensions and has both social and personal components (Hewitt & Flett, 1989; Frost et al., 1990).

For the time being, current research on procrastination and perfectionism is doubtful. The deviation is due to the fact that some researchers have studied both procrastination and perfectionism from only one dimensional aspect (Solomon &

Rothblum, 1984; Ferrari, 1992), while other reviewers have analyzed perfectionism and procrastination from a multidimensional context. Significant relationship has been observed between procrastination and perfectionism by the research done by Solomon and Rothblum (1984).

Frost et al. (1990) described the possible significance of a multidimensional approach in his study. Frost along with associates introduced multidimensional perfectionism scale to 106 female students of college and also measured multidimensional academic procrastination. However, the results showed no significant relationship between overall frequency of procrastination and total perfectionism scores. It was observed from the results that a significant negative correlation exists between procrastination frequency and high personal standards. Overall, these findings indicate that procrastination may be a response to the expectations as well as punishing manner of parents.

2.12.6 Academic Procrastination and Fear of Failure/Fear of Success

Piedmont (2000) defined Fear of success as "the anticipation held by several women that success in certain attainment-associated situations will be followed by harmful consequences....achievement is equated with a failure of femaleness that will become the reason of society rejection" (p. 14).

Fear of Failure viewed as natural inclination to stay away from failure in accomplishment settings" (Elliott & Thrash, 2004). One of the earliest educational researchers who conducted the study on fear of failure was Beery. According to Beery (1975), the people who have fear of failure may have a number of assumptions which leads them towards a terrifying menace. These assumptions may include the level of ability and worth of a person's performance.

Furthermore, the study elaborated that if a person states his ambitions below

the assured ability level then this person will never face failure. Any type of his obtained score will be success for himself. They can study little and only focus on some part of whole content. Usually they base themselves on their luck and assume that exam will cover only these things which they have studied. At the very last day they feel themselves victim of failure, under hallucination they try to cover all content in one sitting. With respect to Beery, some other researchers argued that students may have lack of effort rather than abilities (Thomson, 1999; Cox, Clara & Enns, 2009).

Many studies have investigated that there is a strong association between fear of failure and perfectionism (Ferrari, 2001). Fear of failure is important component of procrastination (Burns et al., 2000; Rothblum et al. 1986; Solomon & Rothblum, 1984).

These students face lack of self-confidence and escape themselves from humiliation and embarrassment, the find excuses to underperformance (Beery, 1975). Beery argues that fear of failure in some students may lead them towards perfectionist. But in some students, this type of behaviour decays their academic success (Rothblum, 1990).

2.12.7 Academic Procrastination and Aversiveness of the Task and Low

Frustration Tolerance

Task aversion is typically defined as un-enjoyable and unpleasant feeling of an individual who has to perform the task (Solomon & Rothblum, 1984; Lay, 1990; Milgram et al., 1995). Task aversion may include characteristics of task such as dullness and ambiguity which tell us about unpleasant task which an individual has to perform (Lay, 1986). Task aversion is not only limited to the built-in unpleasantness of a task but it also has effects from outcomes of a task (Silver, 1974).

Task aversiveness is a term with deep negative explanations. Restlessness that

may affect the working capacity of an individual (Harris & Sutton, 2002) also known as a means of action which found inconvenient. According to this definition, the more a task is unpleasant, the more the person will try to avoid it. (ie, procrastination). This situation sometimes occurs due to the task (Boring, Unpleasant etc.) but most of the times it reflects the personal characteristics of the procrastinator (e.g., boredom, Lack of internal motivation) (Milgram, Sroloff & Rosenbaum, 1988).

Hoffrogge (2001) believed that Low Frustration Tolerance (LFT) is one of the most common reasons for people in great distress. The concept developed by psychologist Albert Ellis, Low Frustration Tolerance (LFT) comes from the idea that frustration becomes unendurable and it should be avoided at all costs. Hoffrogge (2001) believed that it is the most common trend of people in distress. Empirical evidence shows that Low Frustration Tolerance (LFT) is associated with depression and task aversiveness, that leads towards delay or postponement (Chang & Zurilla, 2007; Harrington, 2006; McDermut, Haaga, & Bilek, 2002; Stanković & Gvozden, 2011).

Academic procrastination has association with avoidance of an unpleasant task. These procrastinators may have ability to perform a task but they do not exhibit inclination of performing it. Task demanding little effort may make the people feel unpleasant or feel displeased (Steel, 2007). It is the habit of procrastinators to avoid unpleasant task and do impulsive effort (Burns, Dittmann, Nguyen, & Mitchelson, 2000; Ferrari, 2001). Zhang et al. (2009) explained that aversiveness of task, lack of assertion, fear of failure, rebellion against control and fear of success are the common causes of delaying an academic task at under-graduate level.

2.12.8 Academic Procrastination and Laziness

Laziness is one the major reasons of academic procrastination as the lazy

person gets distracted easily by a number of activities. Lazy people justify themselves with the pretext of being captivated by more entertaining activities. Circumstances are also declared responsible by them for their sluggish behaviour (Grunschel, Patrzek, & Fries, 2013).

Laziness affects students' academic achievement negatively. Educational responsibilities have positive correlation with students' level of academic procrastination. Actually sluggish persons have a habit to transfer their exertions to someone else, often considering others to be more responsible and will get done additional works anyhow. Furthermore, boys are found more involved in academic procrastination because of their laziness rather than girls. Procrastinators' believe that assignment-abhorrence is caused by laziness, low willpower or low ambition and they may face trouble and they lookout for support to avoid social humiliation (Neil, 2007). Studies concluded that difficulty in decisions making, laziness and gender at undergraduate level are positively correlated with academic procrastination (Ozer et al., 2009; Schouwenbury, 2004). Laziness simply causes academic procrastination, as one who is too idle to perform a task, is called a lazy person (Steel, 2010).

2.12.9 Academic Procrastination and Difficulty Making Decisions

Dilmac (2009) argued that procrastination makes people put off responsibilities, duties and decisions. According to Beheshtifar and Nasab (2012) procrastination can be defined as avoiding implementation of decisions, breaking the objectives already set and to postpone anything until it is too late.

Balkis (2007) defined procrastination as a trait which includes such behaviours and attitudes that affect working and decisions of an individual in negative way. Ugurlu (2013) argued that attitudes and behaviours play their role in decision making process for deciding the distinctiveness of tasks, like where, when and how to

complete given activity.

Procrastination can be defined as a personality trait, which makes it more than just an attribute of unproductive management of time. Procrastination, if taken as a personal attribute, includes cognitive and affective fundamentals and is because of many causes. One of them is difficulty in making decisions (Lay, 1986; Fee & Tangenym, 2000; Uzun & Sackes, 2010; Uzun & Ferrari, 2011). Ugurlu (2013) further explained that, this situation leads to the conclusion that reflects the individual decision-making styles, which establishes the link between decision-making and behaviours of procrastination.

Zimberoff and Hartman (2001) proposed the procrastinators' required high threshold of certainty in order to select further steps for completion of tasks and to get more knowledge for alternate options.

2.12.10 Academic Procrastination and Low Level of Motivation

There are certain tactics or ways by which a student can defeat procrastination or can reduce this habit of procrastination. One is motivation which a human can develop or sometimes God gifted to someone. A motivated student's achievement is always more than a student, who is less motivated for example performing tasks more efficiently, well prepared for exams doing homework and achieving goals during academic carrier. Motivation is inversely proportional to procrastination, higher the motivation level lowers the procrastination. Motivation has significant role in producing effective and efficient academic output or more academic output (Vallerand & Bissonnette, 1992). Boznoglu (2004) defined motivation as producing energy to perform specific task as desired. Chu and Choi's (2005) opinion about motivation is that it's an ability in entity to deal with activity.

A wide range of academic work has linked motivation and academic

procrastination behaviours and concluded that lack of motivation is one of the common reasons of academic procrastination among students (Ackerman and Grss, 2005; Phillips, Joy & Mogford, 2007). High motivation level and tendency to procrastinate the academic tasks are inversely proportionate. Increase in level of Motivation will decrease the level of academic procrastination (Senecal et al., 1995). So the cause behind academic procrastination is not the laziness but motivation that plays important role in academic life.

Motivation has two types: intrinsic and extrinsic Motivation. Motivation is such a force which drives a person to keep him engaged in a specific task, assignment or in an activity. Intrinsic motivation arises from the inside of a person or from the internal drive (Dice & Rayan, 1985) while, on the other side extrinsic motivation results from some exterior or environmental chances. Deci and Ryan (1985) also explained that intrinsic motivation is the result of some internal drive and external motivation resulted by some outer or external contingency.

Brownlow and Reasinger (2000) explored that both intrinsic motivation (resulted by some internal drive) and extrinsic motivation (resulted by some outer or external eventuality) are negatively associated with academic procrastination. Conti (2000) proposed extrinsic motivation as one of the essential components to stop happening the task-delay and also argued that students with intrinsic motivation spend major part of time to complete their tasks on time as compared to the students with extrinsic motivation. Level of motivation may influence the student's academic achievement.

Intrinsic motivation is necessary to prevent an individual from delaying a task. The individuals who have intrinsic motivation spend more time on their tasks as compared to the extrinsically motivated participants (Brownlow and Reasinger,

2000). Ariely and wertenbroch, (2002) explored that intrinsic motivation is more reliable to avoid the academic procrastination. Active procrastinators have high level of extrinsic motivation and low level of intrinsic motivation because these individuals have inclination to perform a task at last moment and in the least possible time.

Meta cognitive beliefs and achievement goal orientation are motivational factors which have relationship with active procrastination (Wolters, 2003; Steel, 2007; Schraw et al., 2007; Howell & Buro, 2009; Ozer, 2011). Meta cognitive beliefs deal with the internal states and cognition of an individual. From Meta cognition point of view, individuals procrastinate when they feel their abilities insufficient for performing a task and they feel fear from failure and negative consequences of the task (Shoham, Avner & Neeman, 1989).

The one more motivational variable is achievement goal orientation. These goals represent the purpose for achieving engaging themselves in an achievement situation (Ames, 1988; Pintrich, 2000). These purposes intrinsically and extrinsically engage individuals in achievement situation and different approaches to learning activities (Ames, 1984). Moreover, both types of motivation (intrinsic and extrinsic) have their significance to minimize the awful impacts of academic procrastination on the academic career of the students.

2.12.11 Academic Procrastination and Tendency to Feel Overwhelmed and Poor Time Management

Time not only affects the management of students but also creates the anxiety among university students (Dusselier, Dunn, Wang, Shelley, & Whalen, 2005). Misra and McKean, (2000) mentioned that proper time management decreases the stress and increases the productivity level of students by setting the level of priorities and monitoring the time. Many students think that they have plenty of time to perform a

task but they fail to take in to account the quantity of work they have to do in a predetermined time period (Brown, 2000). Due to this misjudgement of the time available and their abilities and capabilities, they start deferring. Mostly the procrastinators have such kind of poor time structure (Vodanovich & Seib, 1997). Traditional procrastinators who have unstructured time schedule may float in a meaningless way from an important task to the other activity (Bond & Feather, 1988). During these circumstances, they mostly fail to accomplish their tasks on time who demonstrate less control on time available to them (Lay & Schouwenburg, 1993). Norans (2000) also pointed out that procrastinators, lacking in time management ability and in addition overwhelming feelings, while performing a certain task also play a role in postponement. Dusselier et al., (2005) summarised that poor time management not only creates problem for university students but also becomes the reason of hindrance during academic year.

It is the fact that scores of the procrastinating students are very low than those students who are non procrastinators due to undereatination of stipulated period of time (Bendr, 2006).

Burrus, Jackson, & Steinberg (2013) claimed that if one has the ability to manage time once affectively then performance of students will be valuable for their whole academic life. Necati and Sevil (2010) determined the relationship between good time management and achievements of students entirely. Pehlivan, (2013) conducted a study to assess the performance of students in academic achievement and on their GPA score. He concluded that there is a strong relation between scores of students and their time management abilities. Competency in academic performance, management of time, level of study and stress coping abilities have significant positive correlation (Talib, 2012).

2.12.12 Academic Procrastination and Peer Influence

In recent estimation of peer impacts in academic achievement has gotten much consideration. A number of studies have given critical discoveries about these impacts in various circumstances. Studies showed that there is significant improvement in performance of students who are either friend or somehow associated with high achievers, on the other hand if peers or colleagues are low achievers than it may affect the performance of the students negatively (Hoxby 2000; Sacerdote, 2001; McEwan, 2003; Zimmerman, 2003; Hoxby & Weingarth, 2006; Graham, 2008; Ammermueller & Pischke, 2009).

2.12.13 Academic Procrastination and Lack of Self-Confidence

Confidence is the mainstay of victory. Lack of confidence can restrict even a competent person from achieving his goal in spite of capability. Procrastination is not about avoiding the petty and trivial matters but ignoring the decisive actions and critical decisions (Plessis, 2006). When somebody regards his abilities with suspicion, he experiences vacillation, indecision and hesitation and tasks fall victim to delay (Hermann, Leonardelli & Arkin, 2002).

Procrastination includes knowing that anyone is supposed to do and also want to do so yet failing to motivate himself to perform the task within the expected or desired time framework. It is evaluated that autonomous self-regulation plays a predictor role in academic procrastination. From a research that was conducted in France by Senecal, Koestner and Vallerand, (1995), it was found that self-esteem was a fear of breakdown or failure. Correlation results of the study showed that those students' less procrastinate who had intrinsic causes to scrutinize their studies. On the other side those who had extrinsic reasons were found more procrastinated. Regression results showed that 14 % of variance was accounted due to self-esteem,

depression and anxiety, while 25% related to self-regulation variables. The results supported the idea that procrastination is motivational problem which involves trait laziness or skills of bad time management. Self-esteem, depression and anxiety may be cause as personality aspect reflective of fear of breakdown.

2.12.14 Academic Procrastination and Fail to Prioritize

Procrastinators need a choice between completing tasks or doing it later in which one task is avoided in favors of the other and is usually characterized by the preference of tasks (usually procrastinators remain confused in preferring tasks or in prioritizing of tasks). Noran (2000) also advocated that graduates lack the ability to prioritize their activities and due to this reason they certainly avoid to complete their tasks that lead them to Procrastinate their tasks in general. Ariely and wertenbroch (2002) highlighted that self-imposed tasks are prior and external factors become on second. A large number of students face the failure because they cannot set their self-imposed deadlines. Hoover (2005) conceptualized procrastination as lacking the ability to set goal priorities and complete assignments on time. Furthermore, he stated that procrastination occurs due to many reasons like, illness, low performance, stress and lack of confidence.

2.12.15 Academic Procrastination and Focused Thinking

Focused thinking can help a lot to minimize the degree of procrastination as Bridges and Roig (1997) stated in their study that when there is increase in unreasonable thinking there is also increase in academic procrastination. Noran (2000) pointed out that fail to concentrate is another cause of procrastination due to environmental disturbance, such as doing assignment while lying or in noise (music). Dietz et al. (2007) suggested an intended course of action for the day or planned schedule for daily actions can help a lot to thwart and stop procrastination and

ultimately it gives assistance to foster decisions making for educational and academic activities and tasks.

2.12.16 Academic Procrastination and Pleasant versus Boring Tasks (Pleasure Principle)

Plessis (2006) stated that one, who procrastinate his tasks frequently, is needed to practice at first with easy task to complete them within time. Students are needed to be more confident and aware about their shortcomings to reduce this habit and to maintain their lives properly

2.12.17 Academic Procrastination and Pedagogy

Tucman (2003) has emphasised on modern skills of teaching in order to motivate the students to concentrate their academic tasks and also concluded that certain pedagogical skills can help to avoid behaviour of avoidance. Research being done by Tucman (2003) practically has proved that training (conducted by teachers for students) with the purpose of motivating the students to work and techniques of complete the tasks effectively, gave higher up to the students than those who never attended those training proceedings.

2.12.18 Academic Procrastination and Help-seeking

Help-seeking strategy also has positive association with expectations of undergraduates at the end of the academic session. This variable is related to those learners who seek assistance and support in achieving their academic goals (Knapp & Karabenick, 1988; Karabenick, 2003). These individual are motivated towards their tasks but feel difficulty in performing the task. So, they feel themselves dependent on other people to overcome this difficulty and ask for remedial process from mentor and peers (Ablard & Lipsultz, 1998; Zimmerman & Martinez-Pons, 1990). Seeking for help from other people is a vital instrument in achieving academic goals. The learners

who use knowledge monitoring strategy comes in the category of help-seeking individual and ask for help when needed (Newman, 2000). It is said that both of these variables, self-efficacy for self-regulating learning as well as help-seeking strategies make the learner capable of better academic performance along with highlighting their expectations. Pintrich and De Groot (1900) observed that these learners know the worth of their task and try to overcome the difficulties with the help of teachers and peers.

2.13 Stress-Coping Strategies and Academic Procrastination

2.13.1 Stress-coping Strategies

When individuals try to get rid of a stimulus that causes stress, they deal with that stress (Latack & Havlovic, 1992). An individual can use one of these stress-coping strategies:

I. Task-Oriented Strategies

A task-oriented coping strategy is in fact the problem-focused coping strategy. The individual is needed to focus the task that is delayed for any reason. A conscious effort is required to understand the nature of the assigned task...complexity, difficulty to operate etc. Direct action is involved to minimize the stressfulness of the problem.

II. Emotion-Oriented Strategies

Emotion-oriented coping strategies involved abolishing the negative emotional extreme anxiety that is caused by the stressor. Emotional intelligence of the individual can play a vital role in this regard. Strong control over the negative emotions can help to minimize the level of stress directly and the level of procrastination indirectly.

III. Avoidance-Oriented Strategies

Most of the times, avoidance-oriented strategies also helped to minimize the stress. Avoidance-oriented coping strategies involved to turn aside and to avoid the

problem/task that is caused by stressor (Carver, Scheier & Weintraub, 1989; Endler & Parker, 1990; Kosic, 2004).

The individual use any type of these coping strategies according to the level of their self-efficacy and capabilities. When an individual feels himself helpless and does not overcome the stimulus that cause stress than avoidance-oriented and emotion-oriented strategies become apparent (Folkman & Lazarus, 1980).

2.13.2 Active Procrastinators and Stress-Coping Strategies

Non procrastinators may have maximum level of self-efficacy and they considered that they can control that stimulus which cause stress and also overcome the problematic stress situation. Active procrastinators also have maximum level of self-efficacy and more likely to experience positive outcomes due to their beliefs which make them capable of solving their stressful problem (Chu & Choi, 2005).

2.13.3 Passive Procrastinators and Stress-Coping Strategies

Passive procrastinators may have low level of self-efficacy and due to this scarcity they feel themselves helpless to overcome the stressful situation and circumstances. In consequences of powerlessness they may engage themselves in different distract and irrelevant tasks and may use high-pitched crying for expressing their anxiety and fear of task and can ignore task completely (Chu & Choi, 2005).

2.14. Academic Procrastination and Rational / Irrational Beliefs

Ellis and Knaus (1977) argued that self-critical behaviour and irrational/rational beliefs have important effect on procrastination. Rational beliefs are valid and contain verifiable data and go towards vigorous emotional reaction. These beliefs are considered useful, adaptive and healthy (Dryden & Branch, 2008). It is assumed that active procrastinators have rational beliefs about their academic achievement. On the other hand, irrational beliefs are highly unrealistic, ambiguous,

rigid, inflexible and illogical. These beliefs are considered as maladaptive, damaging, negative and worthless (Crawford & Ellis 1989; Dryden & Branch, 2008).

Ellis and Knaus (1977) introduced the first emotive behaviour theory (REBT).

The theory holds that feel disturbance in two ways:

- I. By having self trouble beliefs
- II. By holding anxiety trouble beliefs.

Procrastinators have attitude of doing well at every task and this attitude drive them towards the avoidance of task. Irrational beliefs produce low self-esteem when a procrastinator fails to do well in his task (Beswick et al., 1988). Irrational beliefs encourage procrastinators to postpone starting and ending of a task (Beswick, et al. 1988). Many studies have found evidences about relationships of irrational beliefs (Bridges & Roig, 1977; Solomon & Rothblum, 1984; Beswick et al. 1988; Harrington, 2005; Steel, 2007). Vernon (2002) argues that some procrastinators feel fear to fail because they have irrational, ambiguous and unrealistic standards and feel themselves inadequate to achieve these.

2.15 Academic Procrastination, Rational / Irrational Beliefs, and Academic Life Satisfaction

Academic procrastination brings negative consequences in the life of a student. It affects the satisfaction of students in academic life. Satisfaction is “operationally defined as the expected satisfaction in one’s life in school by the fulfilment of his/her important academic goals and aspiration” (Kumar & Dileep, 2006).

Durden (1997) argued that students who come in the category of high level of procrastination are significantly less satisfied with their life while on the other hand, students who have low level of procrastination are significantly more satisfied with

their life. In this way life satisfaction is inversely related to the procrastination (Deniz, 2006).

Many researchers have found that rational/irrational beliefs are associated with many negative consequences like; depressions, anxiety, stress, worry and pessimism which lead towards less satisfaction of students in their life. Hamidi & Hosseini (2010) argued that social, emotional and academic life satisfaction has relation to irrational beliefs. Life satisfaction is inversely related to the irrational beliefs (Snell & Hawkins, 1985; Ciarrochi, 2004; Sporrle, Strobel & Tumasjan, 2010).

2.16. Academic Procrastination, Rational / Irrational Beliefs, Academic Life Satisfaction and Students' Achievement

Many studies have revealed that procrastination has negative effect on student's academic achievement (Fritzsche, Young & Hickson, 2003; Jackson et al., 2003; Akinsola & Tella, 2007; Ozer et al, 2009; Balkis & Duru, 2010). Procrastinators may cut off academic performance in many ways; students need insufficient time for completing a task to deal with anxiety (Schouwenburg, 1995), procrastinators assume that they do well under pressure, they do not have prediction about obstacles of procrastination so they perform less well (Ferrari et al, 1995), procrastinators do not know the value of time for a specific task that's why they do not put in to time and effort of performing that task (McCown, 1986).

The effect of academic procrastination on academic achievement is due to high level and low level of Rational Beliefs about Studying (RBS). The students who have high level of RBS (Rational Beliefs about Studying) are more satisfied with their life and have successful academic achievement. While on the other hand, students who have low level of RBS (Rational Beliefs about Studying) are less satisfied with their life and show failures in their academic performances (Balkis, 2013). Students

who are at higher level of procrastination and irrational beliefs incline to execute more unsuccessfully than others.

The students who have high level of rational beliefs, they can reduce negative consequences of academic procrastination on their academic achievement and this enhances their ability to use strategies to cope with stressful events (David, Lynn & Ellis, 2010).

The study indicates that rational beliefs about studying play a vital and mediator role in relationship of academic procrastination, academic achievement and life satisfaction (Balkis, 2013). Irrational beliefs highlight those emotions which enhance avoidant behaviour and rational beliefs enhance behaviours which facilitate academic achievement (Ellis, 1994; Dryden, 2002).

2.17. Effects of Procrastination

2.17.1 Anxiety/ Stress

Erkutul and Chafra (2006) usually defined stress as reaction of individuals to stressors imposed upon them. According to Trabant (2006) anxiety is a condition of uneasiness and fear about unrealistic future phenomenon and it arises the feeling of anger. Anxiety and stress have its effects in the life of students in various dimensions as; fear, feeling of continuous and uncontrollable worries, feeling of anger which increases internally and depicts its negative effects externally and increases tension which may harm the physical health of a students. A number of researches have nominated the stress as a possible predictor of procrastination. The students avoid such academic tasks which cause stress or anxiety (Onwuegbuzie & Jiao, 2000; Onwuegbuzie & Collins, 2001; Onwuegbuzie, 2004).

Some researchers assumed that sometimes stress has positive effects on the academics of a Procrastinator, as Akinsola and Tella (2007) mentioned that students

who procrastinate, fight against deadline and complete their assignment that create anxiety and tension.

2.17.2 Effects on students' academic performance

Tice and Baummeister (1997) assumed that procrastinators have lower grades in their examinations than other students. If any student faces high level of anxiety there will be usually deficits in their academic performance. Many types of negative consequences may harm students' performance such as low grade expectations and poor conceptualization and organization of the content which detach them from their goals. Active procrastinators have negative effects of this behaviour on the academic performance than passive procrastinators.

