

ACADEMIC PROCRASTINATION IN RELATION TO GENDER AMONG GIFTED
AND TALENTED COLLEGE STUDENTS

In Partial Fulfillment of the Requirements of Master of Science in the Department of
Educational Psychology

Approved by Thesis Committee;

Dr. John Gaa, Chairperson

Dr. Richard Olenchak, Committee Member

Dr. Amber Meuth, Committee Member

Robert H. McPherson, Dean

College of Education

ACADEMIC PROCRASTINATION IN RELATION TO GENDER AMONG GIFTED
AND TALENTED COLLEGE STUDENTS

A Thesis Submitted to the
Faculty of the College of Education
University of Houston

by
Ruhsan Burcu Islak

June, 2011

ABSTRACT

The aim of the study was to investigate to what extent gender predicts academic procrastination among gifted and talented college students. The study consisted of 35 honor college undergraduate students enrolled in a large urban university in Texas. A questionnaire packet was used for collecting data. It included a demographic data form and the Procrastination Assessment Scale-Students (PASS).

The results of the t-test analysis for the total sample indicated that, gender was not a significant predictor of academic procrastination among gifted and talented students. Implications of the findings were discussed and some suggestions were made for further research.

Keywords: Academic Procrastination, Academic Achievement, Gender, Gifted and Talented Students

TABLE OF CONTENTS

LIST OF TABLES	iv
INTRODUCTION	1
Background of Study	1
Purpose of the Study	5
Research Questions	7
Significance of the Study	7
Definition of Terms.....	8
REVIEW OF THE LITERATURE	10
Definitions and History of Procrastination	10
Models of Procrastination	11
Psychoanalytic and Psychodynamic Theories	12
Behavioral Theory	14
Cognitive Behavioral Theory.....	16
Variables associated with Procrastination	18
Research on College Student Procrastination	23
METHODOLOGY AND RESEARCH DESIGN	26
Overall Design of the Study.....	26
Participants.....	26
Procedure	27
Data Collection Instrument	27
The Procrastination Assessment Scale-Students (PASS)	27
Data Analysis	28

RESULTS	30
DISCUSSION	32
Implications.....	32
Limitations	33
Recommendations for Further Research.....	34
REFERENCES	35

LIST OF TABLES

Table

1	Demographic Characteristics of Participants	27
2	What extent does gender predict academic procrastination among gifted and talented college students	31

CHAPTER ONE

INTRODUCTION

This chapter has been categorized into five sections: (1) Background to the study, (2) Purpose of the study, (3) Research Questions, (4) Significance of the study, (5) Definitions of terms.

Background the Study

In thinking about procrastination, several scenarios come to mind. On the evening of December 24, malls are filled with last minute gift buyers. At the central post office on April 15, numerous tax-return applicants are mailing their tax forms. And most specifically to the topic of academic procrastination, observe a college library just before final exams, a number of freshman students studying for their exam assigned at the beginning of the semester but due the following morning at 8.00 am.

A couple of hundred years ago, Benjamin Franklin shared with the world the secret of his success. "Never leave that till tomorrow which you can do today." This is the man who discovered electricity. For different life reasons, people procrastinate. While some people think that putting things off until the last minute might evoke excitement, individuals' lives are more negatively affected by procrastination and its negative consequences may not feel this way.

We have all heard proverbs from our grandparents warning us about wasting time. The early bird catches the worm. A stitch in time saves nine. He who hesitates is lost. We can't pretend we haven't been told about the effects of procrastination. We've all heard the proverbs, philosophers, and our grandparents warning us about wasting time, and heard the poets urging us to seize the day. Still sometimes we have to see for ourselves

until we finally understand for ourselves what Benjamin Franklin really meant about being careful about spending our time.

The English term procrastinate comes from the Latin verb “procrastinatus”, a combination of “pro”, an adverb implying for or forward motion, and “crastinus”, belonging to tomorrow (Merriam Webster’s Collegiate Dictionary, 1993) means “putting forward until tomorrow.”

In the last few decades, due to increased use of technology and time pressure, people put off things more in their lives. There are truly negative influences and consequences of procrastination, which affect people to different degrees. For instance a failure to file taxes on time can bring on a financial penalty and additional aggravation from the IRS. An absent Christmas present can result in relational discord. Late studying for final exams can yield lower course grades or perhaps even cause one to fail a class. However, consider a man who procrastinates on getting medical treatment for his heart problem, and then soon suffers a heart attack. In these types of situations, putting off purposeful and necessary action until later can result in very serious, negative, and perhaps fatal consequences.

The study of procrastination and its consequences has received increased empirical attention within the field of psychology over the past several decades. In general, procrastination has long been identified as a negative behavior and procrastinators perceive this behavior as a problem that they wanted to reduce because of its serious negative outcomes (Ferrari, 1991a; Solomon & Rothblum, 1984). When explaining procrastination behavior in general, researchers frequently define it as a

negative behavior. Ferrari and Lay examined the reasons and the consequences for this behavior in general and academic settings. In fact, academic procrastination is typically defined as an irrational tendency to delay at the beginning of an academic task. Students may have the intention of performing an academic activity within the desired or expected time frame, yet not be motivated to do so. (Ferrari, 1998; Lay, 1986,1985).