Wikibooks (2006) mentioned that Procrastination is not actually a practice which is made by students due to their laziness; it is a complicated attitude of students regarding their feelings, emotions and actions. In fact students become habitual of these attitudes. To overcome this style of delay they are needed to take a critical view of their self-performance.

2.18. Counseling Procrastinating Behaviour

A lot of studies have been conducted on procrastination and guidelines to overcome this phenomenon. There are also accessible suggestions and developing guidelines how one can prevent from this state (Van, 2003). Procrastination is not simply a habit but it contains complex behaviour patterns involving emotions, attitude, actions and thoughts which become habitual to the procrastinators. It is not an easy task to get rid of these behaviours but it is need of the hour to try to minimize the ratio of procrastinators. Some techniques are useful for this as;

2.18.1 Start from Simple to Complex

A procrastinator may have to taught to start with easiest task and proceed

towards more complex and rigorous one. They must be motivated with easiest task and intrinsically this motivation must be ginger them towards more complex task. In short, a student must make a “to do” list of daily task and arrange it in order from easy to complex. Self-confidence and confidence in their own abilities is the most important to avoid people from procrastination (Plessis, 2006).

2.18.2 Effective use of Time

Methods of managing task are most useful for overcoming procrastination. Those who reduce fear and anxiety emphasize their specific goals. Those who are inflexible and increase anxiety actually procrastinate. For instance, if an individual make a huge list of “to do” in a day and every minute he spends on scheduling his time can waste his whole day and this increases his stress.

2.18.3 Motivation- productive reasons

Every individual may have positive, productive, satisfying feeling and thought about their academic achievement. One can lose his hold on productivity due to fear and anxiety.

2.19. Related Researches

The phenomenon of Academic Procrastination got the interest of academician in early 1980s. Academic Procrastination behavior was investigated by Solomon and Rothblum in 1984, who introduced the Procrastination Assessment Scale for Students (PASS). PASS was created to measure procrastinating attitude among students.

Olubusayo (2010) studied academic procrastination in Mathematics: Causes, Dangers and Implications of Counselling for Effective Learning through a conceptual paper. It was concluded that mathematics procrastination occurs among thousands of the students. It happens mostly due to the students’ hatred for mathematics.

Sirin (2011) studied the phenomenon of academic procrastination with the title “Academic procrastination among undergraduates attending school of physical education and sports: Role of general procrastination, academic motivation and academic self-efficacy”. The sample of the study consisted of 774 students studying at physical education. It was a comparative study of three Turkish universities, Selcuk University, Samsun University, and Ni_de University in Turkey. Resulted show a significant positive correlation between academic procrastination and general procrastination, while the relationship among academic procrastination, academic motivation and academic self-efficacy was not statistically significant. Furthermore, general procrastination was determined as a significant predictor of academic procrastination. The level of academic procrastination was significantly different among students in terms of departments and grade levels but gender was identified as non significant predictor of academic procrastination.

Balkis (2013) studied Academic Procrastination, Academic Life Satisfaction and Academic Achievement: The Mediation Role of Rational Beliefs about Studying. 290 students took part in the study. The findings showed that academic procrastination was negatively correlated with rational beliefs about studying, academic life satisfaction, and academic achievement. Whereas, the rational believes about studying were positively correlated with academic life.

Nordby, Wang, Dahl and Svartdal (2016) have reported in the findings of an experimental research that after receiving intervention in the form of lectures and seminar sessions (designed to help the students to minimize their level of academic procrastination), the student who have the high level of academic procrastination get maximum help and showed a reduced tendency towards procrastination.

Mahasneh, Bataineh and Al-Zoubi (2017) have conducted an investigation to correlate the level of Academic Procrastination and Parenting Style. The sample of the study consisted of 685 university level graduates. They concluded that majority of the students (67%) were medium level procrastinators. Only 7% students were high procrastinators and 26 % students were low procrastinations. The study predicts gender as non-significant predictor of academic procrastination and indicated parenting style as a positive correlate of academic procrastination.

2.20 Chapter Overview

Chapter 2 provided the theoretical basis to the study. Review of the related literature was done to link the study with the previous knowledge and in three major sections. First section included the basic concept and nature of the phenomenon of procrastination, Second section contained the history and types of the phenomenon, Third section focused the academic procrastination, Latest researches in the area and explaining its possible effects and relationship with students' academic achievement. Methodology and procedures to achieve the objectives of the study are presented in the next chapter (Chapter 3).

CHAPTER 3

RESEARCH METHODOLOGY

The study intended to find out the relationship between the phenomenon of Academic Procrastination and Academic Achievement. While discussing the population, sampling, instrumentation, data collection and analysis, this chapter presents the methodology, processes and procedures adopted to achieve the objectives of the study.

The following methodology was used for the study:

3.1 Research Design

The present study was a correlation study. It was an attempt to find out the relationship between Predictor Variable (Academic Procrastination) and Criterion Variable (Academic Achievement). Correlation research method helps to quantify the strength of the relationship between two or more variables but not manipulated. It is the most complicated form of Descriptive Research (Creswell, 2011).

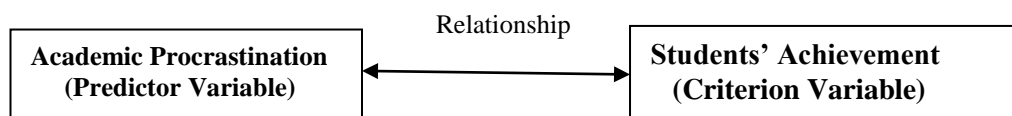


Figure 3.1: Correlational Research Design (Creswell, 2011)

The approach followed for the study was the mixed method approach as the data collected to achieve the objectives of the study was in both forms, narrative data

(Interviews of the Teachers) as well as Quantitative data (Procrastination Assessment Scale for Students and Students Academic Achievement). Mertler and Charl (2011) described that the research relying on narrative data is called Qualitative Research whereas the research relying on numerical data is called Quantitative Research.

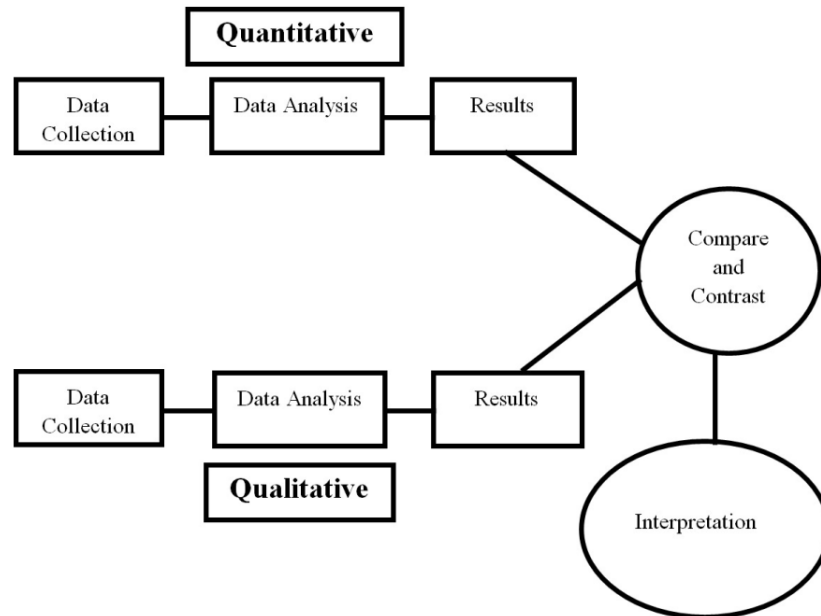


Figure 3.2: Mixed Method Research Design Approach

Sequential Transformative Strategy of Mixed Method by (Creswell, 2013) was used. Sequential Transformative Strategy regarded as by the collection and analysis of any one (quantitative or qualitative data) first. In sequential model, analysis of quantities data is done in the first phase. It yields extreme or outlier cases. Follow up qualitative interviews with these outlier cases provide insights explaining the nature and dimensions of quantitative sampled population (Creswell, 2013). The transformative structure further advances the advocacy issue in the beginning. This is important in this study to reason out different cases of students' study behaviour. Then, sequential or concurrent structure is employed as a means of acquiring the form and content of the study. The results are integrated of both sources (quantitative and

qualitative) in the interpretation phase. The purpose of this strategy is to utilize the methods that best serve a theoretical perspective.

3.2 Population of the Study

“Population is any group of individuals that has one or more characteristics in common that are of interest to the researcher. The population may be all the individuals of a particular type, or a more restricted part of that group” (Best, 2000).

All the MS/M. Phil level students and teachers at general public sector universities of the province of Punjab, Pakistan of the Session 2014-2016 were considered as the population of the study. Approximately 3000 students were enrolled in MS/M.phill session 2014-2016 in Social Sciences at 20 public sector universities in Punjab. Approximate number of faculty members was 200. (Source: universities website data). List of universities is given in Appendices V.

3.3 Sample of the Study

“Sample is a small proportion of a population selected for observation and analysis. By observing the characteristics of the sample, one can make certain inferences about the characteristics of the population from which it is drawn” (Best, 2000).

Multi-Stage Cluster Random Sampling Technique was used for the study. Total public sector universities in the province Punjab, Pakistan were 20 during the course of investigation. At the first stage of sampling five public sector universities were randomly selected for the purpose of data collection. Alreck and Settle (1995) recommended the sample size of about 10% of the parent population. Roscoe (1975) also mentioned 10% as a "rule of thumb" acceptable level. Although 10% of the total 20 universities comes to 2 universities, but the researcher randomly selected five universities as Franenkel and Wallen (2006) stated that “there is no hard and fast rule

for sample size. The research should select a sample as large as the researcher can obtain with a reasonable expenditure of time and energy”. The second formed cauterisation of the area of Punjab in typological context. Punjab is the largest province of Pakistan. It constitutes five major geographical zones, southern, semi-southern, central, semi-central and potohar. Ideally, Rawalpindi would have represented potohar. As there is no general mixed university in public sector in Rawalpindi, Sargodha was regarded plausible alternative. Keeping in view this explanation following five public sector universities were randomly selected:

1. University of the Punjab, Lahore representing Central
2. Bahauddin Zakariya University, Multan representing semi-southern
3. University of the Sargodha, Sargodha representing potohar
4. Islamia University, Bahawalpur representing southern
5. Government College University, Faisalabad representing semi-central

The study was delimited to the M.S/M.Phil students from the faculty of social sciences. The third stages of sampling, following five departments were identified as common departments in the faculty of social sciences of the sampled five universities.

1. Department of Economics
2. Department of Psychology
3. Department of Sociology
4. Department of Education
5. Department of Political Science

The rational for selecting social sciences was a large body of students seek enrolment in social sciences and most of them tend to procrastinate their studies in these disciplines. Also, most of the graduates of these universities wait for longer duration for seeking employment, leading to growing wastage in education. So, at the

third stage of sampling, five departments of the faculty of social sciences (Economics, Psychology, Sociology, Education and Political Science) among five public sector universities of the province of Punjab, Pakistan were considered as a cluster. The fourth stage constituted the level of education that is MS/M.Phil. the rationale included that with the introduction of 12-4 model of degree education in Pakistan from early 2000, M.S/M.Phil has emerged as a crucial stage: a bridge between first degree and higher education. It is an entry degree to college/university teaching career and a leading degree to Phd. Hold master degree is becoming an intermediary stage in local context. Also, there is a growing pressure on enrolment. More importantly it involves a higher cost both in public and private investment. Two-third on public finance and one-third private, either by self or parents account. It fore goes an opportunity cost. On academic side, it is relatively demanding high academic work, particularly combination of investigational/field work. This forms the hub of academic demand, both on the part of student and teacher, including management for providing academic services. In this perspective, all the students of M.S/M.Phil level studying at sampled universities were considered as the sample of the study. One teacher was randomly selected from each department. In that way total 25 teachers were selected and included in the study as a sample. The description of sampling along with justification is given in the following table:

Table 3.1

The Description of Sampling

Sr. #	Stages of Sampling	Reasons
First Stage		
1	Five public sector universities of the province Punjab, Pakistan	Randomly selected, To get a homogeneous and representative set of sample
Second Stage		
2	Clusterisation of the area of Punjab in typological context	Randomly selected
Third Stage		
3	Five departments of social sciences (Economics, Psychology, Sociology, Education and Political Science)	These Five Departments were common in the Faculty of Social Sciences of the sampled Five Universities
Forth Stage		
4	All the students (total students were 365), and 25 teachers (one randomly selected teacher from each department) of MS/M.Phil degree level for the Session 2014-2016	To get representative and homogeneous sample

All the students of M.S/M.Phil level session 2014-2016 within the five departments and one teacher (randomly selected) from each department were considered as the sample of the study. Total 365 students and 25 teachers were included as a sample of the study.

Table 3.2

The Detailed Breakout of the Sample

Universities	Total respondents within the five departments of the five selected public sector universities (M.S/M.Phil level students)	Total respondents (Teachers) one from each department
University of the Punjab Lahore	88	5
Bahauddin Zakariya University Multan	56	5
University of the Sargodha	52	5
Islamia University Bahawalpur	84	5
G. C. University Faisalabad	85	5
Total	365	25

Table 3.2 shows that total 365 students and 25 teachers of M.S/M.Phil level were included in the sample of the study.

3.4 Tools of the Study

One standardized scale Procrastination Assessment Scale for Students (PASS), after getting permission from the author and after effecting necessary amendments according to the objectives of the study was used to collect data from the students.

3.4.1 Procrastination Assessment Scale for Students (PASS) by Solomon and Rothblum (1984)

Description of the Tool is as under:

3.4.1.1 Purpose, Sections and Questions of the PASS Scale

The purpose of the Procrastination Assessment Scale for Students (PASS) was to evaluate a wide range of tendencies the students deployed for delaying their academic tasks with an exploration of the causes of Academic Procrastination and an assessment of the interest of the students to change their attitude of Academic

Procrastination.

The original version of the scale contains 44 likert type items, developed by Solomon and Rothblum (1984). For meeting the objective of the study and assigning weightage to the variables drawn from the literature review, the scale was extended to 76 items. Some original items were amended in culture context. The adapted scale consisted of three sections.

Section I. It includes estimation of tendency of the students to procrastinate their academic tasks, under six titles. These six academic tasks are as under:

1. Writing a term paper
2. Studying for an exam
3. Keeping up with assignment tasks
4. Performing academic administrative tasks
5. Attendance tasks.
6. Performing academic tasks in general

Under each area there are five statements. The statements were subjected to modification as per requirement to meet the objectives of the study following feedback from expert group. The students were asked to rate their procrastination tendency under each academic area of investigation.

Section II. Students were given a procrastination scenario and were asked to identify the reasons of their procrastination in that scenario. Total 13 reasons were identified by the students as originated by Solomon and Rothblum (1984) in PASS.

1. Evaluation Anxiety
2. Perfectionism
3. Difficulty Making Decisions
4. Dependency and Help Seeking

5. Aversiveness of the Task and Low Frustration Tolerance
6. Lack of Self-Confidence
7. Laziness
8. Lack of Assertion
9. Fear of Success
10. Tendency to feel Overwhelmed and Poorly Manage Time
11. Rebellion against Control
12. Risk-Taking
13. Peer Influence

Five more causes were identified and were included in the light of the literature studied, following the first stage of the pilot testing. These were as under:

1. Lower level of motivation
2. Socialization (people spend time with family and friends instead of doing work)
3. Pleasant versus boring tasks (Pleasure principle)
4. Fail to prioritize
5. Lack of focus/Fatigue

Section III. In the third section, total ten statements were included to assess the students' interest in changing their attitude towards procrastination.

3.4.2 Interview

A semi-structured interview was used to collect data from teachers of M.S/M.Phil degree program within the five departments of the five sampled universities. Total twenty five interviews of teachers were conducted by random selection of five teachers from each sampled university (one teacher for each department). The interview focused on the questions about the tendency of students

procrastination within the six identified academic tasks. The intent was identification of the reasons and their impact on academic achievement.

3.4.3 Students' Achievement

Students' results were collected from the department offices in terms of Cumulative Grade Point Average (CGPA) for the session 2014-2016.

3.5 Pilot Study

In the process of pilot study five students (one from each university) were interviewed at the initial stage of pilot testing and on the basis of interview data and relevant literature amendments were effected in the Procrastination Assessment Scale for Students (PASS).

At the second step of pilot study, thirty randomly selected students were contacted to respond to the test items, contained in the scale. It was finally used after measuring the degree of reliability by using the formula Cronbach's Alpha on SPSS and ensuring their validity through experts' opinion. The teachers and the students included in the piloting procedure were excluded from the sample.

To measure the extent to which the statements in the same factor assessed the particular single aspect under each factor and to determine the internal consistency of the tool adopted (PASS), the Cronbach's Alpha Reliability Coefficient (Cronbach, 1951) was calculated.

Table 3.3

Mean, Standard Deviation and Reliability Coefficient on Academic Procrastination (PASS) Scale

No. of Items	Mean	Standard Deviation	Cronbach Alpha Reliability Coefficient
76	3.01	0.790	0.974

Table 3.3 shows the value of Mean, Standard Deviation, and the reliability coefficient value of the pilot test for PASS Scale. During pilot testing Cronbach Alpha reliability was applied to ensure the internal consistency of the PASS Scale. The value of the Cronbach Alpha Reliability Coefficient was 0.974. Landau and Everit (2004) suggested that the Cronbach Alpha Reliability Coefficient values above .70 considered acceptable for a research tool. So the Cronbach Alpha Reliability Coefficient value 0.974 suggesting very good internal consistency.

Table 3.4

Item Statistics and Item-Total Correlation for PASS Scale

Item Number	Mean (Difficulty Index)	Item-Total Correlation (Discrimination Index)	Item Number	Mean (Difficulty Index)	Item-Total Correlation (Discrimination Index)
PASS 1	3.69	.460	PASS 39	2.62	.797
PASS 2	3.74	.374	PASS 40	2.70	.677
PASS 3	3.75	.408	PASS 41	2.57	.883
PASS 4	3.73	.420	PASS 42	2.58	.867
PASS 5	3.76	.407	PASS 43	2.05	.425
PASS 6	3.70	.364	PASS 44	2.01	.423
PASS 7	3.72	.538	PASS 45	2.84	.234
PASS 8	3.80	.482	PASS 46	2.79	.117
PASS 9	3.68	.421	PASS 47	2.05	.431
PASS 10	3.70	.490	PASS 48	2.02	.430
PASS 11	3.65	.462	PASS 49	2.59	.882
PASS 12	3.70	.457	PASS 50	2.59	.873
PASS 13	3.72	.303	PASS 51	2.57	.899
PASS 14	3.72	.471	PASS 52	2.58	.897
PASS 15	3.73	.451	PASS 53	2.69	.743
PASS 16	3.84	.396	PASS 54	2.72	.730
PASS 17	3.68	.445	PASS 55	2.72	.729
PASS 18	3.71	.405	PASS 56	2.70	.742
PASS 19	3.74	.397	PASS 57	2.71	.736
PASS 20	3.69	.425	PASS 58	2.70	.731
PASS 21	3.67	.419	PASS 59	2.58	.910
PASS 22	3.64	.353	PASS 60	2.60	.917
PASS 23	3.72	.414	PASS 61	2.59	.911
PASS 24	3.65	.504	PASS 62	2.58	.909
PASS 25	3.80	.427	PASS 63	2.60	.911
PASS 26	3.70	.455	PASS 64	2.60	.902
PASS 27	3.78	.469	PASS 65	2.58	.913
PASS 28	3.75	.342	PASS 66	2.59	.908
PASS 29	3.70	.480	PASS 67	0.53	.025
PASS 30	3.70	.486	PASS 68	0.52	.011
PASS 31	2.62	.491	PASS 69	0.56	.021
PASS 32	2.74	.340	PASS 70	3.27	.858
PASS 33	2.65	.437	PASS 71	3.36	.825

PASS 34	2.74	.333	PASS 72	3.26	.854
PASS 35	2.40	.422	PASS 73	3.35	.835
PASS 36	2.41	.408	PASS 74	3.31	.856
PASS 37	2.63	.792	PASS 75	3.33	.835
PASS 38	2.71	.665	PASS 76	3.31	.832

In Table 3.4, on the basis of pilot testing item analysis was performed to identify internally consistent items. Each item difficulty and discrimination index was computed. Value of Item difficulty refers to the mean score value of each item included in the scale whereas discrimination index is also called as item total correlation that is the correlation of an item with the total score of all items. Item is considered as internally consistent if it has high degree of correlation with the total score (McIver and Carmines, 1981; Dunn-Rankin, 1983; Dinnel & Thompson, 2000). Table 3.5 shows value of difficulty regarding each item and discrimination index. On the basis of the results of pilot study, none of the items was rejected in the adapted version of the PASS Scale and the final scale (PASS) consisted of 76 items, finally used in the study.

Table 3.5

Factor loadings for items in the Academic Procrastination (PASS) Scale

Item No.	Factor Loading					
	Writing a Term Paper	Study for an Exam	Weekly Assignments	Academic Administrativ e Tasks	Attendanc e Tasks	Performing Academic Tasks in General
PASS 1	.585					
PASS 2	.650					
PASS 3	.589					
PASS 4	.656					
PASS 5	.483					
PASS 6		.548				
PASS 7		.687				
PASS 8		.634				
PASS 9		.505				
PASS 10		.616				
PASS 11			.667			
PASS 12			.598			
PASS 13			.509			
PASS 14			.634			
PASS 15			.575			

PASS 16				.589		
PASS 17				.608		
PASS 18				.602		
PASS 19				.563		
PASS 20				.629		
PASS 21					.536	
PASS 22					.519	
PASS 23					.644	
PASS 24					.622	
PASS 25					.630	
PASS 26						.590
PASS 27						.681
PASS 28						.506
PASS 29						.664
PASS 30						.607
Eigen value	1.776	1.809	1.794	1.791	1.754	1.878
%age of Variance	35.530	36.178	35.873	35.817	35.075	37.559

Loading smaller than .3 omitted.

Table 3.5 shows factor loadings for items in the academic procrastination (PASS) Scale. Principal components of factor analysis (with vari-max rotation) were applied to derive the factors. Total six factors merged. Factor loadings of .30 or higher than .30 are presented in the table as per criterion given by Nelson (2005). According to Nelson (2005) criterion, only the items in a research instrument having at least .30 factors loading or higher than .30 would be included in the final instrument. As per criterion none of the items were deleted from the adapted version of the PASS scale as the factor loading values ranged between .483 - .687 that is above .30.

Percentage of variance was 35.530 % for writing a Term Paper, 36.178 % for Study for an Exam, 35.873% for Weekly Assignments, 35.817 % for Academic Administrative Tasks, 35.075 % for Attendance Tasks and 37.559 % for Performing Academic Administrative Tasks in General. Similarly, the Eigen values for six factors of PASS Scale ranged from 1.754 to 1.878.

Table 3.6

Mean, Standard Deviation and Reliability Coefficient of Academic Tasks on Academic Procrastination (PASS) Scale

No. of Items	Mean	Standard Deviation	Cronbach Alpha Reliability Coefficient
30	3.719	.968	0.881

Table 3.6 shows that the overall mean of the six factors was 3.719 and S.D.=.968. The value of Cronbach Alpha Reliability Coefficient was 0.881. The reliability value for a factor of Academic Area on Academic Procrastination (PASS) Scale is above 0.50 as described by De Vellis, (1991). It is, therefore, concluded that the tool can be considered as reliable.

Table 3.7

Mean, Standard Deviation and Reliability Coefficient of Causes of Academic Procrastination (PASS) Scale

No. of Items	Mean	Standard Deviation	Cronbach Alpha Reliability Coefficient
36	2.567	.520	0.966

Table 3.7 shows that the overall mean of the second section of the PASS Scale (Causes of Academic Procrastination) was 2.567 and S. D. = .520. The value of Cronbach Alpha Reliability Coefficient was 0.966. The reliability value for a factor regarding causes of Academic Procrastination on Academic Procrastination Scale PASS is above 0.50 as described by De Vellis (1991). Thus the data supports reliability of the tool.

Table 3.8

Factors with serial numbers in Final Scale (PASS)

Factors	No. of Items	Serial Number in Final Scale
Writing a Term Paper	5	1, 2, 3, 4, 5
Study for an Exam	5	6, 7, 8, 9, 10
Weekly Assignments	5	11, 12, 13, 14, 15
Academic Administrative Tasks	5	16, 17, 18, 19, 20
Attendance Tasks	5	21, 22, 23, 24, 25
Performing Academic Tasks in General	5	26, 27, 28, 29, 30
Evaluation anxiety	2	31, 32
Perfectionism	2	33, 34
Difficulty making decisions	2	35, 36
Dependency and help seeking	2	37, 38
Aversiveness of the task and low frustration tolerance	2	39, 40
Lack of self-confidence	2	41, 42
Laziness	2	43, 44
Lack of assertion	2	45, 46
Fear of success	2	47, 48
Tendency to feel overwhelmed and poorly manage time	2	49, 50
Rebellion against control	2	51, 52
Risk-taking	2	53, 54
Peer Influence	2	55, 56
Lower Level of Motivation	2	57, 58
Socialization	2	59, 60
Pleasure Principle (Pleasant vs. Boring Tasks)	2	61, 62
Fail to prioritize	2	63, 64
Lack of focus	2	65, 66
Students interest in Changing their Level of Academic	10	67, 68, 69, 70, 71,

Table 3.8 shows the factor wise sequence and the number of the statements under each factor in the actual Scale (PASS).

Section I deals with the level of academic procrastination in six academic tasks. Factor I was Writing a Term Paper (Statements 1-5), Factor 2 was Study for an Exam (Statements 6-10), Factor 3 was Weekly Assignments (Statements 11-15), Factor 4 was Academic Administrative Tasks (Statements 16-20), Factor 5 was Attendance Tasks (Statements 21-25) and Factor 6 was Performing Academic Administrative Tasks in general (Statements 25-30).

Section II refers to the cause of academic procrastination. 18 causes were identified having two statements under each cause, Evaluation anxiety (Statements 31-32); Perfectionism (Statements 33-34); Difficulty making decisions (Statements 35-36); Dependency and help seeking (Statements 37-38); Aversiveness of the task and low frustration tolerance (Statements 39-40); Lack of self-confidence (Statements 41-42); Laziness (Statements 43-44); Lack of assertion (Statements 45-46); Fear of success (Statements 47-48); Tendency to feel overwhelmed and poorly manage time (Statements 49-50); Rebellion against control (Statements 51-52); Risk-taking (Statements 53-54); Peer Influence (Statements 55-56); Lower level of motivation (Statements 57-58); Socialization (Statements 59-60); Pleasure Principle (Pleasant vs. Boring Tasks) (Statements 61-62); Fail to prioritize (Statements 63-64); Lack of focus (Statements 65-66).

Section III examines students' interest in changing their level of academic procrastination consisting of ten statements from 67 to 76 in the final form.

Table 3.9

Factor wise and for overall tool, the calculated value of the Cronbach Alpha Reliability Coefficient for pilot test was as under:

Factors	Alpha Reliability Coefficient Value	Mean Correlation with other factors	ANOVA (eta²)
Writing a Term Paper	.543	0.29	0.21*
Study for an Exam	.556	0.25	0.16*
Weekly Assignments	.552	0.34	0.70*
Academic Administrative Tasks	.551	0.19	0.50*
Attendance Task	.535	0.19	0.25*
Performing Academic Tasks in General	.583	0.19	0.07*
Causes of Academic Procrastination	.966	0.47	0.16*
Overall Tool	.974	0.42	0.50*

*p<0.001

In Table 3.9, the reliability values for the academic procrastination in five Academic Tasks were derived. Perusal of the table indicates that causes of academic procrastination are consistently above 0.50. De Vellis (1991) recommended that a research tool is considered as a reliable tool if the factors in a research tool have reliability value above than 0.50.

Fourteen experts were contacted to give their valuable comments about the content of the modified tool. Content Validity Index (CVI) value was 0.69 which is an acceptable value as per the criterion determined by Shultz and Whitney (2005). “A Content Validity Index (CVI) of .51 would be sufficient with 14 Subject Matter Experts (SMEs).”

Semi-structured interview was validated through expert opinion and alignment was ensured between the Procrastination Assessment Scale for Students (PASS). The contents of the interview were based on the variables drawn from review of literature and scholastic experience. The dry run of the expert opinion provided the data and

substance for its validation in the final analysis.

3.6 Data Collection

The data were collected through the modified version of Procrastination Assessment Scale for Students (PASS). It was distributed among selected sample of students followed by personal contacts of the researcher. Semi-structured interviews of the teachers were conducted by the researcher and recorded with the help of audio recorder. Students' achievement in terms of Cumulative Grade Point Average (CGPA) was collected from the department offices.

3.7 Data Analysis

Data were analyzed by using SPSS. At the initial stage, to check and measure the phenomenon of academic procrastination, both positive and negative statements were included in the scale. Academic procrastination is a negative phenomenon so all the positive statements were recorded as negative and the analysis was made by applying the following statistics:

Table 3.10

Statistic Applied for the Analysis of the Research Instruments

Sr. #	Instruments	Statistics	Purpose
1	PASS (Procrastination Assessment Scale for Students)	Mean, T-test, ANOVA, Regression, Pearson Correlation, Percentage, Odd Ratio, Bar Graph	Objective I, II, III, IV and V
2	Students C.G.P.A. (Cumulative Grade Point Average)		
3	Semi-Structure Interview by the Teachers	Common themes were obtained, percentages were calculated and data were presented in the form of tables and graphs. Theme identification is one of the most fundamental tasks in qualitative research as suggested by Ryan and Bernard (2003).	Objective I, II, III, IV and V

3.8 Chapter Overview

This chapter presented the methodology and procedures adopted to achieve the objectives of the study. Furthermore, questionnaire for assessing the students' level of academic procrastination was adapted. The detailed explanation regarding the procedures for adaptation was also described. For qualitative portion, interviews of the faculty members at university level were conducted. The details about the contents of the interview were illustrated. The next chapter presents the details of data analyses with interpretation in tabulated and graphic mode.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis as well as the interpretation of the collected data. Qualitative data were collected through an adapted scale that is Procrastination Assessment Scale for Students (PASS) and semi-structured interviews were conducted for quantitative part of the study. The data were analysed by using SPSS. Various statistical techniques were employed for analysis of quantitative data. They included mean, t-test, ANOVA, regression analysis, Pearson correlation, graphics etc. Five levels (from Low – Extreme) of the responses were determined as articulated in the instrument. Qualitative data were interpreted by thematic approach. The findings of the research were organized and presented in line with the objectives of the study.

4.1 Level of Students' Academic Procrastination under Six Academic Tasks

Question 1-6: What is the Level of Students' Academic Procrastination under six Academic Tasks?

The study identified six academic tasks (Writing a Term Paper, Study for an Exam, Assignment Tasks, Academic Administrative Tasks, Attendance tasks and Performing Academic Tasks) in general. The following section of the analysis would help to determine the level of Students' Academic Procrastination under six academic tasks.

Table 4.1

Level of Students 'Academic Procrastination under Six Academic Tasks

Academic Tasks		Procrastination					Total
		Low	Slight	Moderate	High	Extreme	
Writing a Term Paper	Frequency	2	21	69	246	27	365
	Percentage	0.5	5.8	18.9	67.4	7.4	100
Study For an Exam	Frequency	4	25	84	215	37	365
	Percentage	1.1	6.8	23.0	58.9	10.1	100
Assignment Tasks	Frequency	2	27	72	240	24	365
	Percentage	0.5	7.3	19.7	65.7	6.5	100
Academic Administrative Tasks	Frequency	2	23	76	231	33	365
	Percentage	0.5	6.3	20.8	63.3	9.0	100
Attendance Tasks	Frequency	1	30	77	231	26	365
	Percentage	0.3	8.2	21.1	63.3	7.1	100
Performing Academic Tasks in General	Frequency	1	25	78	227	34	365
	Percentage	0.3	6.8	21.4	62.2	9.3	100
Total	Frequency	12	151	456	1390	181	2190
	Percentage	0.54	6.89	21.82	63.47	8.26	100

Table 4.1 shows the frequency and percentage of the students regarding level of academic procrastination under six academic tasks and overall. Data shows that majority of the students (63.47%) were high procrastinators. In the total sample only 0.54% of the students were low procrastinators. 6.89% students slightly procrastinated their Academic Tasks. Moderate/average procrastinators were 21.82 % whereas 8.26% of the students were at the level of extreme procrastination.

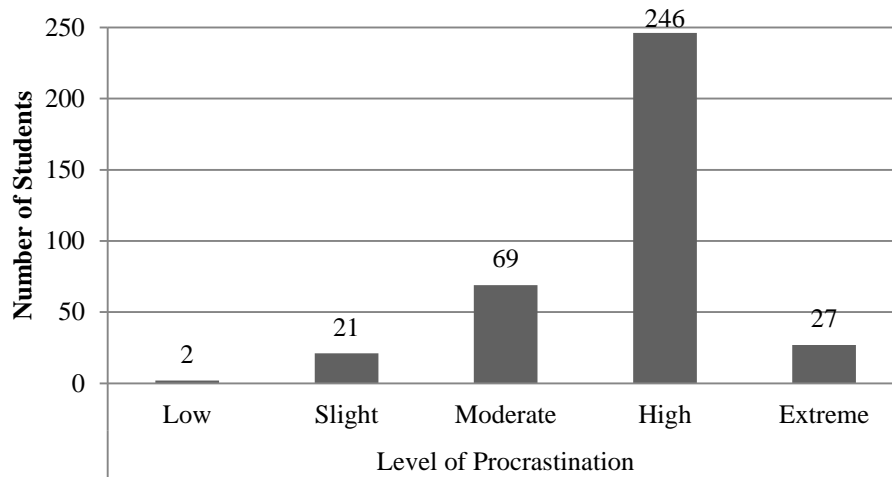


Figure 4.1: Level of Procrastination in Writing a Term Paper

Figure 4.1 shows that in the area of Writing a Term Paper among 365 respondents only 2 students were the low procrastinators, 21 students slightly procrastinated writing their term papers during semester, and 69 students were average procrastinators and the majority, 246 students were the high procrastinators whereas 27 students in the sample were suffering with extreme level of academic procrastination.

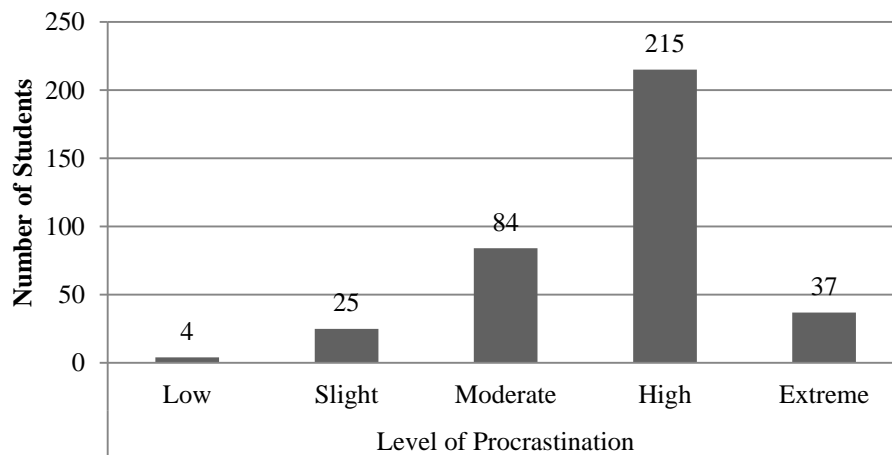


Figure 4.2: Level of Procrastination in Study for an Exam

Figure 4.2 shows that in the area of Study for an Exam, among 365 Students only 4 students were low procrastinators, 25 students slightly procrastinate their studies for exam point of view, 84 students were average procrastinators whereas

majority, 215 students were high procrastinators whereas 37 students in the sample were suffering with extreme level of academic procrastination.

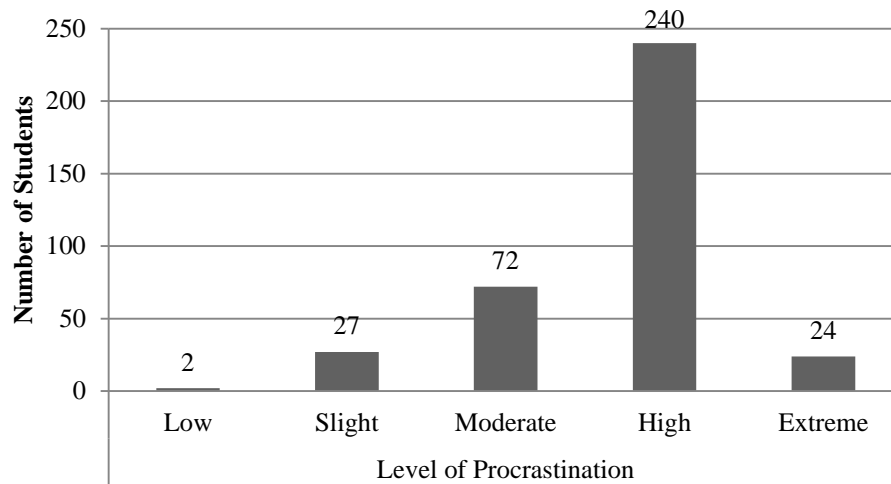


Figure 4.3: Level of Procrastination in Assignment Tasks

Figure 4.3 shows that in the area of Assignment Tasks among 365 students only 2 students were low procrastinators, 27 students slightly procrastinated their assignment tasks, and 72 students were the average procrastinators and the majority, 240 students were the high procrastinators whereas 24 students in the sample were suffering with extreme level of Academic Procrastination.

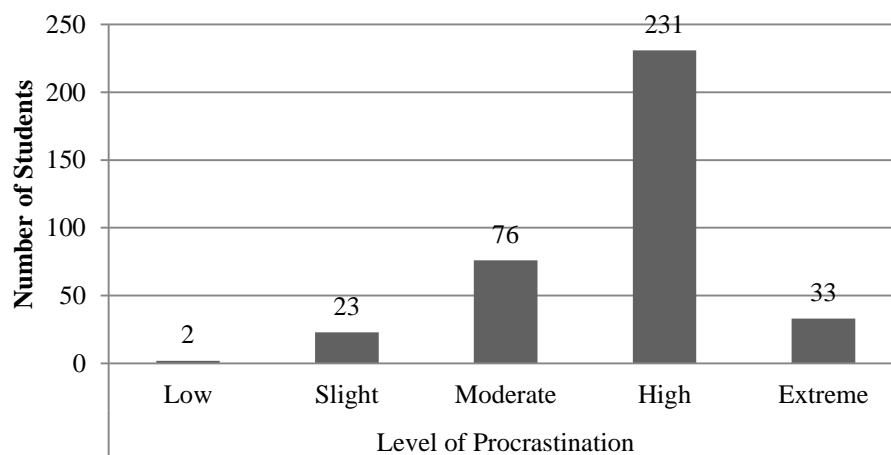


Figure 4.4: Level of Procrastination in performing Academic Administrative Tasks

Figure 4.4 shows that in the area of Academic Administrative Tasks among 365 students only 2 students were low procrastinators, 23 students slightly

procrastinate their Academic Administrative Tasks, and 76 Students were the average procrastinators. A high majority of 231 students were the high procrastinators whereas 33 students in the sample suffered with extreme level of academic procrastination.

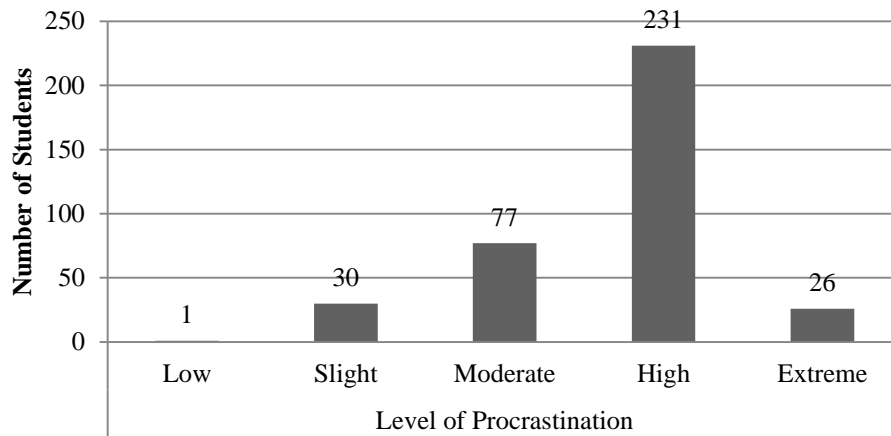


Figure 4.5: Level of Procrastination in Attendance Tasks

Figure 4.5 shows that in the area of attendance among 365 students only 1 case was low procrastinators, 30 students slightly procrastinated and 77 students were the average procrastinators. Moreover, 231 students were the high procrastinators whereas 33 students in the sample suffered with extreme level of academic procrastination.

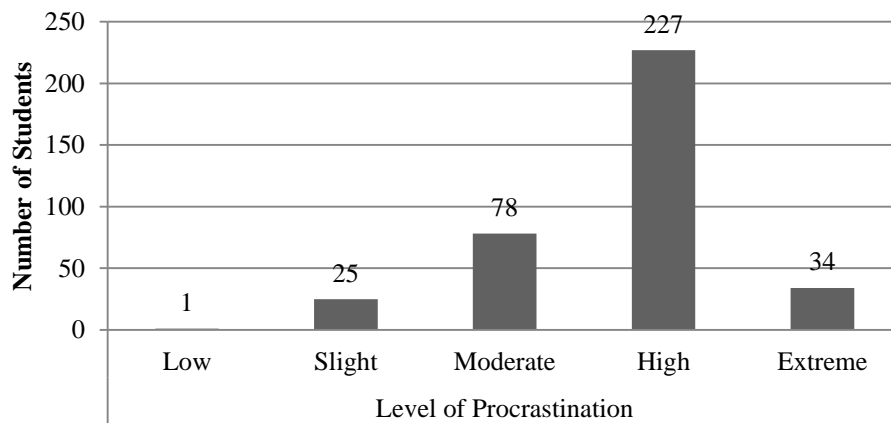


Figure 4.6: Level of Procrastination in Performing Academic Tasks in General

Figure 4.6 shows that while Performing Academic Tasks in General among

365 students only 1 case was the low procrastinators, 25 students slightly procrastinated, 78 Students were the average procrastinators. However, 227 students were the high procrastinators whereas 34 students in the sample suffered with extreme level of academic procrastination.

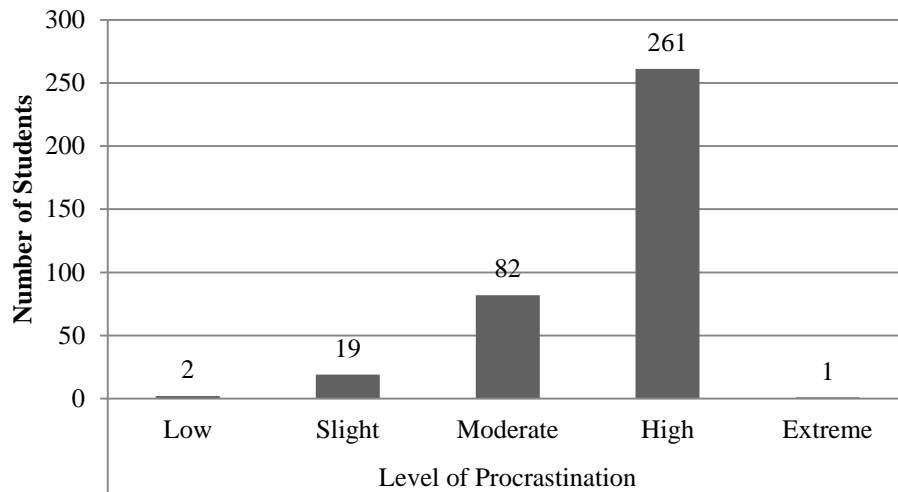


Figure 4.7: Overall level of Procrastination

Figure 4.7 shows that in Overall Academic Tasks among 365 students only 2 cases were the low procrastinators, 19 students slightly procrastinate their Academic Tasks, 82 students were the average procrastinators. Majority, 261 students are the high procrastinators whereas only one case in the sample suffered with extreme level of academic procrastination. In contrast to these findings Mahasneh, Bataineh and Al-Zoubi (2017) have concluded that 67 % undergraduate students were medium level procrastinators. Only 7 % were high procrastinators and 26 % had low level of procrastination.

Teachers Perception about Students Procrastination in Academic Tasks

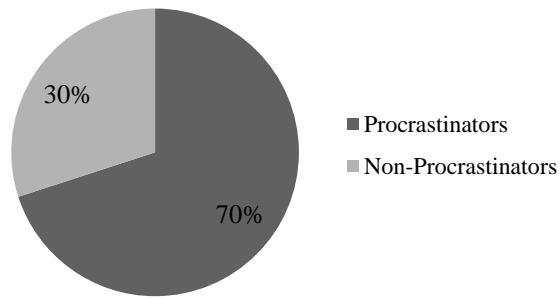


Figure 4.8: Ratio of Academic Procrastination among Students at Higher Education Level

Teachers were of the view that high proportion (70%) of the students' procrastinate their academic tasks; whereas about one third (30%) students were non-procrastinators who perform their academic tasks without any delay and postponement. These findings were endorsed by Wolters (2003), who concluded that everybody experienced procrastination and may suffer by its harms, once or many times of one's life. Day, Mensink and O'Sullivan (2000) called it as a universal phenomenon among the population of students.

Table 4.2

Teachers Perception about the Tendency of Academic Procrastination under Six Identified Academic Tasks

Academic Tasks	Tendency of Procrastination
Writing the Term Paper	70%
Study for an Exam	5%
Keeping up with Assignment Tasks	10%
Performing Academic Administrative Tasks	3%
Attendance Tasks	2%
Performing Academic Tasks in General	10%

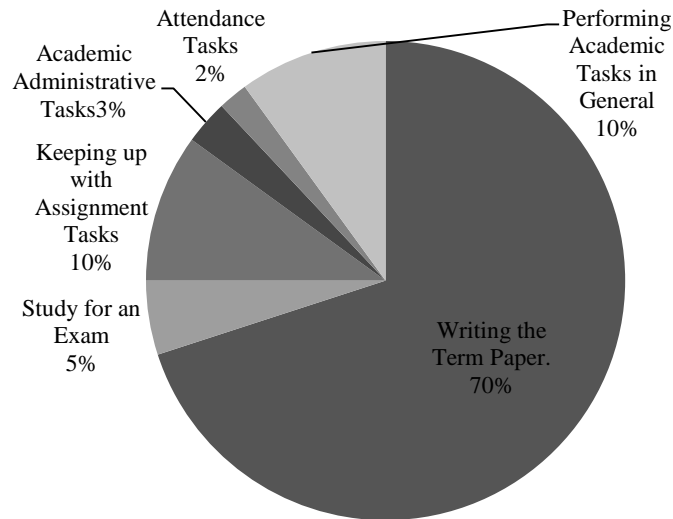


Figure 4.9: Tendency of Academic Procrastination in Six Identified Academic Tasks

Table 4.2 and figure 4.9 show teachers view point. They indicated 70% of the procrastination was in the area of Writing the Term Papers, 5% procrastination was in the area of Study for an Exam, 10 % was in Keeping up with Assignment Tasks, 3 % was in Academic Administrative Tasks, 2 % was in the area of Attendance Tasks. Whereas 10 % was in Performing Academic Tasks in general.

Question 7: To what extent the Students' Academic Procrastination Level differ significantly from average?

Table 4.3

Level of Academic Procrastination

Academic Tasks	Mean	SD	Mean Difference	t-value	p-value
Writing a Term Paper	3.75	0.695	-0.75	103.182	.000***
Study for an Exam	3.70	0.785	-0.70	90.053	.000***
Assignment Tasks	3.70	0.723	-0.70	97.939	.000***
Academic Administrative Tasks	3.74	0.731	-0.74	97.939	.000***
Attendance Tasks	3.69	0.735	-0.69	95.915	.000***
Performing Academic Tasks in General	3.73	0.732	-0.73	97.417	.000***
Overall Procrastination	3.65	0.607	-0.65	115.86	.000***

***p<.01

Table 4.3 presents viewpoint of 365 students. There was a significant difference among students' level of Academic Procrastination from the scale mean score. Under all the six academic tasks, Writing a Term Paper ($t = 103.182, p = .000 < .01$), Study for an Exam ($t = 90.053, p = .000 < .01$), Assignment Tasks ($t = 97.939, p = .000 < .01$), Academic Administrative Tasks ($t = 97.939, p = .000 < .01$), Attendance Tasks ($t = 95.915, p = .000 < .01$), Performing Academic Tasks in General ($t = 97.417, p = .000 < .01$) and with the Overall Level of Academic Procrastination ($t = 115.86, p = .000 < .01$).

Departments were segregated in five Academic tasks: Writing a term Paper (Mean 3.75, S.D. = 0.695), Study for an Exam (Mean 3.70, S.D. = 0.785), Assignment Tasks (Mean 3.70, S.D. = 0.723), Academic Administrative Tasks (Mean 3.74, S.D. = 0.731), Attendance Tasks (Mean 3.69, S.D. = 0.735). In the area of performing Academic Tasks in general (Mean 3.73, S.D. = 0.732) the students are also high procrastinators. Students overall level of procrastination was equally high (Mean 3.65, S.D. = 0.607).

Question 8: To what extent the Male and Female Students' Academic Procrastination Level differ significantly at University Level?

Table 4.4

Gender Wise Difference regarding Academic Procrastination in Six Academic Tasks

Academic Tasks	Male N=184		Female N=181		Mean Deference	t- value	p- value
	Mean	SD	Mean	SD			
Writing a Term Paper	3.74	0.69	3.77	0.70	-0.03	-0.39	0.69
Study for an Exam	3.70	0.81	3.70	0.75	0	-0.00	0.99
Assignment Tasks	3.67	0.74	3.74	0.69	-0.04	-0.95	0.34
Academic Administrative Tasks	3.76	0.78	3.72	0.67	0.04	0.55	0.57
Attendance Tasks	3.71	0.76	3.66	0.70	0.05	0.63	0.52
Performing Academic Tasks in General	3.75	0.71	3.72	0.75	0.03	0.41	0.69
Overall Procrastination	3.64	0.62	3.67	0.58	0.03	-0.51	0.60

Table 4.4, the value of t-test $t = -0.39$ and $p\text{-value} = 0.69 > 0.05$ show no significant difference in the level of procrastination between Male and Female in Writing a Term Paper at 95% level of significance. The Mean Value ($M= 3.74$) shows that majority of Male students at higher education level were high procrastinators in the area of Writing a Term Paper. Similarly the Mean Value ($M= 3.77$) shows that majority of Female students at higher education level constituted high procrastinators in the area of Writing a Term Paper. Thus no gender based significant difference was found in the area of Writing a Term Paper.

The value of t-test $t = -0.00$ and $p\text{-value} = 0.99 > 0.05$ shows no significant difference in the level of procrastination between Male and Female in the area of Study for an Exam (at 95% level of significance). The Mean Value ($M= 3.70$) shows that majority of Male students at higher education level were high procrastinators in the area of Study for an Exam. Similarly the Mean Value ($M= 3.70$) shows that majority of Female students at higher education level held high procrastinators in the area of Study for an Exam. Thus, no gender based significant difference was found in the area of Study for an Exam.

The value of t-test $t = -0.95$ and $p\text{-value} = 0.34 > 0.05$ show no significant difference in the level of procrastination between Male and Female in the area of Assignment Tasks (at 95% level of significance). The Mean Value ($M= 3.67$) shows that majority of Male students at higher education level were high procrastinators in the area of Assignment Tasks. Similarly the Mean Value ($M= 3.74$) shows that majority of Female students at higher education level were also high procrastinators in the area of Study Assignment Tasks. Thus, no gender based significant difference was found in the area of Assignment Tasks.

The value of t-test $t = 0.55$ and $p\text{-value} = 0.57 > 0.05$ show no significant

difference at 95% level of significance for procrastination between Male and Female in the area of Academic Administrative Tasks. The Mean Value ($M= 3.76$) shows that majority of Male students at Higher Education Level were high procrastinators in the area of Academic Administrative Tasks. Similarly the Mean Value ($M= 3.72$) shows that majority of Female students at higher education level were high procrastinators in the area of Academic Administrative Tasks. Thus, no gender based significant difference was found in the area of Academic Administrative Tasks.

The value of t-test $t = 0.63$ and $p\text{-value} = 0.52 > 0.05$ show no significant difference in the level of procrastination between Male and Female in the area of Attendance Tasks at 95% level of significance. The Mean Value ($M= 3.71$) shows that majority of Male students at higher education level were high procrastinators in the area of Attendance Tasks. Similarly the Mean Value ($M= 3.66$) shows that majority of Female students at higher education level were high procrastinators in the area of Attendance Tasks. Thus, no gender based significant difference was found in the area of Attendance Tasks.

The value of t-test $t = 0.41$ and $p\text{-value} = 0.69 > 0.05$ show no significant difference in the level of procrastination between Male and Female in the area of Performing Academic Tasks in General at 95% level of significance. The mean value ($M= 3.75$) shows that majority of Male students at higher education level were high procrastinators in the area of Performing Academic Tasks in General. Similarly the mean value ($M= 3.72$) shows that majority of Female students at higher education level were high procrastinators in the area of Performing Academic Tasks in General. Thus, no gender based significant difference was found in the area of Performing Academic Tasks in General.

The value of t-test $t = -0.51$ and $p\text{-value} = 0.60 > 0.05$ which shows no

significant difference in overall level of procrastination between Male and Female at 95% level of significance. The Mean Value (M= 3.64) shows that majority of Male students at Higher education level were high procrastinators. Similarly the Mean Value (M= 3.67) shows that majority of Female students at higher education level were equally high procrastinators.

These findings were collaborated with the works of Zhang, et al. (2009); and Mahasneh, Bataineh & Al-Zoubi (2017). They found no significant difference among students on gender basis and on grade point level. In contrast, Yong (2010) reported that female students less procrastinate as compare to male students.

Question 9: To what extent the Students’ Academic Procrastination Level differ significantly across departments at University Level?

Table 4.5

Department Wise Difference regarding Academic Procrastination in Six Academic Tasks

Academic Tasks	Source of Variance	Sum of Squares	df	Mean Square	F	Sig.	Effect Size
Writing a Term Paper	Between Groups	0.611	4	0.153	.314	0.869	0.003
	Within Groups	175.197	360	0.487			
	Total	175.808	364				
Study for an Exam	Between Groups	3.457	4	0.864	1.408	0.231	0.015
	Within Groups	220.992	360	0.614			
	Total	224.449	364				
Assignment Tasks	Between Groups	5.933	4	1.483	2.900	0.022**	0.031
	Within Groups	184.111	360	0.511			
	Total	190.044	364				
Academic Administrative Tasks	Between Groups	7.787	4	1.947	3.758	0.005****	0.040
	Within Groups	186.487	360	0.518			
	Total	194.274	364				
Attendance Tasks	Between Groups	5.656	4	1.414	2.669	0.032**	0.029
	Within Groups	190.739	360	0.530			
	Total	196.395	364				
Performing Academic	Between Groups	3.046	4	0.761	1.426	0.225	0.016

Tasks in General	Within Groups	192.176	360	0.534			
	Total	195.222	364				
Overall Procrastination	Between Groups	5.815	4	1.454	4.076	0.003***	0.043
	Within Groups	128.377	360	0.357			
	Total	134.192	364				

p<.05 *p<.01

Table 4.5 shows that there is a significant difference in the Level of Academic Procrastination among students studying five different programs in the area of Assignment Tasks ($F = 30.063$, $p\text{-value}=0.022<0.05$), Academic Administrative Tasks ($F = 3.758$, $p\text{-value}=0.005<0.05$), Attendance Tasks ($F = 0.225$, $p\text{-value}=0.032<0.05$) and overall level of Academic Procrastination ($F = 4.076$, $p\text{-value}=0.003<0.01$) at 95% level of significance.

To estimate the magnitude of the department wise differences in the level of Academic Procrastination, effect sizes were calculated. In Writing a Term Paper (Effect Size = 0.003), Study for an Exam (Effect Size = 0.015), and Performing Academic Tasks in General (Effect Size = 0.016). The effect sizes were below 0.25, which indicated small effect size and in the areas of Assignment Tasks (Effect Size = 0.031), and Attendance Tasks (Effect Size = 0.029), the effect sizes were above 0.25 and below 0.40 which indicated Medium effect Size whereas in Academic Administrative Tasks (Effect Size = 0.040) and in the overall Academics (Effect Size = 0.043) the calculated effect sizes were above 0.40 which indicated large effect size as per Cohen's (1988) criterion.

Table 4.6

*Post Hoc Tests for Multiple Comparisons of Level of Academic Procrastination Six**Academic Tasks among Departments*

Academic Tasks	Program	Mean	SD	Mean Deference	Sig.
Study for an Exam	Department of Education	3.82	0.672	-0.284	0.032**
	Department of Political Science	3.54	0.734		
Assignment Tasks	Department of Sociology	3.58	0.755	-0.286	0.009***
	Department of Education	3.87	0.650		
	Department of Education	3.87	0.650	0.346	0.004***
	Department of Political Science	3.52	0.789		
Academic Administrative Tasks	Department of Psychology	3.82	0.627	0.259	0.032**
	Department of Sociology	3.57	0.776		
	Department of Psychology	3.82	0.627	0.304	0.021**
	Department of Political Science	3.52	0.789		
	Department of Sociology	3.57	0.776	-0.326	0.003***
	Department of Education	3.89	0.648		
	Department of Political Science	3.52	0.789	-0.371	0.002***
	Department of Education	3.89	0.648		
Attendance Tasks	Department of Sociology	3.51	0.851	-0.333	0.003***
	Department of Education	3.84	0.689		
	Department of Education	3.84	0.689	0.260	0.035**
	Department of Political Science	3.58	0.731		
Performing Academic Tasks in General	Department of Education	3.83	0.542	0.301	0.023**
	Department of Political Science	3.54	0.885		
Overall Procrastination	Department of Psychology	3.69	0.618	0.250	0.023**
	Department of Political Science	3.44	0.611		
	Department of Sociology	3.53	0.631	-0.262	0.004***
	Department of Education	3.80	0.530		
	Department of Education	3.80	0.530	0.358	0.000***
	Department of Political Science	3.44	0.611		

p<.05, *p<.01, *p< 0.1

Table 4.6, Post Hoc LSD test for multiple comparisons indicates that students of Department of Education showed high level of Academic Procrastination (M =

3.82, S. D. = 0.672) in the area of Study for an Exam as compared to the students of the Department of Political Science (M = 3.54, S. D. = 0.734), and the mean difference (-0.284) was significant at 95% level of significance.

Students of Departments of Education held high level of Academic Procrastination (M = 3.87, S. D. = 0.650) in the Area of Assignment Tasks as compared to the students of the Department of Sociology (M = 3.58, S. D. = 0.755) and the mean difference (-0.286) is significant at 95% level of significance. The Students of Department of Education had High level of Academic Procrastination (M = 3.87, S. D. = 0.650) in the Area of Assignment Tasks as compared to the students of the Department of Political Science (M = 3.52, S. D. = 0.789) and the Mean Difference (0.346) was significant at 95% level of significance.

Students of Departments of Psychology had high level of Academic Procrastination (M = 3.82, S. D. = 0.627) in Academic Administrative Tasks as compared to the students of the Department of Sociology (M = 3.57, S. D. = 0.776) and the mean difference (0.259) is significant at 95% level of significance. Students of Departments of Psychology had high level of Academic Procrastination (M = 3.82, S. D. = 0.627) in Academic Administrative Tasks as compared to the students of the Department of Political Science (M = 3.52, S. D. = 0.789) and the mean difference (-0.304) is significant at 95% level of significance. Students of Departments of Education had high level of Academic Procrastination (M = 3.89, S. D. = 0.648) in Academic Administrative Tasks as compared to the students of the Department of Sociology (M = 3.57, S. D. = 0.776) and the Mean Difference (-0.326) is Significant at 95% level of significance. Students of Departments of Education had high level of Academic Procrastination (M = 3.89, S. D. = 0.648) in Academic Administrative Tasks as compared to the students of the Department of Political Science (M = 3.52,

S. D. = 0.789) and the Mean Difference (-0.371) was significant at 95% level of significance.

Students of Departments of Education had high level of Academic Procrastination (M = 3.84, S. D. = 0.689) in Attendance Tasks as compared to the students of the Department of Sociology (M = 3.51, S. D. = 0.851) and the Mean Difference (-0.333) was significant (at 95% level of significance). Students of Departments of Education had high level of Academic Procrastination (M = 3.84, S. D. = 0.689) in Attendance Tasks as compared to the students of the Department of Political Science (M = 3.58, S. D. = 0.731), and the mean difference (0.260) was significant at 95% level of significance.

Students of Departments of Education had high level of Academic Procrastination (M = 3.83, S. D. = 0.542) in Performing Academic Tasks in General as compared to the students of the Department of Political Science (M = 3.54, S. D. = 0.885) and the Mean Difference (0.301) was Significant at 95% level of significance.

Students of Departments of Psychology had high level of Academic Procrastination as compared to the students (M = 3.69, S. D. = 0.618) of the Department of Political Science (M = 3.44, S. D. = 0.611) and the Mean Difference (0.250) was significant at 95% level of significance. Students of Departments of Education had high level of Academic Procrastination (M = 3.80, S. D. = 0.530) as compared to the students of the Department of Sociology (M = 3.53, S. D. = 0.631) and the Mean Difference (-0.262) was significant at 95% level of significance. Students of Departments of Education had high level of Academic Procrastination (M = 3.80, S.D. = 0.530) as compared to the students of the Department of Political Science (M=3.44, S. D. = 0.611) and the mean difference (0.358) was significant at 95% level of significance.

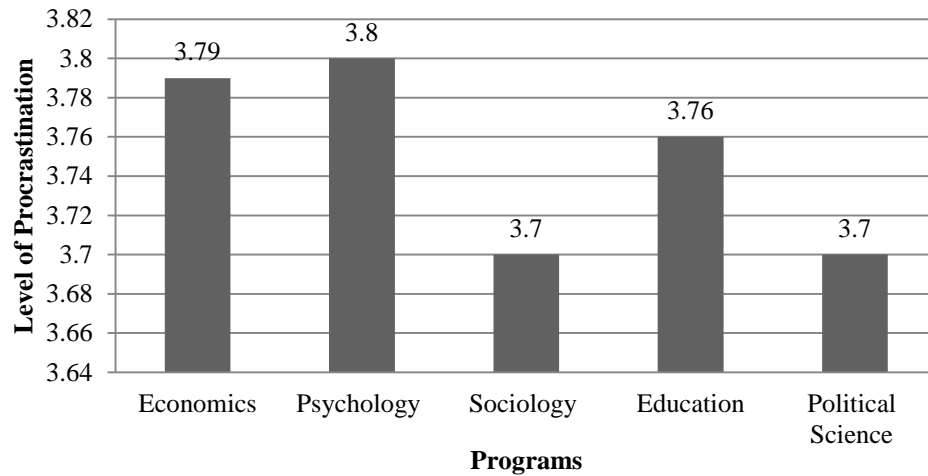


Figure 4.10: Comparison of Academic Programs and Students' Level of Academic Procrastination in Writing a Term Paper

Figure 4.10 reflects that students of all the five departments were high procrastinators in Writing their Term Papers but comparatively students from the Department of Psychology were the most procrastinators than Department of Economics and Education respectively. Students from the Department of Political Science and Department of Sociology were less Procrastinators in comparison with the other Departments in Writing their Term Papers.

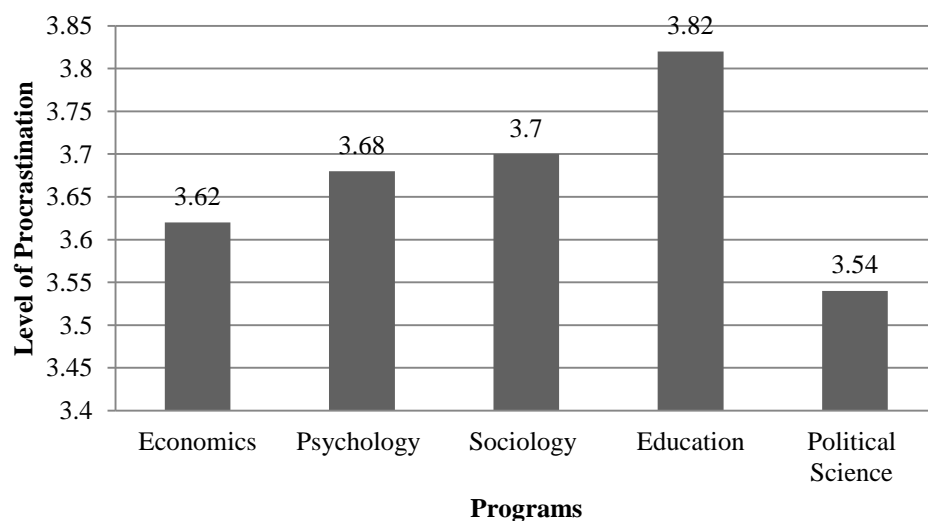


Figure 4.11: Comparison of Academic Programs and Students' Level of Academic Procrastination in Study for an Exam

Figure 4.11 shows that students of all the five departments were high procrastinators in Study for an Exam but relatively students from the Department of Education were the most procrastinators than Department of Sociology, Psychology and Economics respectively. Students from the Department of Political Science were less procrastinators in comparison with the other Departments in the area of Study for an Exam.

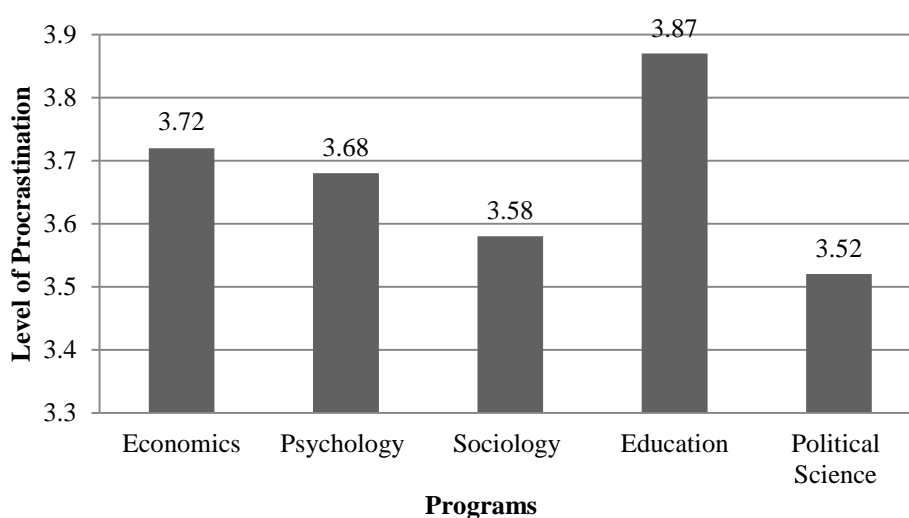


Figure 4.12: Comparison of Academic Programs and Students' Level of Academic Procrastination in Assignment Tasks

Figure 4.12 depicts that students of all the five departments were high procrastinators in their Assignment Tasks but comparatively students from the Department of Education were the most procrastinators than Department of Economics, Psychology and Sociology respectively. Students from the Department of Political Science were less procrastinators in comparison with the students from other Departments in their Assignment Tasks.

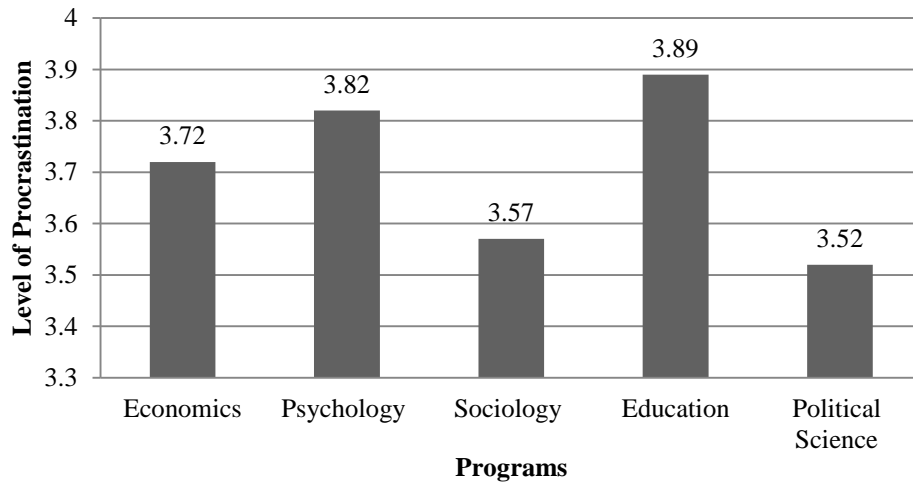


Figure 4.13: Comparison of Academic Programs and Students' Level of Academic Procrastination in Academic Administrative Tasks

Figure 4.13 illustrates that students of all the five departments were high procrastinators in Academic Administrative Tasks but comparatively students from the department of Education were the most procrastinators than Department of Psychology, Economics and Sociology respectively. Students from the Department of Political Science were less procrastinators in comparison with the other Departments in Academic Administrative Tasks.

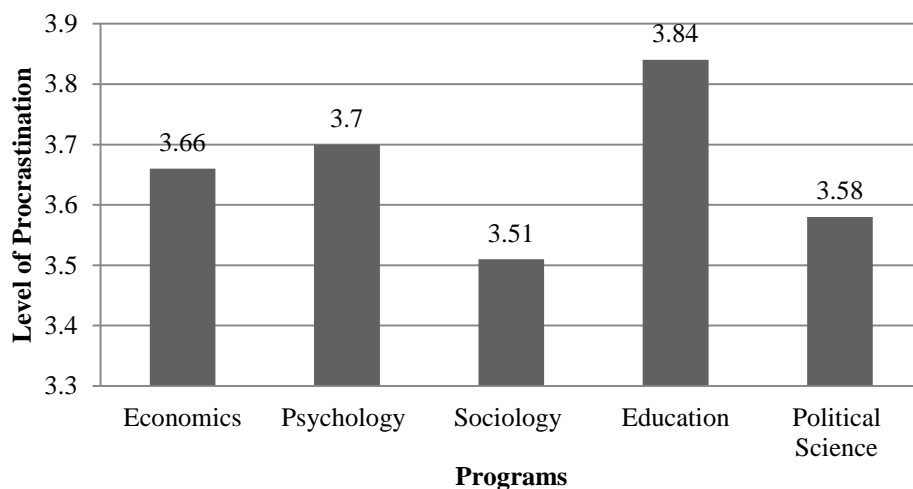


Figure 4.14: Comparison of Academic Programs and Students' Level of Academic Procrastination in Attendance Tasks

Figure 4.14 shows that students of all the five departments were high procrastinators in Attendances Tasks but comparatively students from the Department of Education were the most procrastinators than Department of Psychology, Economics and Political Science respectively. Students from the Department of Sociology were less procrastinators in comparison of the other departments in their Attendance Tasks.

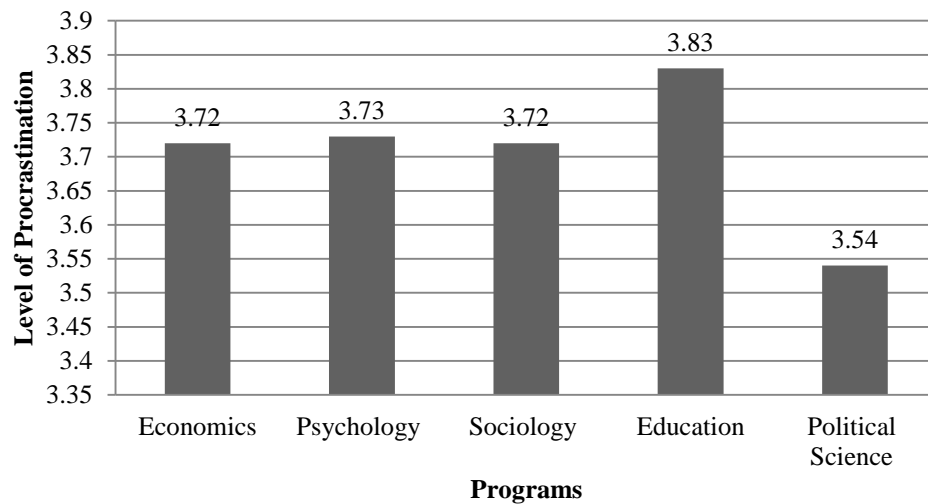


Figure 4.15: Comparison of Academic Programs and Students' Level of Academic Procrastination in Performing Academic Tasks in General

Figure 4.15 shows that students of all the five departments were high procrastinators in performing their Academic Tasks in General but comparatively students from the Department of Education were the most procrastinators than Department of Sociology, Psychology and Economics respectively. Students from the Department of Political Science were less procrastinators in comparison with the other Departments in performing their Academic Tasks in General.

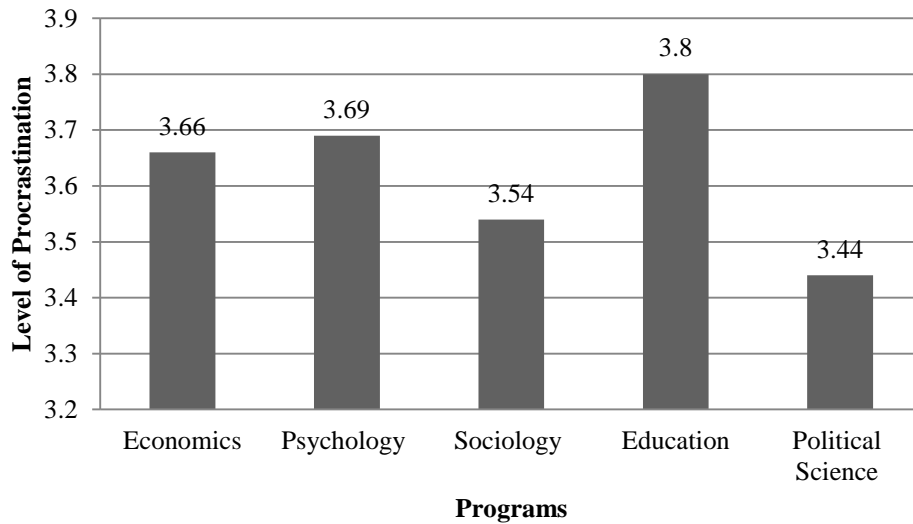


Figure 4.16: Comparison of Academic Programs and Students' Level of Academic Procrastination

Figure 4.16 illustrates that students from all the five departments were high procrastinators but comparatively students from the Department of Education were the most procrastinators than Department of Psychology, Economics and Sociology respectively. Students from the Department of Political Science were less procrastinators in comparison with the other departments.

Question 10: To what extent the Students' Academic Procrastination Level differ significantly among Low, Average and High Achievers?

Students were divided in three groups: Low, Average and High Achievers in terms of their Cumulative Grade Point Average (CGPA).

Table 4.7:

Grouping of students on the basis of Cumulative Grade Point Average (CGPA.)

CGPA	Group status
2.50 - 3.00	Low Achievers
3.01 - 3.50	Average Achievers
3.51 - 4.00	High Achievers

Table 4.7 shows that the students with 2.50 - 3.00 CGPA were regarded as Low Achievers and the students with 3.01 - 3.50 CGPA were considered as Average Achievers whereas the students with 3.51 - 4.00 CGPA merited as High Achievers.

Table 4.8

Comparison Regarding Areas of Academic Procrastination and Academic Achievement

Academic Tasks	Source of Variance	Sum of Squares	df	Mean Square	F	Sig.	Effect Size
Term Paper	Between Groups	18.139	2	9.069	20.823	0.000***	0.103
	Within Groups	157.669	362	.436			
	Total	175.808	364				
Study for an Exam	Between Groups	23.182	2	11.591	20.848	0.000***	0.103
	Within Groups	201.267	362	.556			
	Total	224.449	364				
Assignment Tasks	Between Groups	16.291	2	8.145	16.970	0.000***	0.086
	Within Groups	173.753	362	.480			
	Total	190.044	364				
Academic Administrative Tasks	Between Groups	19.297	2	9.649	19.961	0.000***	0.099
	Within Groups	174.977	362	.483			
	Total	194.274	364				
Attendance Tasks	Between Groups	8.629	2	4.314	8.318	0.000***	0.044
	Within Groups	187.766	362	.519			
	Total	196.395	364				
Performing	Between Groups	15.354	2	7.677	15.450	0.000***	0.079
	Within Groups						

Academic Tasks in General	Within Groups	179.868	362	.497			
	Total	195.222	364				
Overall Procrastination	Between Groups	31.990	2	15.995	56.653	0.000***	0.238
	Within Groups	102.202	362	.282			
	Total	134.192	364				

***p<.01

Table 4.8 shows that there is a significant difference in the level of Academic Procrastination in the area of Writing a Term Paper and Academic Achievement with $F = 20.82$ at 95% level of significance ($p\text{-value}=0.000<0.01$). Significant difference in the level of Academic Procrastination in the area of study for an exam and students' Academic Achievement was found with $F = 20.848$ at 95% level of significance ($p\text{-value}=0.000<0.01$). Significant difference in the level of Academic Procrastination in the area of Assignment Tasks and students' Academic Achievement was found with $F = 16.970$ at 95% level of significance ($p\text{-value}=0.000<0.01$).

Significant difference in the level of Academic Procrastination in the area of Academic Administrative Tasks and students' Academic Achievement was found with $F = 19.961$ at 95% level of significance ($p\text{-value}=0.000<0.01$). Significant difference in the level of Academic Procrastination in the area of Attendance Tasks and Students' Academic Achievement was found with $F = 8.318$ at 95% level of significance ($p\text{-value}=0.000<0.01$). Significant difference in the level of Academic Procrastination in performing Academic Tasks in general and Students' Academic Achievement was found with $F = 15.450$ at 95% level of significance ($p\text{-value}=0.000<0.01$). Significant difference in the level of Academic Procrastination and Students' Academic Achievement was found with $F = 56.653$ at 95% level of significance ($p\text{-value}=0.000<0.01$).

To estimate the magnitude of the differences between the level of Academic Procrastination and Academic Achievement, effect sizes were calculated. In writing a

Term Paper (0.103) and study for an Exam (0.103) the effect sizes were medium whereas in the other four Academic Tasks Assignment Tasks (0.086), Academic Administrative Tasks (0.099), Attendance Tasks (0.044) and in Performing Academic Tasks in General (0.079) the effect sizes were small and in overall academic Procrastination (0.238) the effect size was regarded as medium as per by Cohen's (1988) criterion.

Table 4.9

Post Hoc Tests for Multiple Comparisons of Academic Procrastination in Writing a Term Paper and Academic Achievement

Academic Tasks	Achievement Group	Mean	SD	Mean Deference	Sig.
Writing a Term Paper	Low Achievers	3.45	0.783	-0.447	.001***
	Average Achievers	3.90	0.564		
	Low Achievers	3.45	0.783	-0.599	.684
	High Achievers	3.39	0.876		
	Average Achievers	3.90	0.564	-0.506	.000***
	High Achievers	3.39	0.876		

p<.05, *p<.01

In Table 4.9, Post Hoc LSD test for Multiple Comparisons indicates that Average Achievers (M = 3.90, S.D. = 0.564) tend to be high procrastinators as compared to Low Achievers (M = 3.45, S.D. = 0.783), in Writing a Term Paper and the mean difference (-0.447) is significant at 95% level of significance. No significant difference was found between Low Achievers (Mean 3.45, S.D. 0.783) and High Achievers (M= 3.39, S.D. = 0.876) in Writing a Term Paper. Average achievers (M = 3.90, S.D. = 0.564) seemed high procrastinators as compared to High Achievers (M = 3.39, S.D. = 0.876), in Writing a Term Paper and the mean difference (-0.506) is Significant at 95% level of significance.

Table 4.10

Post Hoc Tests for Multiple Comparisons of Academic Procrastination in Study for an Exam and Academic Achievement

Academic Tasks	Achievement Group	Mean	SD	Mean Deference	Sig.
	Low Achievers	3.52	0.688		
	Average Achievers	3.86	0.681	-0.34	0.020**
Study for an Exam	Low Achievers	3.52	0.688		
	High Achievers	3.25	0.948	0.27	0.097*
	Average Achievers	3.86	0.681		
	High Achievers	3.25	0.094	0.61	0.000***

*p<0.1, **p<.05, ***p<.01

In Table 4.10, Post Hoc LSD test for Multiple Comparisons indicates that Average Achievers (Mean 3.86, S.D = 0.681) were high procrastinators as compared to Low Achievers (M = 3.42, S.D. = 0.688), in Study for an Exam and the mean difference (-0.44) was significant at 95% level of significance. Significant difference was found between Low Achievers (M = 3.42, S.D. = 0.688) and High Achievers (M = 3.25, S.D. = 0.948) in study for an Exam. Average Achievers (Mean 3.86, S.D 0.681) were high procrastinators as compared with High Achievers (M = 3.25, S.D. = 0.09) in study for an Exam and the mean difference (-0.61) was significant at 95% level of significance.

Table 4.11

Post Hoc Tests for Multiple Comparisons of Academic Procrastination in Assignment Tasks and Academic Achievement

Academic Tasks	Achievement Group	Mean	SD	Mean Deference	Sig.
Assignment Tasks	Low Achievers	3.72	0.841	-0.098	0.469
	Average Achievers	3.82	0.609		
	Low Achievers	3.72	0.841	-0.425	0.005***
	High Achievers	3.30	0.875		
	Average Achievers	3.82	0.609	-0.524	0.000***
	High Achievers	3.30	0.875		

p<.05, *p<.01, *p<0.1

In Table 4.11, Post Hoc LSD test for multiple comparisons indicates that Average Achievers (M = 3.82, S.D. = 0.609) and Low Achievers (M = 3.72, S.D. = 0.841) are High procrastinators in Assignment Tasks. Low Achievers (M = 3.72, S.D. = 0.841) were high procrastinators as compared with High Achievers (M = 3.30, S.D. = 0.875) in weekly assignment and the mean difference (-0.425) was significant at 95% level of significance. Average Achievers (M = 3.82, S.D. = 0.609) were high procrastinators as compared with High Achievers (M = 3.30, S.D. = 0.875), in Assignment Tasks and the mean difference (-0.524) was significant at 95% level of significance.

Table 4.12

Post Hoc Tests for Multiple Comparisons of Academic Procrastination in Academic Administrative Tasks and Academic Achievement

Academic Tasks	Achievement Group	Mean	SD	Mean Deference	Sig.
Academic Administrative Tasks	Low Achievers	3.76	0.689	-0.110	0.419
	Average Achievers	3.87	0.596		
	Low Achievers High Achievers	3.76 3.30	0.689 0.961	0.460	0.003***
	Average Achievers High Achievers	3.87 3.30	0.596 0.961	0.570	.000***

*p<0.1, **p<.05, ***p<.01

In Table 4.12, Post Hoc LSD test for Multiple Comparisons indicates that no significant difference was found between Low Achievers (M = 3.76, S.D. = 0.689) and Average Achievers (M = 3.87, S.D. = 0.596) in Academic Administrative Tasks. Low Achievers (M = 3.76, S.D. = 0.689) were high procrastinators as compared to High Achievers (M = 3.30, S.D. = 0.961), in Academic Administrative Tasks and the mean difference (0.460) is Significant at 95% level of significance. Average Achievers (M = 3.87, S.D. = 0.596) were high procrastinators as compared with High Achievers (M = 3.30, S.D. = 0.961), in Academic Administrative Tasks and the mean difference (0.570) was significant at 95% level of significance.

Table 4.13

Post Hoc Tests for Multiple Comparisons of Academic Procrastination in Attendance Tasks and Academic Achievement

Academic Tasks	Achievement Group	Mean	SD	Mean Deference	Sig.
Attendance Tasks	Low Achievers	3.55	0.827	-0.232	0.101
	Average Achievers	3.78	0.664		
	Low Achievers	3.55	0.827	0.368	0.000***
	High Achievers	3.42	0.848		
	Average Achievers	3.78	0.664	-0.490	0.002***
	High Achievers	3.42	0.848		

*p<0.1, **p<.05, ***p<.01

In Table 4.13, Post Hoc LSD test for Multiple Comparisons indicates that no significant difference was found between Low Achievers (M = 3.55, S.D. = 0.827) and Average Achievers (M = 3.78, S.D. = 0.664) in Attendance Tasks. Low Achievers (M = 3.55, S.D. = 0.827) were high procrastinators as compared with High Achievers (M = 3.42, S.D. = 0.848), in Attendance Tasks and the mean difference (.368) is significant at 95% level of significance. Average Achievers (M = 3.78, S.D. = 0.664) were high procrastinators as compared with High Achievers (M = 3.42, S.D. = 0.848), in Attendance Tasks and the mean difference (-0.490) was significant at 95% level of significance.

Table 4.14

Post Hoc Tests for Multiple Comparisons of Academic Procrastination in Performing Academic Tasks in General and Academic Achievement

Academic Tasks	Achievement Group	Mean	SD	Mean Deference	Sig.
Performing Academic Tasks in General	Low Achievers	3.83	0.848	-0.014	0.910
	Average Achievers	3.84	0.649		
	Low Achievers	3.83	0.848	0.490	0.002***
	High Achievers	3.34	0.821		
	Average Achievers	3.84	0.649	0.504	0.000***
	High Achievers	3.34	0.821		

*p<0.1, **p<.05, ***p<.01

In Table 4.14, Post Hoc LSD test for Multiple Comparisons indicates that No Significant Difference was found between Low Achievers (M = 3.83, S.D. = 0.848) and Average Achievers (M = 3.84, S.D. = 0.649) in Performing Academic Tasks in General. Low Achievers (Mean = 3.83, S.D. = 0.848) were high procrastinators as compared with High Achievers (M = 3.34, S.D. = 0.821), in Performing Academic Tasks in General and the mean difference (0.490) was Significant at 95% level of significance. Average Achievers (M = 3.84, S.D. = 0.649) were high procrastinators as compared with High Achievers (M = 3.34, S.D. = 0.821), in Performing Academic Tasks in General and the mean difference (0.504) was significant at 95% level of significance.

Table 4.15

Post Hoc Tests for Multiple Comparisons of Academic Procrastination and Academic Achievement

Academic Tasks	Achievement Group	Mean	SD	Mean Deference	Sig.
Overall Procrastination	Low Achievers	3.55	0.572	-0.282	0.007***
	Average Achievers	3.83	0.383		
	Low Achievers	3.55	0.572	0.447	0.000***
	High Achievers	3.10	0.852		
	Average Achievers	3.83	0.383	0.730	0.000***
	High Achievers	3.10	0.572		

*p<0.1, **p<.05, ***p<.01

In Table 4.15, Post Hoc LSD test for Multiple Comparisons indicates that Average Achievers (M = 3.83, S.D. = 0.383) were high procrastinators as compared with Low Achievers (M = 3.55, S.D. = 0.572), and the mean difference (-0.282) was significant at 95% level of significance. Low Achievers (M = 3.55, S.D. = 0.572) were high procrastinators as compared with High Achievers (M = 3.10, S.D. = 0.852), and the mean difference (0.447) was significant at 95% level of significance. Average Achievers (M = 3.83, S.D. = 0.383) were high procrastinators as compared with High Achievers (M = 3.10, S.D. = 0.572), and the mean difference (0.730) was significant at 95% level of significance.

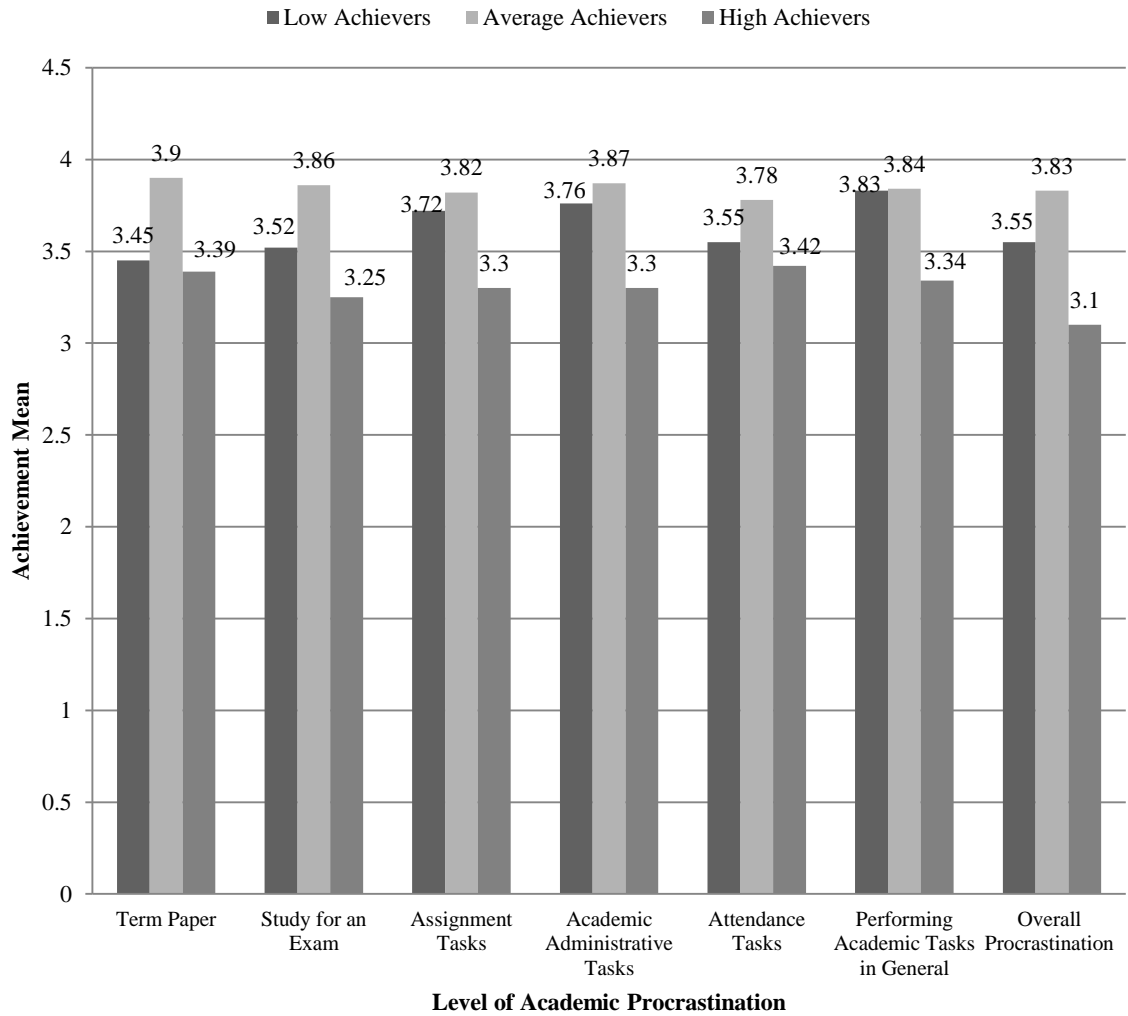


Figure 4.17: Level of Academic Procrastination and Academic Achievement Groups

Figure 4.17 reflects that average students were high procrastinators in all the six Academic Tasks and in overall procrastination. Low Achievers were at second number and Higher Achievers students' level of Academic Procrastination was comparatively low then both of the other groups (Low and High Achievers). Popoola (2005) also concluded that high achievers were comparatively less procrastinators.

4.2 Causes of Students Academic Procrastination

Question 11: To what extent the Causes for Academic Procrastination predict students Academic Procrastination at University Level?

Table 4.16

Cause of Academic Procrastination

Factors of Academic Procrastination	Pearson Correlation (r)	Sig. (2-tailed)	B	Sig. (2-tailed)
Evaluation Anxiety	0.297	0.000***	0.231	0.105
Perfectionism	0.276	0.000***	0.158	0.245
Difficulty making Decision	0.228	0.000***	0.009	0.782
Dependency and Help Seeking	0.652	0.000***	0.706	0.040*
Aversiveness of the Task and Low Frustration Tolerance	0.658	0.000***	0.469	0.182
Lack of Self-Confidence	0.697	0.000***	0.020	0.767
Laziness	0.266	0.000***	0.074	0.148
Lack of Assertion	0.145	0.000***	0.049	0.106
Fear of Success	0.270	0.000***	0.084	0.100
Tendency to Feel Overwhelmed and Poorly Manage Time	0.700	0.000***	0.016	0.814
Rebellion against Control	0.708	0.000***	0.120	0.088
Risk-Taking	0.515	0.000***	0.143	0.049*
Peer Influence	0.505	0.000***	0.024	0.714
Low Level of Motivation	0.522	0.000***	0.056	0.444
Socialization	0.781	0.000***	0.175	0.012*
Pleasant Verses Boring Task	0.786	0.000***	0.219	0.003**
Fail to Prioritize	0.786	0.000***	0.206	0.002**
Lack of Focus	0.808	0.000***	0.354	.000***
Multiple Correlation R	0.862	0.000***		
R ²	0.743			

*p<0.1, **p<.05, ***p<.01

In Table 4.16, Pearson Correlation values depict that all the factors had significant positive correlation Evaluation Anxiety (r = .297, p-value = 0.000 <.001), Perfectionism (r = 0.276, p-value = 0.000 <.001), Difficulty Making Decisions (r = 0.228 , p-value = 0.000 <.001), Dependency and Help Seeking (r = 0.652, p-value = 0.000<.001), Aversiveness of the Task and Low Frustration Tolerance (r = 0.658 , p-value = 0.000<.001), Lack of Self-Confidence (r = 0.697, p-value = 0.000<.001), Laziness (r = 0.266, p-value = 0.000<.001), Lack of Assertion (r = 0.145, p-value =

0.000<.001), Fear of Success ($r = 0.270$, $p\text{-value} = 0.000<.001$), Tendency to Feel Overwhelmed and Poorly Manage Time ($r = 0.700$, $p\text{-value} = 0.000<.001$), Rebellion Against Control ($r = 0.708$, $p\text{-value} = 0.000<.001$), Risk- Taking ($r = 0.515$, $p\text{-value} = 0.000<.001$), Peer Influence ($r = 0.505$, $p\text{-value} = 0.000<.001$), Lower Level of Motivation ($r = 0.522$, $p\text{-value} = 0.000<.001$), Socialization ($r = 0.781$, $p\text{-value} = 0.000<.001$), Pleasant Verses Boring Tasks ($r = 0.786$, $p\text{-value} = 0.000<.001$), Fail to Prioritize ($r = 0.786$, $p\text{-value} = 0.000<.001$), Lack of Focus($r = 0.808$, $p\text{-value} = 0.000<.001$) with Academic Procrastination. Moreover, it reflects that increase in any of these factors would increase the level of academic procrastination. Similarly decrease in any of these factors will minimize the level of academic procrastination. Correlation was significant at 95% level of significance.

The standardized regression weights indicate that six factors Dependency and Help Seeking ($\beta 0.706$, $p\text{-value} = 0.040<0.05$), Risk-Taking ($\beta 0.143$, $p\text{-value} = 0.049 < 0.05$), Socialization ($\beta 0.175$, $p\text{-value} = 0.012 < 0.05$), Pleasant Verses Boring Tasks ($\beta 0.219$, $p\text{-value} = 0.003 < 0.01$), Fail to Prioritize ($\beta 0.206$, $p\text{-value} = 0.002 < 0.01$), (also studied by Noran 2000), Lack of Focus ($\beta 0.354$, $p\text{-value} = < 0.05$) were statistically significant whereas rest of the factors Evaluation Anxiety ($\beta 0.231$, $p\text{-value}=0.105$), Perfectionism ($\beta 0.158$, $p\text{-value}=0.245$), Difficulty Making Decisions ($\beta 0.009$, $p\text{-value}=0.782$), Aversiveness of the Task and Low Frustration Tolerance ($\beta 0.469$, $p\text{-value}=0.182$), Lack of Self-Confidence ($\beta 0.020$, $p\text{-value} = 0.767$), Laziness ($\beta 0.074$, $p\text{-value} = 0.148$), Lack of Assertion ($\beta 0.049$, $p\text{-value} = 0.106$), Fear of Success ($\beta 0.084$ $p\text{-value} = 0.100$),Tendency to Feel Overwhelmed and Poorly Manage Time ($\beta 0.016$, $p\text{-value}= 0.814$), Rebellion Against Control ($\beta 0.120$, $p\text{-value} = 0.088$), Peer Influence ($\beta 0.024$, $p\text{-value} = 0.714$), Lower Level of Motivation ($\beta 0.056$, $p\text{-value} = 0.444$) were statistically insignificant.

The Multiple Correlation ($R = 0.862$) significant at 95% level of significance and R^2 value suggests that indentified 18 causes were contributing 74% in students' Academic Procrastination.

Table 4.17

Teachers Perception about the Causes of Academic Procrastination at Higher Education Level

Causes of Procrastination	Percentage of the Respondents
Socialization	80
Dependency	78
Poor Time Management	75
Lack of Focus	65
No Check and Balance from Parents	60
Leniency of the Teachers	58
Not clear about the Goals	40
Carelessness	30
Lack of Motivation	27

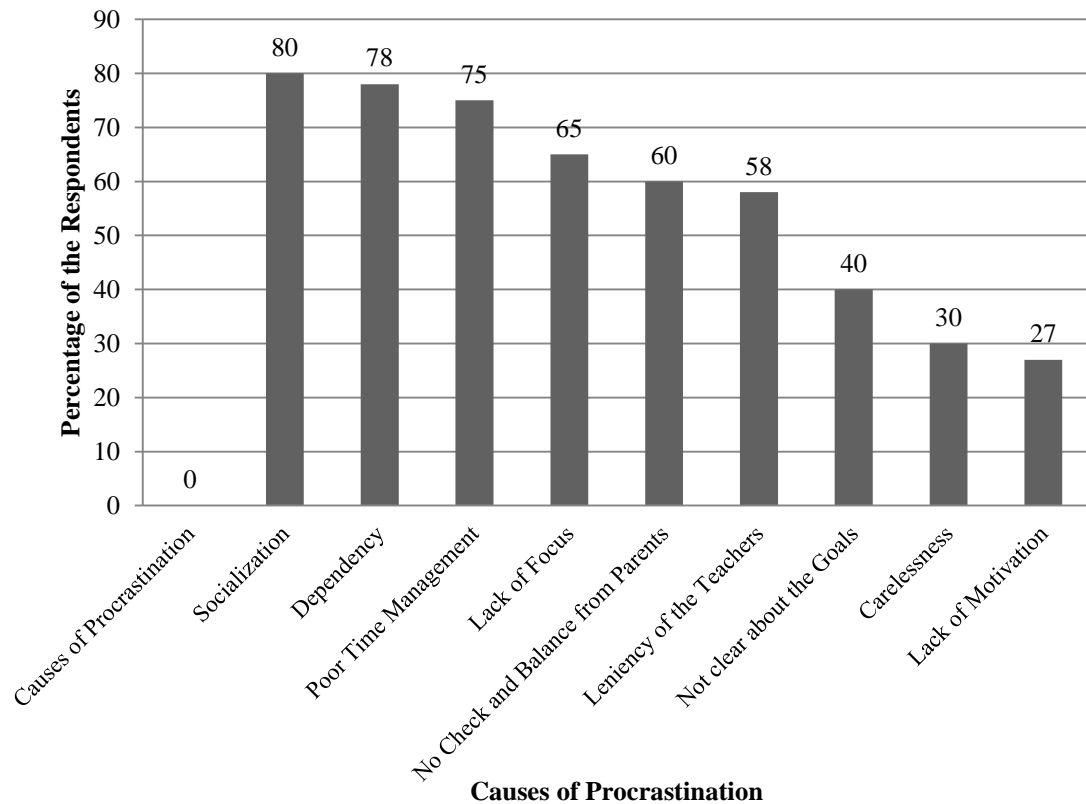


Figure 4.18: Causes of Academic Procrastination among Students at Higher Education Level

Table 4.17 and figure 4.18 indicate that 80% of the teachers highlighted socialization as one the causes of Academic Procrastination among students at Higher Education Level. 78% teachers identified dependency (also studied by Steel in 2007), 75% teachers mentioned Poor Time Management, 65% teachers highlighted Lack of Focus, 60% teachers pointed out that Academic Procrastination happened due to no check and balance from parents. 58% teachers responded that it was due to the Leniency of the teachers causing postponement of the academic tasks. 40% mentioned that students were not clear about their goals. 30% of the teachers pointed out carelessness as one of the causes of Academic Procrastination among students at higher education level. 27% teachers identified Lack of Motivation seemed inherent cause of Academic Procrastination among students at higher education level.

4.3. Level of Academic Procrastination in Six Academic Tasks and Academic Achievement

H0: There is no significant relationship between students' academic procrastination and students' academic achievement at university level.

Table 4.18

Correlation between Level of Academic Procrastination in Six Academic Tasks and Academic Achievement

Academic Task vs. Academic Achievement	Pearson Correlation (r)	Sig. (2-tailed)
Level of Procrastination in Writing a Term Paper Vs. Academic Achievement	-0.145	0.006***
Level of Procrastination in Study for an Exam Vs. Academic Achievement	-0.198	0.000***
Level of Procrastination in Assignment Tasks Vs. Academic Achievement	-0.231	0.000***
Level of Procrastination in Academic Administrative Tasks Vs. Academic Achievement	-0.248	0.000***
Level of Procrastination in Attendance Tasks Vs. Academic Achievement	-0.122	0.020**
Level of Procrastination in Performing Academic Tasks in General Vs. Academic Achievement	-0.238	0.000***
Overall Procrastination Vs. Academic Achievement	-0.342	0.000***

*p<0.1, **p<.05, ***p<.01

Table 4.18, Pearson Correlation values show significant negative correlation between level of procrastination in Writing a Term Paper and Academic Achievement ($r = -0.145$, $p = 0.006 < 0.01$), Study for an Exam and Academic Achievement ($r = -0.198$, $p = 0.000 < 0.001$), Assignment Tasks and Academic Achievement ($r = -0.231$, $p = 0.000 < 0.001$), Academic Administrative Tasks and Academic Achievement ($r = -0.248$, $p = 0.000 < 0.001$), Attendance Tasks and Academic Achievement ($r = -0.122$, $p = 0.020 < 0.05$), Performing Academic Tasks in General and Academic Achievement ($r = -0.238$, $p = 0.000 < 0.001$), Overall level of Academic

Procrastination and Academic Achievement ($r = -0.342$, $p = 0.000 < 0.001$). the results indicated that increase in Academic Procrastination in any of these Academic Tasks decreases the level of Academic Achievement similarly decrease in Academic Procrastination in any of these Academic Tasks increases the level of Academic Achievement. Correlation was significant (at 95% level of significance). So the null hypothesis “There is no significant relationship between students’ academic procrastination and students’ academic achievement at university level” is rejected. These findings collaborated with the work of Popoola, (2005) and Tuckman, et al. (2000).

Question 12: How far the Students are interested in Changing their Level of Academic Procrastination?

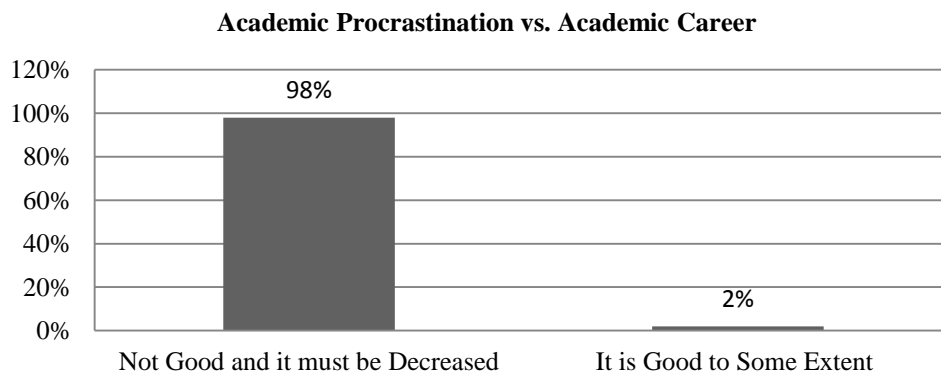


Figure 4.19: Standing of Academic Procrastination in Students’ Academic Career

Figure 4.19 shows that 98% teachers perceived Academic Procrastination as harmful for the Academic Career of the students. They held the view that such an attitude of delaying Academic Tasks need to be decreased and 2% of the teachers formed the view that Academic Procrastination was good to some extent for the student. They did not assign the reason.

Table 4.19

Contingency Table of Gender and Procrastination Presence in Academic Career

Gender	Procrastination Presence as an obstacle		Total (%)
	Yes	No	
Male	95	89	184 (50.4%)
Female	99	82	181 (49.6%)
Total (%)	194 (53.3%)	171 (46.8 %)	365

Odds Ratio= 1.13

Table 4.19 reveals that the estimated odds ratio of procrastination as an obstacle in academic career was 1.13 times more in Males as compared to Female students. Thus OR=1.13 predicts that procrastination as an obstacle in academic career. There was 13% likelihood of procrastination obstacle in males as compared to females. This predicts that procrastination obstacle in academic career was higher in males than female students. These findings are collaborated with the empirical words of Gallagher, Borg, Golin, and Kellehr (1992); Jansenn and Carton (1999); Kachgal, Hansen and Nutter (2001); Chow (2009); Ozer, et. al. (2009).

4.4 Students Interest in Changing Their Level of Academic Procrastination

Table 4.20

Contingency Table of Gender and wish to change the Attitude of Procrastinating the Academic tasks

Gender	Wish to Change the Attitude of Procrastination		Total (%)
	Yes	No	
Male	85	99	184 (50.4%)
Female	90	91	181 (49.6%)
Total (%)	175 (47.9%)	190 (52.1 %)	365

Odds Ratio= 0.868

Table 4.20 is indicative of the observation that the wish to change the attitude

of Procrastination in Academic Tasks was 0.868 times high in Male students contrary to Female students. Thus $OR=0.868$ predicts that the wish to change the attitude of Procrastination in Academic Tasks had 86% likelihood of the wish to change the attitude of Procrastination in Academic Tasks in Males as compared to Females, which predicts that the wish to change the attitude of Procrastination in Academic Tasks was higher in males than female students (endorsed by O'Brien, 2002; Schraw, Wadkins & Olafson; 2007 and Steel, 2007)

Table 4.21

Contingency Table of Gender and Interest of Attending Academic Procrastination Overcoming Program

Gender	Interest of Attending Academic Procrastination Overcoming Program		Total (%)
	Yes	No	
Male	84	100	184 (50.4%)
Female	78	103	181 (49.6%)
Total (%)	162 (44.4%)	203 (55.6 %)	365

Odds Ratio= 1.109

Table 4.21 illustrates that the interest of attending the program that overcome on Procrastination obstacle was 1.10 times high in Male students contrary to Female students or in other words, the estimated odds ratio $OR=1.109$ predicts that intention of attending the program regarding conquering the Procrastination was 10% likelihood in males as compared with females in next semester subject to the offering that program which predicts that male students were much victims of Procrastination obstacle contrary to female students.

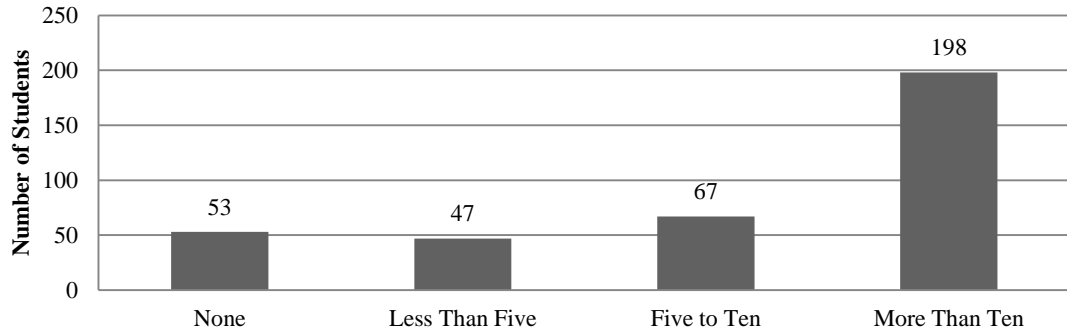


Figure 4.20: The Total Sessions Students are willing to attend

in a Procrastination Program

Figure 4.20 shows that majority of the students at University Level wished to attend more than ten sessions in total, if a Program to Overcome Procrastination was offered.

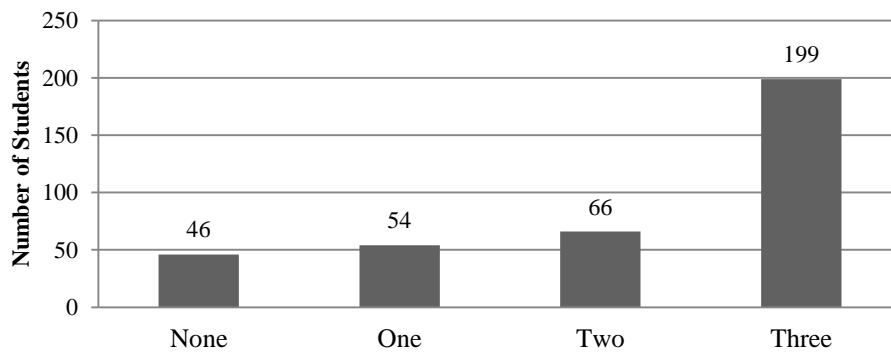


Figure 4.21: The Total Sessions per Week Students are willing to

attend in a Procrastination Program

Figure 4.21 shows that majority of the students at University Level wished to attend three sessions in a Week, if a Program to Overcome Procrastination was offered.

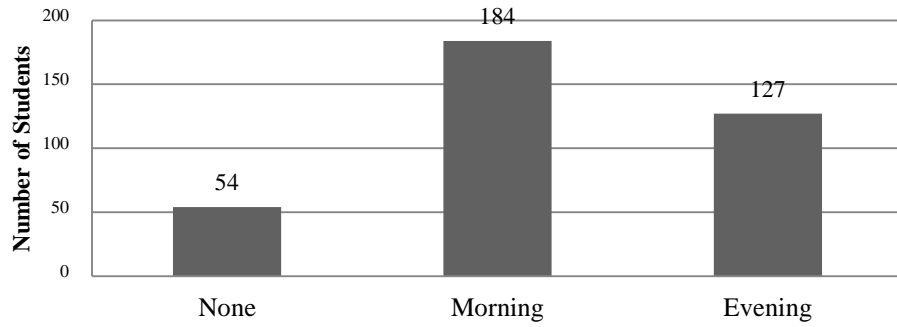


Figure 4.22: Best Time for Scheduling a Program on Procrastination

Figure 4.22 shows that majority of the students at University Level wished to attend a program to Overcome Procrastination in morning session.



Figure 4.23: Best Days for Scheduling a Program on Procrastination

Figure 4.23 depicts that majority of the students at University Level wished to attend a Program to Overcome Procrastination during week days.

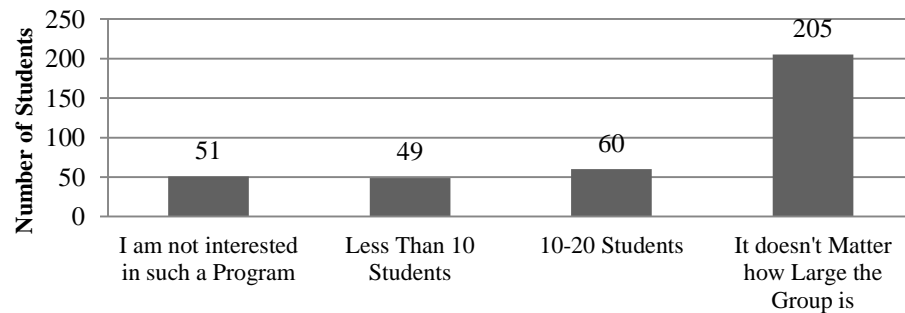


Figure 4.24: The Preferred Size of the Group in a Program on Procrastination

Figure 4.24 shows that majority of the students at University Level claimed that the size of group in a Program offered to Overcome Procrastination wouldn't matter.

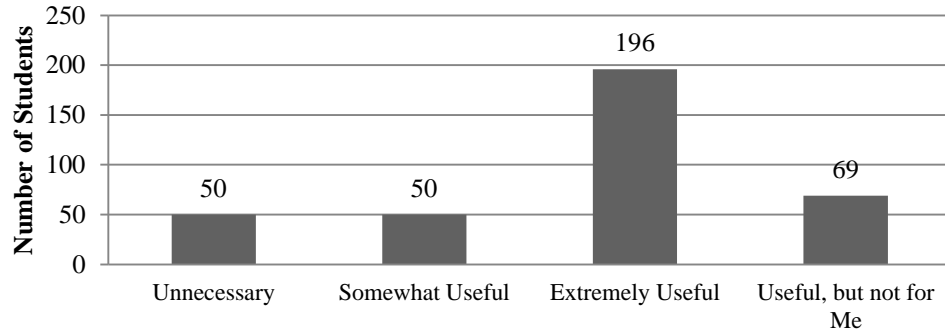


Figure 4.25: The Preferred Size of the Group in a Program on Procrastination

Figure 4.25 shows that majority of the students at University Level felt the Program to Overcome Procrastination as extremely useful.

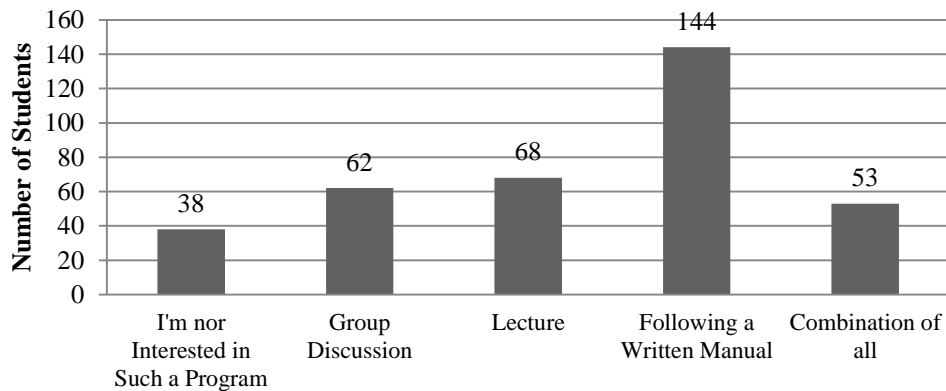


Figure 4.26: Format for a Program on Procrastination

Figure 4.26 shows that majority of the students at University Level wished the design of the program offered to overcome procrastination as the combination of Group Discussion, Lecture, and by following a Written Manual. Nordby, Wang, Dahl and Svartdal (2016) had supported these findings by concluding that interventions in the form of lectures and seminar sessions helped the students a lot in reducing the level of Academic Procrastination.

4.5 Chapter Overview

Chapter 4 illustrated the detailed data analysis in tabulated and graphic representation. In the light of the data analysis the findings, conclusions, discussion and recommendation are presented in the upcoming chapter (Chapter 5).

CHAPTER 5

SUMMARY, FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

The study was conducted to find out the relationship between the phenomenon of Academic Procrastination and Students Academic Achievement at university level. On the bases of data analysis the current chapter presents the summary, findings, conclusions, discussion and recommendations. Data were collected through following sources:

1. Modified version of Procrastination Assessment Scale for Students (PASS)
2. Semi-Structured Interview of the Teachers
3. CGPA (Cumulative Grade Point Average) Record

5.1 Summary

Current study was an attempt to find out the relationship between the phenomenon of Academic Procrastination and Academic Achievement at University Level. Chapter 1 reflects a brief overview as well as the introduction of the study. The objectives of the study were to (a) Identify the Academic Tasks for which Students' Procrastinate at University Level (b) Explore the Reasons for Academic Procrastination at University Level (c) Correlate the Academic Procrastination and Students' Achievement at University Level (d) Assess the Interest of Students in

Changing their Level of Academic Procrastination.

Chapter 2 provided theoretical bases to the study and helped to connect the present study with the previous knowledge that is already generated. This chapter described the nature and meaning of the term procrastination, history of procrastination, different types of procrastination, nature of academic procrastination as well as causes and factors effecting academic procrastination in detail.

Chapter 3 discussed in detail the methods and procedures opted for the achievement of the objectives of the study. The study was delimited to five Public Universities of the Province Punjab, Pakistan. Five Departments of Social Sciences (Education, Psychology, Sociology, Political Science and Economics) were included in the study. The study was also delimited to the MS/M.Phil degree level students of the session 2014-2016. Data were collected from the students through modified version of Procrastination Assessment Scale for Students (PASS), semi-structured interview was used to collect data from the teachers and students Academic Achievement were measured by their CGPA.

Chapter 4 presented data analyses. Mean score helped to determine the level of Academic Procrastination in six identified Academic Tasks (Writing a term Paper, Study for an Exam, Keeping up with Assignment Tasks, Performing Academic Tasks, Attendance Tasks, Performing Academic Tasks in General). T-test and ANOVA was applied to find out the gender and department wise significance between/among groups. Effect Size was determined to estimate the magnitude of the differences and Post Hoc Test was applied to make gender and department wise multiple comparisons. Pearson Correlation and regression was applied to determine the possible causes of Academic Procrastination among the university students. Relationship between the phenomenon of Academic Procrastination and Academic

Achievement was also determined using Pearson Correlation. Interest of students regarding changing their attitude was calculated by applying percentage and odd ratio. Data collected through semi-structured interview were analyzed by getting common themes and percentages. They were presented in tabulation form and graphic representation for giving better understanding.

5.2 Findings of the Study

Keeping in view the objectives of the study findings are presented under following subsections.

1. Students' level of academic procrastination at university level in six academic tasks
2. Comparison of academic procrastination level on the basis of gender and departments of the students' at university level
3. Causes of academic procrastination at university level
4. Relationship between academic procrastination and academic achievement at university level
5. Students interest in changing their level of academic procrastination at university level

5.2.1 Students Level of Academic Procrastination at University Level in Six Academic Tasks

1. In Writing a Term Paper, 0.5% students were low procrastinators, 5.8% students were slight procrastinators, 18.9% students were average procrastinators, 67.4% students were high procrastinators and 7.4% students were extreme procrastinators. Majority of the students were high procrastinators ($M = 3.75$, $S.D 0.695$) in Writing a Term Paper at University Level (Table 4.1, 4.2 and Figure 4.1).

2. In Study for an Exam, 1.1% students were low procrastinators, 6.8% students were slight procrastinators, 23% students were average procrastinators, 58.9% students were high procrastinators and 10.1% students were extreme procrastinators. Majority of the students were high procrastinators ($M = 3.70$, $S.D. = 0.785$) in Study for an Exam at university level (Table 4.1, 4.2 and Figure 4.2).
3. In Assignment Tasks, 0.5% students were low procrastinators, 7.3% students were slight procrastinators, 19.7% students were average procrastinators, 65.7% students were high procrastinators and 6.5% students were extreme procrastinators. Majority of the students were high procrastinators ($M = 3.70$, $S.D. = 0.723$) in Assignment Tasks at university level (Table 4.1, 4.2 and Figure 4.3).
4. In Academic Administrative Tasks, 0.5% students were low procrastinators, 6.3% students were slight procrastinators, 20.8% students were average procrastinators, 63.3% students were high procrastinators and 9.0% students were extreme procrastinators. Majority of the students were high procrastinators ($M = 3.74$, $S.D. = 0.731$) in Academic Administrative Tasks at university level (Table 4.1, 4.2 and Figure 4.4).
5. In Attendance Tasks, 0.3% students were low procrastinators, 8.2% students were slight procrastinators, 21.1% students were average procrastinators, 63.3% students were high procrastinators and 7.1% students were extreme procrastinators. Majority of the students were high procrastinators ($M = 3.69$, $S.D. = 0.735$) in Attendance Tasks at university level (Table 4.1, 4.2 and Figure 4.5).
6. In Performing Academic Tasks in General, 0.3% students were low

procrastinators, 6.8% students were slight procrastinators, 21.4% students were average procrastinators, 62.2% students were high procrastinators and 9.3% students were extreme procrastinators. Majority of the students were high procrastinators ($M = 3.73$, $S.D = 0.732$) in the area of performing Academic Tasks in General at university level (Table 4.1, 4.2 and Figure 4.6).

7. Generally, students' level of academic procrastination was high ($M = 3.65$, $S.D. = 0.607$) at university level (Figure 4.7).
8. Data collected through interviews of the teachers reflected that almost 70% students were procrastinators whereas only 30% students are non-procrastinators (Figure 4.8)
9. Teachers interview data reflected that 70% of the procrastination by the students was in the area of Writing the Term Papers, 5% procrastination was in the area of Study for an Exam, 10 % is in Keeping up with Assignment Tasks, 3 % was in Academic Administrative Tasks, 2 % is in the area of Attendance Tasks, 10 % is in Performing Academic Tasks in General (Table 4.2, Figure 4.9).

5.2.2 Gender wise Comparison of the Level of Academic Procrastination at University Level in Six Academic Tasks

1. Significant difference was found among students' level of Academic Procrastination under all the five Academic Tasks, Writing a Term Paper ($t = 103.182$, $p = 0.000 < .001$), Study for an Exam ($t = 90.053$, $p = 0.000 < .001$), Assignment Tasks ($t = 97.939$, $p = 0.000 < .001$), Academic Administrative Tasks ($t = 97.939$, $p = 0.000 < .001$), Attendance Tasks ($t = 95.915$, $p = 0.000 < .001$), Performing Academic Tasks in General ($t = 97.417$, $p = 0.000 < .001$) and with the overall Level of Academic Procrastination ($t =$

115.86, $p = 0.000 < .001$), (Table 4.3).

2. No gender wise significant difference was found in all the six Academic Tasks, Writing a Term Paper ($t = -0.396$, $p\text{-value} = 0.693 > 0.05$), Study for an Exam ($t = -0.007$, $p\text{-value} = 0.994 > 0.05$), Assignment Tasks ($t = -0.950$, $p\text{-value} = 0.343 > 0.05$), Academic Administrative Tasks ($t = 0.558$, $p\text{-value} = 0.577 > 0.05$), Attendance Tasks ($t = 0.637$, $p\text{-value} = 0.525 > 0.05$), Performing Academic Tasks in General ($t = .414$, $p\text{-value} = 0.697 > 0.05$) and in the Overall Level of Academic Procrastination ($t = -0.515$, $p\text{-value} = 0.607 > 0.05$) at University Level (Table 4.4).
3. Both of the genders were high procrastinators in all the six academic tasks, Writing a Term Paper, (Male $M = 3.74$, Female $M = 3.77$), in Study for an Exam (Male $M = 3.70$, Female $M = 3.70$), in Assignment Tasks (Male $M = 3.67$, Female $M = 3.74$) in Academic Administrative Tasks (Male $M = 3.76$, Female $M = 3.72$), in Attendance Tasks (Male $M = 3.71$, Female $M = 3.66$), in Performing Academic Tasks in General (Male $M = 3.75$, Female $M = 3.75$), and both were high procrastinators in overall academics (Male $M = 3.64$, Female $M = 3.67$) at university level (Table 4.4).

5.2.3 Department wise Comparison of the Level of Academic Procrastination at University Level in Six Academic Tasks

1. Department wise comparison among five Departments of Social Sciences reflected significant difference in Assignment Tasks ($F = 2.90$, $p\text{-value} = 0.022 < .05$), Academic Administrative Tasks ($F = 3.75$, $p\text{-value} = 0.005 < .01$), Attendance Tasks ($F = 2.66$, $p\text{-value} = 0.032 < .05$), and overall level of Academic Procrastination ($F = 4.07$, $p\text{-value} = 0.003 < .01$).

The magnitude of differences among five Departments of social sciences

in the areas of Assignment Tasks (Effect Size = 0.031), and Attendance Tasks (Effect Size = 0.029), the calculated effect sizes indicated as medium whereas in Academic Administrative Tasks (Effect Size = 0.040) and in the overall Academics (Effect Size = 0.043) the calculated effect sizes were above 0.40 which indicated large effect size as per Cohen's (1988) criterion (Table 4.5).

2. Multiple comparison suggested that students from Departments of Education had high level of Academic Procrastination ($M = 3.87$, $S. D. = 0.650$) in Assignment Tasks as compared to the students of the Department of Sociology ($M = 3.58$, $S. D. = 0.755$) and the Mean Difference (-0.286) was significant at 95% level of significance. Similarly, the students from the department of Education had high level of Academic Procrastination ($M = 3.87$, $S. D. = 0.650$) in Assignment Tasks as compared to the students of the Department of Political Science ($M = 3.52$, $S. D. = 0.789$), and the Mean Difference (0.346) was significant at 95% level of significance (Table 4.6, Figure 4.12). Likewise, Students of Department of Psychology had high level of Academic Procrastination ($M = 3.82$, $S. D. = 0.627$) in Academic Administrative Tasks as compared to the students of the Department of Sociology ($M = 3.57$, $SD=0.776$), and the Mean Difference (0.259) was significant at 95% level of significance.

Generally, students of Departments of Psychology had high level of Academic Procrastination ($M = 3.82$, $S. D. = 0.627$) in Academic Administrative Tasks as compared to the students of the Department of Political Science ($M = 3.52$, $S. D. = 0.789$), and the Mean Difference (-0.304) was significant at 95% level of significance.

Furthermore, the department wise comparison suggested that the students

from Departments of Education had high level of Academic Procrastination ($M = 3.89$, $S. D. = 0.648$) in Academic Administrative Tasks as compared to the students of the Department of Sociology ($M = 3.57$, $S. D. = 0.776$) and the Mean Difference (-0.326) was significant at 95% level of significance. Similarly, students from Departments of Education had high level of Academic Procrastination ($M = 3.89$, $S. D. = 0.648$) in Academic Administrative Tasks as compared to the students of the Department of Political Science ($M = 3.52$, $S. D. = 0.789$) and the mean difference (-0.371) was significant at 95% level of significance (Table 4.6, Figure 4.13).

Students of Departments of Education had high level of Academic Procrastination ($M = 3.84$, $S. D. = 0.689$) in Attendance Tasks as compared to the students of the Department of Sociology ($M = 3.51$, $S. D. = 0.851$) and the Mean Difference (-0.333) was significant at 95% level of significance. Similarly, students from Departments of Education had high level of Academic Procrastination ($M = 3.84$, $S. D. = 0.689$) in Attendance Tasks as compared to the students of the Department of Political Science ($M = 3.58$, $S.D. = 0.731$) and the Mean Difference (0.260) was significant at 95% level of significance (Table 4.6, Figure 4.14).

Students of Departments of Psychology had high level of Academic Procrastination ($M = 3.69$, $S. D. = 0.618$) as compared to the students of the Department of Political Science ($M = 3.44$, $S. D. = 0.611$) and the Mean Difference (0.250) was significant at 95% level of significance. Similarly, the students from the Departments of Education had high level of Academic Procrastination ($M = 3.80$, $S. D. = 0.530$) as compared to the students of the Department of Sociology ($M = 3.53$, $S. D. = 0.631$) and the Mean Difference

(-0.262) was significant at 95% level of significance. Likewise, students of Departments of Education had high level of Academic Procrastination ($M = 3.80$, $S. D. = 0.530$) as compared to the students of the Department of Political Science ($M = 3.44$, $S. D. = 0.611$) and the Mean Difference (0.358) was significant at 95% level of significance (Table 4.6, Figure 4.16).

5.2.4 Students Academic Procrastination Level among Low, Average and High Achievers

1. Significant difference was found between Academic Procrastination in Writing a Term Paper and Academic Achievement ($F = 20.82$, $p\text{-value} = 0.000 < 0.001$), in study for an Exam and Students' Academic Achievement ($F = 20.848$, $p\text{-value} = 0.000 < 0.001$), in Assignment Tasks and Academic Achievement ($F = 16.970$, $p\text{-value} = 0.000 < 0.001$), in Academic Administrative Tasks and Academic Achievement ($F = 19.961$, $p\text{-value} = 0.000 < 0.001$), in Attendance Tasks and Academic Achievement ($F = 8.318$, $p\text{-value} = 0.000 < 0.001$), in Performing Academic Tasks in General and Academic Achievement ($F = 15.450$, $p\text{-value} = 0.000 < 0.001$), in the overall Level of Academic Procrastination and Academic Achievement was ($F = 56.653$, $p\text{-value} = 0.000 < 0.001$).

To estimate the magnitude of the differences between the level of Academic Procrastination and Academic Achievement, effect sizes were calculated. In writing a Term Paper (0.103) and Study for an Exam (0.103) the effect sizes were medium whereas in the other four Academic Tasks Assignment Tasks (0.086), Academic Administrative Tasks (0.099), Attendance Tasks (0.044) and in Performing Academic Tasks in General (0.079) the effect sizes were small and in overall academic Procrastination

- (0.238) the effect size was as medium as per Cohen's (1988) criterion (Table 4.8).
2. Multiple Comparisons reflected that average achievers ($M = 3.90$, $S.D. = 0.564$) were high procrastinators as compared to low achievers ($M = 3.45$, $S.D. = 0.783$) in Writing a Term Paper and the Mean Difference (-0.447) was significant at 95% level of significance. Similarly average achievers ($M = 3.90$, $S.D. = 0.564$) were high procrastinators as compared to high achievers ($M = 3.39$, $S.D. = 0.876$), in Writing a Term Paper and the Mean Difference (-0.506) was significant at 95% level of significance (Table 4.9, Figure 4.17).
 3. Furthermore, Multiple Comparisons indicates that Average Achievers (Mean 3.86 , $S.D = 0.681$) were high procrastinators as compared to Low Achievers ($M = 3.42$, $S.D. = 0.688$), in Study for an Exam and the mean difference (-0.44) was significant at 95% level of significance. No significant difference was found between Low Achievers ($M = 3.42$, $S.D. = 0.688$) and High Achievers ($M = 3.25$, $S.D. = 0.948$) in study for an Exam. Average Achievers (Mean 3.86 , $S.D 0.681$) were high procrastinators as compared with High Achievers ($M = 3.25$, $S.D. = 0.09$) in study for an Exam and the mean difference (-0.61) was significant at 95% level of significance (Table 4.10, Figure 4.17).
 4. Moreover, multiple comparisons indicated that average achievers ($M = 3.82$, $S.D. = 0.609$) and low achievers ($M=3.72$, $S.D. = 0.841$) were high procrastinators in Assignment Tasks and the mean difference (-0.046) was not significant at 95% level of significance. Similarly, low achievers ($M = 3.72$, $S.D. = 0.841$) were high procrastinators as compared to high achievers ($M=3.30$, $S.D. = 0.875$) in Weekly Assignment and the Mean Difference ($-$

0.425) was significant at 95% level of significance. Likewise average achievers ($M=3.82$, $S.D. = 0.609$) were high procrastinators as compared to high achievers ($M= 3.30$, $S.D. = 0.875$), in Assignment Tasks and the Mean Difference (-0.524) was significant at 95% level of significance (Table 4.11, Figure 4.17).

5. Multiple comparisons indicated low achievers ($M = 3.76$, $S.D. = 0.689$) were high procrastinators as compared to high achievers ($M = 3.30$, $S.D. = 0.961$), in Academic Administrative Tasks and the Mean Difference (0.460) was significant at 95% level of significance. Similarly, average achievers ($M=3.87$, $S.D. = 0.596$) were high procrastinators as compared to high achievers ($M= 3.30$, $S.D. = 0.961$), in Academic Administrative Tasks and the Mean Difference (0.570) was significant at 95% level of significance (Table 4.12, Figure 4.17).
6. Multiple comparisons indicated that low achievers ($M = 3.55$, $S.D. = 0.827$) were high procrastinators as compared to high achievers ($M = 3.42$, $S.D. = 0.848$), in Attendance Tasks and the Mean Difference (0.368) was significant at 95% level of significance. Likewise, average achievers ($M = 3.78$, $S.D. = 0.664$) were high procrastinators as compared to high achievers ($M = 3.42$, $S.D. = 0.848$), in Attendance Tasks and the Mean Difference (-0.490) was significant at 95% level of significance (Table 4.13, Figure 4.17).
7. Multiple comparisons indicated low achievers (Mean 3.83 , $S.D. 0.848$) were high procrastinators as compared to high achievers ($M = 3.34$, $S.D. = 0.821$), in Performing Academic Tasks in General and the mean difference (0.490) was significant at 95% level of significance. Similarly, average achievers ($M = 3.84$, $S.D. = 0.649$) were high procrastinators as compared to high achievers

($M = 3.34$, $S.D. = 0.821$), in Performing Academic Tasks in General and the mean difference (0.504) was significant at 95% level of significance (Table 4.14, Figure 4.17).

8. Multiple comparisons reflected that average achievers ($M = 3.83$, $S.D.=0.383$) were high procrastinators as compared to low achievers ($M = 3.55$, $S.D. = 0.572$) and the mean difference (-0.282) was significant at 95% level of significance. Similarly, low achievers ($M = 3.55$, $S.D. = 0.572$) were high procrastinators as compared to high achievers ($M = 3.10$, $S.D. = 0.852$), and the Mean Difference (0.447) was significant at 95% level of significance. Likewise, average achievers ($M = 3.83$, $S.D. = 0.383$) were high procrastinators as compared to high achievers ($M = 3.10$, $S.D. = 0.572$), and the mean difference (0.730) was significant at 95% level of significance (Table 4.15, Figure 4.17).

5.2.5 Causes of Academic Procrastination at University Level

1. All the identified eighteen factors showed significant positive correlation with Academic Procrastination, including the Evaluation Anxiety ($r = 0.297$, $p\text{-value} = 0.000 <.001$), Perfectionism ($r = 0.276$, $p\text{-value} = 0.000 <.001$), Difficulty Making Decisions ($r = 0.228$, $p\text{-value} = 0.000 <.001$), Dependency and Help Seeking ($r = 0.652$, $p\text{-value} = 0.000 <.001$), Aversiveness of the Task and Low Frustration Tolerance ($r = 0.658$, $p\text{-value} = 0.000 <.001$), Lack of Self-Confidence ($r = 0.697$, $p\text{-value} = 0.000 <.001$), Laziness ($r = 0.266$, $p\text{-value} = 0.000 <.001$), Lack of Assertion ($r = 0.145$, $p\text{-value} = 0.000 <.001$), Fear of Success ($r = 0.270$, $p\text{-value} = 0.000 <.001$), Tendency to Feel Overwhelmed and Poorly Manage Time ($r = 0.700$, $p\text{-value} = 0.000 <.001$), Rebellion Against Control ($r = 0.708$, $p\text{-value} = 0.000 <.001$), Risk- Taking ($r =$

0.515, p-value = 0.000<.001), Peer Influence (r = 0.505, p-value = 0.000<.001), Lower Level of Motivation (r = 0.522, p-value = 0.000<.001), Socialization (r = 0.781, p-value = 0.000<.001), Pleasant Verses Boring Tasks (r = 0.786, p-value = 0.000<.001), Fail to Prioritize (r = 0.786, p-value = 0.000<.001), Lack of Focus(r = 0.808, p-value = 0.000<.001). This means increase in any of these factors would increase the level of Academic Procrastination. Likewise, the decrease in any of these factors will minimize the level of Academic Procrastination. Correlation was significant at 95% level of significance (Table 4.16).

2. The standardized regression weights indicated that six factors Dependency and Help Seeking (β 0.706, p-value = 0.040<0.05), Risk-Taking (β .143, p-value = 0.049 < 0.05), Socialization (β 0.175, p-value=0.012 < 0.05), Pleasant Verses Boring Tasks (β 0.219, p-value = 0.003 < 0.01), Fail to Prioritize (β 0.206, p-value = 0.002 < 0.01), Lack of Focus (β 0.706, p-value 0.000= 0.354 < 0.05) were statistically significant whereas rest of the factors Evaluation Anxiety (β 0.231, p-value=0.105), Perfectionism (β 0.158, p-value=0.245), Difficulty Making Decisions (β 0.009, p-value=0.782), Aversiveness of the Task and Low Frustration Tolerance (β 0.469, p-value=0.182), Lack of Self-Confidence (β 0.020, p-value = 0.767), Laziness (β 0.074, p-value = 0.148), Lack of Assertion (β 0.049, p-value = 0.106), Fear of Success (β 0.084 p-value = 0.100),Tendency to Feel Overwhelmed and Poorly Manage Time (β 0.016, p-value= 0.814), Rebellion Against Control (β 0.120, p-value = 0.088), Peer Influence (β 0.024, p-value = 0.714), Lower Level of Motivation (β 0.056, p-value = 0.444) are statistically insignificant. The Multiple Correlation (R = 0.862) significant at 95% level of significance and R² value suggested that

identified 18 causes were contributing 74% in students' Academic Procrastination (Table 4.16).

3. Teachers' interview data reflected Socialization as one the causes of Academic Procrastination among students at higher education level. This factor of Socialization was identified by 80% of the teachers. Dependency mentioned by 78% of teachers, Poor Time Management highlighted by 75%, Lack of Focus mentioned by 65% of the teachers. 60% teachers pointed out that Academic Procrastination happens due to no check and balance from parents. 58% teachers responded that it was due to the Leniency of the teachers that students postpone their Academic Tasks. 40% mentioned that students were not Clear about their Goals. 30% of the Teachers pointed out carelessness and 27% teachers identified Lack of Motivation as causes of Academic Procrastination among students at higher education level (Table 4.17, Figure 4.18).

5.2.6 Relationship between Academic Procrastination and Academic Achievement at University Level

1. Significant Negative Correlation was found between level of procrastination in Writing a Term Paper and Academic Achievement ($r = -0.145$, $p = 0.006 < 0.01$), Study for an Exam and Academic Achievement ($r = -0.198$, $p = 0.000 < 0.001$), Assignment Tasks and Academic Achievement ($r = -0.231$, $p = 0.000 < 0.001$), Academic Administrative Tasks and Academic Achievement ($r = -0.248$, $p = 0.000 < 0.001$), Attendance Tasks and Academic Achievement ($r = -0.122$, $p = 0.000 < 0.001$), Performing Academic Tasks in General and Academic Achievement ($r = -0.238$, $p = 0.000 < 0.001$), Overall Level of Academic Procrastination and Academic Achievement ($r = -0.342$, $p = 0.000$

< 0.001). The results reflected that increase in Academic Procrastination in any of these academic tasks would decrease the level of Academic Achievement. Similarly decrease in Academic Procrastination in any of these Academic Tasks would increase the level of Academic Achievement. Correlation was significant at 95% level of significance (Table 4.18)

5.2.7 Students interest in Changing their Level of Academic Procrastination at University Level

1. Generally, 98% teachers perceived Academic Procrastination as harmful for the academic career of the students and held the view that this attitude of delaying academic tasks must be decreased and 2 % of the teachers were of the view that Academic Procrastination seemed good to some extent for the students (Figure 4.19).
2. The estimated Odds Ratio of Procrastination as an obstacle in academic career was 1.13 times more in males as compared to female students. Therefore, in consequence Odds Ratio = 1.13 predicted that procrastination as an obstacle in academic career seemed 13% likelihood of procrastination obstacle in males as compare to females (Table 4.19).
3. The estimated Odds Ratio of the wish to change the attitude of procrastination in academic tasks was 0.868 times more in males as compared to female students. In consequence Odds Ratio = 0.868 predicted that the wish to change the attitude of procrastination in academic tasks was 86%. Likelihood of the wish to change the attitude of procrastination in academic tasks in males as compare to females (Table 4.20).
4. The estimated Odds Ratio 1.109 predicted that intention of attending the program regarding conquering the procrastination was 10%. Likelihood in

males as compare to females in next semester subject to the offering that program (Table 4.21).

5. Majority of the students at university level wish to attend more than ten sessions in total, if a program to overcome procrastination was offered (Figure 4.20).
6. Majority of the students at university level wished to attend three sessions in a week, if a program to overcome procrastination was offered (Figure 4.21).
7. Majority of the students at university level wished to attend a program to overcome procrastination in morning session (Figure 4.22).
8. Majority of the students at university level wished to attend a program to overcome procrastination during week days (Figure 4.23).
9. Majority of the students at university level claimed that the size of group in a program offered to overcome procrastination wouldn't matter (Figure 4.24).
10. Majority of the students at university level felt the program to overcome Procrastination as extremely useful (Figure 4.25).
11. Majority of the students at university level wished the design of the program offered to overcome procrastination as the combination of group discussion, lecture, and by following a written manual (Figure 4.26).

5.3 Conclusions

Following conclusions were made in the light of the findings of the study:

5.3.1 Level of Students Academic Procrastination

Students at university level were high procrastinators in all the six academic tasks, Writing their Term Papers, Study for an Exam, Assignment Tasks, Academic Administrative Tasks, Attendance Tasks and in Performing Academic Tasks in General. Majority of the students procrastinate their

academic tasks. They were habitual of delaying and postponing their academic activities. Students mostly procrastinate in the area of Writing their Term Papers. Attendance Tasks placed at second order. Assignment Tasks and Performing Academic Administrative Tasks placed at third order. Students' procrastination in Performing Academic Tasks in General placed at second last order. Students procrastinate Study for an Exam at lowest order. (Findings 5.2.1).

5.3.2 Gender wise Level of Academic Procrastination

Both of the genders were high procrastinators in all the six academic tasks including Writing a Term Paper, Study for an Exam, Assignment Tasks, Academic Administrative Tasks, Attendance Tasks, in Performing Academic Tasks in General, and both were high procrastinators in overall academics at university level (Findings 5.2.2).

5.3.3 Department wise Level of Academic Procrastination

Students from all the five Departments (Education, Political Science, Sociology, Economics, and Psychology) were high procrastinators in writing their Term Papers, Study for Exam, Assignment Tasks, Academic Administrative Tasks, Attendance Tasks, Performing Academic Tasks in General and in overall academics (Findings 5.2.3).

5.3.4 Ability wise Level of Academic Procrastination

Average achievers were high procrastinators in all the six identified areas whereas low achievers were high procrastinators in Assignment Tasks, Academic Administrative Tasks, Attendance Tasks, Performing Academic Tasks in General and Overall Procrastination and were moderate/ average procrastinators in Writing Term Paper and Study for Exam. High Achievers

were moderate/ average procrastinators in all the six identified areas (Findings 5.2.4).

5.3.5 Causes of Academic Procrastination

Dependency and Help Seeking, Risk-Taking, Socialization, Pleasant Verses Boring Tasks, Fail to Prioritize, Lack of Focus, Socialization, Poor Time Management, No Check and Balance from Parents, Leniency of the Teachers, No Clear Goals, Carelessness and Lack of Motivation were explored as statistically significant causes of academic procrastination at university level (Findings 5.2.5).

5.3.6 Relationship between Academic Procrastination and Students' Achievement

Academic Achievement was negatively correlated with all the six academic tasks (Writing a Term Papers, Study for an Exam, Assignment Tasks, Academic Administrative Tasks, Attendance Tasks, and Performing Academic Tasks in General) and with the overall level of Academic Procrastination. This fact reflected that increase in the level of Academic procrastination in any of the identified academic area would likely decrease the level of Academic Achievement (Findings 5.2.6).

5.3.7 Interest of Students in Changing their Level of Academic Procrastination

Academic Procrastination was regarded harmful for the academic career of the students and this attitude of delaying academic tasks must be decreased. Generally, the Academic Procrastination obstacle in academic career was higher in males than female students. Similarly, the wish to change the attitude of procrastination in Academic Tasks was higher in males than

female students. Likewise, the intention of attending the program regarding conquering the Academic Procrastination was higher in males as compared to females in next semester subject to the offering that program. Majority of the students at university level wished to attend more than ten sessions, almost three sessions in a week, if a program to overcome procrastination was offered. They preferred weekdays and morning sessions for such a Program. Furthermore, students claimed that the size of the group for such a program wouldn't matter. Students asserted that such a program would be extremely useful and the preferred format of such a program would be as the combination of group discussion, lecture, and by following a written manual (Findings 5.2.7).

5.4 Discussion

The aim of the study was to explore the relationship between the phenomenon of Academic Procrastination and Students' Achievement at university level. The level and causes of Academic Procrastination in different academic tasks was assessed by a modified version of Procrastination Assessment Scale for Students (PASS) developed by Solomon and Rothblum (1984). Teachers at university level were interviewed to get deeper insight into the problem. Students' Academic Achievement was considered in terms of their Cumulative Grade Point Average (CGPA) and was correlated with the level of students' Academic Procrastination. Data analysis, findings and conclusions drawn from the study lead to the course of following discussion.

Students at university level seemed the victim of Academic Procrastination. Every student suffered with Academic Procrastination. The level and intensity of delaying tasks (to be completed soon) were different among them. A number of researches endorsed the findings that such phenomenon of delaying essential tasks

without any solid justification was almost common among individuals. Everybody experienced it once or many times of one's life and suffered by its harms. Such procrastinators fall under the category of passive procrastinators. (Day, Mensink, & O'Sullivan, 2000; Wolters, 2003). The students at university level reflected high procrastinators in all of the six academic tasks Writing a Term Paper, Study for an Exam, Assignment Tasks, Academic Administrative Tasks, Attendance Tasks and Performing Academic Tasks in General. Teachers reported that students highly procrastinated their research oriented tasks almost up to 70 % and less procrastinated their attendance oriented tasks, i-e up to 2 %.

No gender wise difference was found in the level of Academic Procrastination that means both of the genders equally procrastinated their academic tasks at university level and both assessed as high procrastinators (also studied by Zhang, et. al. in 2009). Department wise comparison led toward the conclusion that in writing term papers, study for exams and performing academic tasks in general, the students of social sciences had equal level of procrastination whereas in Assignment Tasks, Academic Administrative Tasks, Attendance Tasks and overall Level of Academic Procrastination, the students of Social Sciences showed different level of procrastination.

Average achievers were high procrastinators in Writing Term Paper and Study for Exam as compared to low and high achievers. Low and average achievers were high procrastinators whereas high achievers were moderate/ average procrastinators in Assignment Tasks, Academic Administrative Tasks, Attendance Tasks, Performing Academic Tasks in General and Overall Procrastination. Popoola, (2005) also explored the same area and concluded that high achiever students postpone their academic tasks very few times and performing well in academics whereas those

students who procrastinated performed awful.

Majority of the students at university level were habitual of delaying their academic tasks, these findings are also endorsed by Gallagher, Borg, Golin, and Kellehr (1992), Jansenn and Carton (1999), Kachgal, Hansen and Nutter (2001), Chow (2009), Ozer, et. al. (2009). Students at that level specially delayed their research oriented tasks like Writing a Term Paper. In fact, the students were not able to work independently in research areas and were less motivated, avoid taking initiatives (also studied by Steel in 2007), were less focused with having no clear vision about their goals.

Students themselves mentioned that they had a number of social activities other than academics. They got busy in socialization and got fail to prioritize the essential tasks. These findings are endorsed by Noran (2000). Teachers at university level mentioned that the role of teachers and parents was also very crucial and significant in this regard. They may have strict check and balance on the activities of the students so that the students would be more concerned and alarmed.

Academic Achievement was negatively correlated with all the six Academic Tasks (Writing a Term Papers, Study for an Exam, Assignment Tasks, Academic Administrative Tasks, Attendance Tasks, and Performing Academic Tasks in General) and with overall level of academic procrastination which reflected that increase in the level of Academic Procrastination in any of the identified academic area would decrease the level of Academic Achievement (Tuckman, et al., 2000; Popoola, 2005).

Academic Procrastination is such a phenomenon that is sometimes not on wish and one of the most undesirable action (also studied by O'Brien, 2002), the victim of it wanted to get rid of it, even had a desire to complete the task on time (endorsed by

Schraw, Wadkins & Olafson in 2007 and Steel in 2007) but was failed due to a number of reasons, one of them was pleasure principle. Under that condition the victim got attracted toward another task which sounded an interesting as compared to the actual task. Generally, male students felt Academic Procrastination obstacle more than female students and the wish to change that attitude of delaying some task of immediate attention seemed more prevailing in male students as compared to female students at university level. The male students are more willing to attending a program to overcome Academic Procrastination if offered by the Higher Education Institutions as compared to female students. These findings collaborated with the work of Yong (2010), who concluded that female students seemed less procrastinated as compared to male students.

Students at university level were interested to change their attitude of Academic Procrastination. They wished to attend more than ten sessions, almost three sessions in a week, if a program to Overcome Procrastination was offered. They preferred weekdays and morning session for such a program. Furthermore, students claimed that the size of the group for such a program wouldn't matter. Students asserted that such a program would be extremely useful and the preferred design of the program would include the combination of group discussion, lecture, and a Written Manual.

5.5 Recommendations

Analysis of the data, findings and conclusion so drawn, lead to the formulation of the following recommendations of the study:

1. Academic Activities at university level need substantial revisions. More research oriented activities may be introduced and teachers need to take some solid steps to make students independent in doing research. So that the

students should take interest and develop competency, the teachers would have to provide them the models of research and powerful methods of investigations. Independent attention by maintaining students' portfolios and grouping on the bases of achievement form the techniques that can facilitate in assessment of students' progress and will stimulate them to complete their work on time. (Conclusions 5.3.1 – 5.3.4)

2. Dependency and help seeking is one of the major causes of Academic Procrastination among students at university level. Teachers at this level may attempt to make students independent in their working. Similarly, students are hesitant to take initiatives and feel bashfulness to take risk. Interestingly, students fail to prioritize their activities and are the victim of lack of focus with low motivation. Students even at university level are careless about their studies and are not clear about their goals. Teachers and students' may collaboratively work to minimize these factors and to make the students' bold and confident in taking initiatives in academic career and help them to be focused. Even at university level, students remain busy in socialization and they spend time in doing pleasant activities and felt academics as boring tasks. Parents and Teachers need to help the students in this endeavor. Even at university level parents and teachers may keep a strict check on the activities of the students so that the students would not waste their time in such activities. Form schedule of academic tasks, assignments, portfolios reviews, critical and creative work demanding high quality work in the first go may be credited high. Extension of date, revision of work for better grade, lacking content, non-research based evidence, arguments and advocacy may be negatively marked (Conclusions 5.3.5).

3. Students may be made aware about the negative impact of the Procrastination on Academic career as this act of delaying may ruin their career. Media, Parents, Teachers and Peers may play a significant role in this regard. Periodical conferences, seminars, colloquial talks need to be institutionally organized to provide the young generation with the data, substance and direction about academic procrastination (Conclusions 5.3.6).
4. A program with the theme of “Overcoming Academic Procrastination” may be introduced at university level as a University Requirement Course (URC). Students may get sufficient support by such a program to change their attitude of Procrastination (Conclusions 5.3.7).
5. Forgetting, deferment, advocacy etc. are psychologically inherent in human nature. In institutional case, regular and graded course/programs in the framework of ‘mentoring services’ at the university level are paramount. Both students and young generation of teaching community need such interventions in this endeavor. Procrastination is a complex phenomenon. Hence, powerful mentoring programs forms the urge of the hour (Conclusions 5.3.7).

5.6. Recommendations for Further Research

The present study raises many new questions and leads the scholars in the field toward many new unexplored horizons such as conduction a similar study in other disciplines (physical sciences, professional courses etc.) on a larger sample, cross sectional drawn in Punjab, and other provinces; a comparative investigation of high ranking universities/institutions to measure students commitments and powerful teacher demanding academic tasks; developing research based manual of a training program in academic procrastination in collaboration with Higher Education Commission (HEC); and qualitative case studies of risk cases in various areas of

academic procrastination.

5.7 Generalizability

Although the study is site-specific, that is the province of Punjab, yet the implications for other programs and institutions would equally hold true. The rationale is that socio-psychological nature of human behaviour is globally universal. By choice or situation, the contents of academic procrastination are strategic and cultural bound. In typological context, Pak-universities draw the scholars both from rural and urban areas. The sampled universities represent these geographical features. Future, the students' characteristics are homogeneous in term of age, gender and socio-cultural background. The vigorous process of education across the stages equalizes the educational behaviour. The teachers' trends are concurrently synonymous. On the top educational program from a school to tertiary or advance level are coordinated, monitored and standardize by legislative bodies. In higher education, Higher Education Commission (HEC) regulates the curriculum and teacher capacity building structures and strategies. Perceived in this perspective, finding of this study can be extended or applicable to other venues of the country, Pakistan.

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**Modified Version of Procrastination
Assessment Scale for Students (PASS)**

Name _____ Program _____ Semester _____

University _____ CGPA _____

Areas of Procrastination

Six Academic Activities have giving below. For each of the following activities, please rate the degree of your answer according to the following key:

Never=1, Rarely=2, Often=3, Mostly=4, Always=5

Sr. #	Statement	1	2	3	4	5
WRITING A TERM PAPER						
1	I start working on the term paper since the first day of the semester					
2	I submit my term paper before the deadline					
3	I submit my term paper on the last day					
4	I feel trouble to manage my time for completion of the term paper					
5	I feel relax by delaying my work					
STUDYING FOR EXAMS						
6	I start studying on the first day of the semester					
7	I prefer to prepare lectures on daily bases					
8	I assume the last night preparation for an exam is always fruitful					
9	I prepare my own notes for exam preparation					
10	I barrow notes from a friend just close to the exam					
KEEPING UP WITH ASSIGNMENTS						
11	I start working on the assignments since the first day					
12	I submit my assignment before the deadline					
13	I submit my assignment on the last day					
14	I feel trouble to manage my time, required for completing my assignments					
15	I feel relax by delaying my work					
ACADEMIC ADMINISTRATIVE TASKS: FILLING OUT FORMS, REGISTERING FOR CLASSES, GETTING ID CARD						
16	I go for course registration earlier					
17	I go for course registration near to closing date					
18	I consider course registration as an wasteful activity					
19	Going for registration earlier, facilitates me					
20	I suffer by delaying my registration					

Sr. #	Statement	1	2	3	4	5
ATTENDANCE TASKS: ATTENDING CLASSES, MAKING AN APPOINTMENT WITH A PROFESSOR						
21	I am very much concerned about my course attendance					
22	University premises is much more except attending classes					
23	I face penalty for bunking my classes					
24	I discuss my assignments and project with my teacher in advance					
25	I attend meetings with teachers and fellow students					
PERFORMING ACADEMIC TASKS IN GENERAL						
26	To what degree do you procrastinate on academic tasks?					
27	To what degree is procrastination on academic tasks a problem for you?					
28	To what extent do you want to decrease your tendency to procrastinate on academic tasks?					
29	To what degree is procrastination on academic task a Facility for you?					
30	To what extent do you want to increase your tendency to procrastinate on academic tasks?					

Reasons for Procrastination

Think of the last time the following situation occurred. It's near the end of the semester. The term paper you were assigned at the beginning of the semester is due very soon. You have not begun work on this paper. There are reasons why you have been procrastinating on this task.

Rate each of the following reasons on a 3-point scale according to how much it reflects why you procrastinated at the time. Mark your answers on your answer sheet.

Use the scale:

Not At All Reflects
Why I Procrastinated
a

Somewhat
Reflects
b

Definitely Reflects
Why I Procrastinated
c

Sr.#	Statement	a	b	c
31	I was concerned the professor wouldn't like my work.			
32	I waited until a classmate did his or her, so that he/she could give me some advice.			
33	I had a hard time knowing what to include and what not to include in my paper.			
34	I had too many other things to do			
35	There's some information I needed to ask the professor, but I felt uncomfortable approaching him/her.			
36	I was worried I would get a bad grade.			

Sr.#	Statement	a	b	c
37	I resented having to do things assigned by others.			
38	I didn't think I knew enough to write the paper.			
39	I really disliked writing term papers.			
40	I felt overwhelmed by the task.			
41	I had difficulty requesting information from other people.			
42	I looked forward to the excitement of doing this task at the last minute.			
43	I couldn't choose among all the topics.			
44	I was concerned that if i did well, my classmates would resent me.			
45	I didn't trust myself to do a good job.			
46	I didn't have enough energy to begin the task.			
47	I felt it just takes too long to write a term paper.			
48	I liked the challenge of waiting until the deadline.			
49	I knew that my classmates hadn't started the paper either.			
50	I resented people setting deadlines for me.			
51	I was concerned I wouldn't meet my own expectations.			
52	I was concerned that if i got a good grade, people would have higher expectations of me in the future.			
53	I waited to see if the professor would give me some more information about the paper.			
54	I set very high standards for myself and I was worried that i wouldn't be able to meet those standards.			
55	I just felt too lazy to write a term paper.			
56	My friends were pressuring me to do other things.			
57	In case of halt i felt hard to revitalize my ambition.			
58	Being disappointed by doing it, i never opt it again.			
59	I loved to spend more time with family and relatives.			
60	I went to attend family functions and social gatherings.			
61	I had a number of exciting activities to do.			
62	I felt difficult to focus and perceive it as a boring task.			
63	Every day i come up with a clear picture of the activities to be performed.			
64	Having more than one activity to perform in a single time, I clearly know what to do at first.			
65	I got tired while working with concentration.			
66	While doing my work i got tired soon and went for refreshment and rest.			

Interest in Changing Your Procrastination

Please reply the following questions in the form of **YES/NO.**

Sr.#	Statements	Yes	No
67	Procrastination is an obstacle in my Academic Career		
68	I want to change my attitude of Procrastinating the Academic tasks.		
69	I am interested in attending a program that focuses on overcoming procrastination if such a program were offered next semester.		

Please choose **the Most Appropriate** reply for the statements given below.

70. If a procrastination program were offered, the total sessions I would be willing to attend?
 - a. none
 - b. less than five
 - c. five to ten
 - d. more than ten

71. Number of sessions per week that I would be willing to attend.
 - a. none
 - b. one
 - c. two
 - d. three

72. Best time for you in scheduling such a program.
 - a. none
 - b. morning
 - e. evening

73. Best days for you in scheduling such a program.
 - a. no days are good
 - b. weekdays
 - c. weekends

74. I prefer the size of the group.....
 - a. I'm not interested in such a program
 - b. less than 10 people in a group
 - c. 10-20 people in a group
 - d. It doesn't matter how large the group is

75. I feel that a program to improve procrastination habits would be:
 - a. unnecessary
 - b. somewhat useful
 - c. extremely useful
 - d. useful, but not for me

76. The interesting format for such a program:
- a. I'm not interested in such a program
 - b. Group discussion
 - c. Lecture
 - d. Following a written manual
 - e. A combination of the above

Thank you for sparing your time. Your contribution is highly appreciated

INTERVIEW FOR TEACHERS

1. Why student procrastinate? Or the Reasons of Academic Procrastinations in your point of view.

2. What is the tendency of procrastination by the Students while completing the following Academic Tasks?

1. Writing a Term Paper

2. Studying for an Exam

3. Keeping up with Assignments

4. Performing Academic Administrative Tasks

5. Attending Meetings/Classes

6. Performing Academic Tasks in General

3. Academic procrastination is good for the Academic Career of the Students because

4. Academic Procrastination have bad impact on the Academic Career of the Students because

5. Do you think that the Academic Procrastination is a attitude to be increased or decreased?

6. What are the common practices that students use to make their work Perfect?

7. When the students got fail to follow the deadlines for the completion of their academic tasks, what are the common excuses that they made?

8. When the students got fail to meet the minimum criterion of perfection for their academic tasks, what are the common excuses that they made?

9. If there is any relationship between the phenomenon of Academic Procrastination and Academic Achievements?

**Original Procrastination Assessment
Scale for Students (PASS)**

Areas of Procrastination

For each of the following activities, please rate the degree to which you delay or procrastinate. Rate each item on an “a” to “e” scale according to how often you wait until the last minute to do the activity. Then indicate on an “a” to “e” scale the degree to which you feel procrastination on that task is a problem. Finally, indicate on an “a” to “e” scale the degree to which you would like to decrease your tendency to procrastinate on each task.

I. WRITING A TERM PAPER

1. To what degree do you procrastinate on this task?

Never Procrastinate	Almost Never	Sometimes	Nearly Always	Always Procrastinate
a	b	c	d	e

2. To what degree is procrastination on this task a problem for you?

Not At All a Problem	Almost Never	Sometimes	Nearly Always	Always a Problem
a	b	c	d	e

3. To what extent do you want to decrease your tendency to procrastinate on this task?

Do Not Want to Decrease		Somewhat		Definitely Want to Decrease
a	b	c	d	e

II. STUDYING FOR EXAMS

4. To what degree do you procrastinate on this task?

Never Procrastinate	Almost Never	Sometimes	Nearly Always	Always Procrastinate
a	b	c	d	e

5. To what degree is procrastination on this task a problem for you?

Not At All a Problem	Almost Never	Sometimes	Nearly Always	Always a Problem
-------------------------	--------------	-----------	---------------	---------------------

6. To what extent do you want to decrease your tendency to procrastinate on this task?

a	b	c	d	e
Do Not Want to Decrease		Somewhat	Definitely Want to Decrease	
a	b	c	d	e

III. KEEPING UP WITH WEEKLY READING ASSIGNMENTS

7. To what degree do you procrastinate on this task?

Never Procrastinate	Almost Never	Sometimes	Nearly Always	Always Procrastinate
a	b	c	d	e

8. To what degree is procrastination on this task a problem for you?

Not At All a Problem	Almost Never	Sometimes	Nearly Always	Always a Problem
a	b	c	d	e

9. To what extent do you want to decrease your tendency to procrastinate on this task?

Do Not Want to Decrease	b	Somewhat	d	Definitely Want to Decrease
a	b	c	d	e

IV. ACADEMIC ADMINISTRATIVE TASKS: FILLING OUT FORMS, REGISTERING FOR CLASSES, GETTING ID CARD

10. To what degree do you procrastinate on this task?

Never Procrastinate	Almost Never	Sometimes	Nearly Always	Always Procrastinate
a	b	c	d	e

11. To what degree is procrastination on this task a problem for you?

Not At All a Problem	Almost Never	Sometimes	Nearly Always	Always a Problem
a	b	c	d	e

12. To what extent do you want to decrease your tendency to procrastinate on this task?

Do Not Want to Decrease		Somewhat		Definitely Want to Decrease
a	b	c	d	e

**V. ATTENDANCE TASKS: MEETING WITH YOUR ADVISOR,
MAKING AN APPOINTMENT WITH A PROFESSOR**

13. To what degree do you procrastinate on this task?

Never Procrastinate	Almost Never	Sometimes	Nearly Always	Always Procrastinate
a	b	c	d	e

14. To what degree is procrastination on this task a problem for you?

Not At All a Problem	Almost Never	Sometimes	Nearly Always	Always a Problem
a	b	c	d	e

15. To what extent do you want to decrease your tendency to procrastinate on this task?

Do Not Want to Decrease		Somewhat		Definitely Want to Decrease
a	b	c	d	e

VI. SCHOOL ACTIVITIES IN GENERAL

16. To what degree do you procrastinate on this task?

Never Procrastinate	Almost Never	Sometimes	Nearly Always	Always Procrastinate
a	b	c	d	e

17. To what degree is procrastination on this task a problem for you?

Not At All a Problem	Almost Never	Sometimes	Nearly Always	Always a Problem
a	b	c	d	e

18. To what extent do you want to decrease your tendency to procrastinate on this task?

Do Not Want to Decrease		Somewhat		Definitely Want to Decrease
a	b	c	d	e

Reasons for Procrastination

Think of the last time the following situation occurred. It's near the end of the semester. The term paper you were assigned at the beginning of the semester is due very soon. You have not begun work on this paper. There are reasons why you have been procrastinating on this task.

Rate each of the following reasons on a 5-point scale according to how much it reflects why you procrastinated at the time. Mark your answers on your answer sheet.

Use the scale:

Not At All Reflects Definitely Reflects Why I Procrastinated		Somewhat Reflects		Why I Procrastinated
a	b	c	d	e

19. You were concerned the professor wouldn't like your work.
20. You waited until a classmate did his or hers, so that he/she could give you some advice.
21. You had a hard time knowing what to include and what not to include in your paper.
22. You had too many other things to do.
23. There's some information you needed to ask the professor, but you felt uncomfortable approaching him/her.
24. You were worried you would get a bad grade.
25. You resented having to do things assigned by others.
26. You didn't think you knew enough to write the paper.
27. You really disliked writing term papers.
28. You felt overwhelmed by the task.
29. You had difficulty requesting information from other people.

30. You looked forward to the excitement of doing this task at the last minute.
31. You couldn't choose among all the topics.
32. You were concerned that if you did well, your classmates would resent you.
33. You didn't trust yourself to do a good job.
34. You didn't have enough energy to begin the task.
35. You felt it just takes too long to write a term paper.
36. You liked the challenge of waiting until the deadline.
37. You knew that your classmates hadn't started the paper either.
38. You resented people setting deadlines for you.
39. You were concerned you wouldn't meet your own expectations.
40. You were concerned that if you got a good grade, people would have higher expectations of you in the future.
41. You waited to see if the professor would give you some more information about the paper.
42. You set very high standards for yourself and you worried that you wouldn't be able to meet those standards.
43. You just felt too lazy to write a term paper.
44. Your friends were pressuring you to do other things.

Interest in Changing Your Procrastination

45. Would you be interested in attending a program that focuses on overcoming procrastination if such a program were offered next semester?
 - a. no
 - b. yes
46. How many program sessions in total would you be willing to attend if a procrastination program were offered?
 - a. none
 - b. less than five
 - c. five to ten
 - d. more than ten

47. How many sessions per week would you be willing to attend?
- a. none
 - b. one
 - c. two
 - d. three
48. What time would be the best for you in scheduling such a program? (Choose one)
- a. none
 - b. morning
 - c. lunchtime
 - d. afternoon
 - e. evening
49. What days would be the best for you in scheduling such a program? (Choose one)
- a. no days are good
 - b. weekdays
 - c. weekends
50. How large a group would you prefer? (Choose one)
- a. I'm not interested in such a program
 - b. less than 10 people in a group
 - c. 10-20 people in a group
 - d. It doesn't matter how large the group is
51. I feel that a program to improve procrastination habits would be:
- a. unnecessary
 - b. somewhat useful
 - c. extremely useful
 - d. useful, but not for me
52. What format would be most interesting to you? (Choose one)
- a. I'm not interested in such a program
 - b. Group discussion
 - c. Lecture
 - d. Following a written manual
 - e. A combination of the above

Appendices-IV



SAN DIEGO STATE
UNIVERSITY

Department of Women's Studies
College of Arts and Letters
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-6030
Tel: 619-594-6524
Fax: 619-594-5218
Email: brooks@mail.sdsu.edu
www.rohan.sdsu.edu/dept/wstweb/

August 22, 2016

SAIRA IJAZ AHMAD
Lecturer
Department of Education
University of Gujrat
Pakistan
and
Ph.D Scholar
Department of Education
International Islamic University Islamabad
Pakistan
0321-6260958

Dear Saira Ijaz Ahmad:

You have my permission to use the Procrastination Assessment Scale—Students (PASS). The PASS, scoring instructions, and related articles are at the bottom of the Research page of my website, which is: <http://www-rohan.sdsu.edu/~rothblum/>

Sincerely,

Esther D. Rothblum, Ph.D., Professor

Appendices-V

List of All Public Sector Universities of Punjab

Sr. No.	Universities	Main Campus Location	Website Address
1	Bahauddin Zakariya University, Multan	Multan	www.bzu.edu.pk
2	Fatima Jinnah Women University, Rawalpindi	Rawalpindi	www.fjwu.edu.pk
3	Government College University, Faisalabad	Faisalabad	www.gcuf.edu.pk
4	Government College University, Lahore	Lahore	www.gcu.edu.pk
5	Government College for Women University, Faisalabad	Faisalabad	www.gcuf.edu.pk
6	Islamia University, Bahawalpur	Bahawalpur	www.iub.edu.pk
7	King Edward Medical University, Lahore	Lahore	www.kemu.edu.pk
8	Kinnaird College for Women, Lahore	Lahore	www.kinnaird.edu.pk
9	Lahore College for Women University, Lahore	Lahore	www.lcwu.edu.pk
10	Pir Mehr Ali Shah Arid Agriculture, University Rawalpindi	Rawalpindi	www.uaar.edu.pk
11	University of Agriculture, Faisalabad	Faisalabad	www.uaf.edu.pk
12	University of Education, Lahore	Lahore	www.ue.edu.pk
13	University of Engineering & Technology, Lahore	Lahore	www.uet.edu.pk
14	University of Engineering & Technology, Taxila	Taxila	www.uettaxila.edu.pk
15	University of Gujrat, Gujrat	Gujrat	www.uog.edu.pk
16	University of Health Sciences, Lahore	Lahore	www.uhs.edu.pk
17	University of Sargodha, Sargodha	Sargodha	www.uos.edu.pk
18	University of the Punjab, Lahore	Lahore	www.pu.edu.pk
19	University of Veterinary & Animal Sciences, Lahore	Lahore	www.uvas.edu.pk
20	The Women University, Multan	Multan	www.wum.edu.pk