However, academic procrastination can also be understood as knowing that one is supposed to, and perhaps even want to, complete an academic task but failing to perform the activity within the expected or desired time frame. (Senecal, Koestner, & Vallerand, 1995) Indeed, procrastination can negatively impact learning, achievement, academic self-efficacy and quality of life and this behavior is fairly commonplace among adults as well as students at high school and college levels. (Clark&Hill, 1994) For example, in academic settings, procrastination may contribute to missing or late assignments, cramming, anxiety during a test, giving up studying when more attractive alternatives are available and overall poor performance on tests and activities assigned for a course (Lay&Schouwenburg, 1993) Consistent with negative consequences, problematic or habitual procrastination might create internal discomfort at some time later. This discomfort may manifest as anxiety, irritation, regret, despair, or self-blame (Burka&Yuen, 1983; Psycyl et al., 2000a; Rothblum,Solomon,&Murakami,1986)

A large number of college students suffer from academic procrastination and its internal and external negative consequences. External negative consequences are decreased learning, lost opportunities, increased health risks, and strained relationships.

(Beswick, Rothblum, & Mann, 1988; Tice & Baumeister, 1997;Burka&Yuen; Burns, Dittman, Nguyen&Mitchelson,2000;Moon& Illingworth,2005a;Rothblum et al,1986;Tice&Baumeister,1997). On the other hand, internal consequences have a serious influence on a learner's behavior also. Internal consequences of procrastinator behavior may include irritation, regret, despair, and self-blame (Burka & Yuen 1983).

Due to these significant negative aspects, researchers have studied and proposed various variables as possible predictors of procrastination. . Recent studies showed that 70% of college students in the United States procrastinate on their school tasks (Ellis & Claus, 1977) and the likelihood of procrastination increases from freshman to senior year (Hill, Hill, Chabot & Barrall, 1978) These students tend to procrastinate when writing papers, studying for tests and when completing assignments (Solomon & Rothblum, 1984; as cited in Senecal, Lavoie & Koestner, 1997), assignments that are often considered effortful and anxiety producing (Ferrari & Scher, 2000). Academic procrastinators also underestimate the time it takes to complete a project and believe that working at the last minute will make them more creative, which is typically not the case . College students who procrastinate have also claimed that their procrastination has a significant impact on their academic standing, ability to understand class material, and the overall quality of their lives (Ferrari, 2001).

Researchers demonstrate that procrastination may be fostered by context specific factors that promote student's fear of failure, evaluation anxiety, feelings of incompetence, or task aversiveness (Ferrari, Parker & Ware,1992; Ferrari & Tice,2000; Lay 1992;

Rhodewalt,1994; Schouwenburg,1992; Senecal, Lavoie & Koestner ,1997; Solomon ,Rothblum,1994). In his study, Wolters (2003) examined the relationship between students reported level of procrastination and aspects of both their motivational and cognitive functioning. This study showed that in order to understand procrastination behavior one must consider the correlation with motivation and cognition constructs.

College students at all levels, from freshman to senior years, mostly suffer from increasing procrastination and its negative consequences. This is a chronic problem in education and will continue to be one. There are no single ‘concrete’ reasons why students do this, but by providing some explanations some concrete suggestions can be made for possible solutions. On the other hand, a large number of studies have been conducted on students’ procrastination in college students. To be sure, we have learned a great deal about academic procrastination, but there is limited research conducted on gifted and talented students’ procrastination. Since gifted and talented students should be protected and nurtured carefully, focusing on gifted and talented students’ procrastination behavior in academic engagement and learning is essential.

Purpose of this study

This master’s thesis study investigated gifted and talented students’ academic procrastination in relation to gender. During their college years, many college students procrastinate on their academic tasks, which ultimately impact their college experience in terms of creating and keeping long-term goals for their academic achievement. Since, multitasking is an essential task for most college students, these students have to meet deadlines within designated time frames. Balancing schoolwork with the rest of their

lives can be very challenging. Given this predicament, understanding academic procrastination among gifted and talented college students can be a practical value to educators for establishing effective solutions to implement in academic settings. Thus, identifying possible factors that contribute to procrastination will also provide information helpful to researchers in developing interventions that help reduce procrastination in order to help college students live better, more productive, and less conflicted, lives.

To our knowledge, this study appears to be the first to investigate and gain insight about the tendency of the gifted and talented students' academic procrastination in relation to gender. Indeed, gifted and talented students should be nurtured and protected, because some of them might be tomorrow's leaders and decision makers.

Another reason to study academic procrastination among gifted and talented college students lies in the notion that universities endeavor to prepare their valued gifted students with skills and knowledge that will allow them to prosper in the non-academic realm or, alternatively, in graduate school for those who choose to pursue advanced degrees.

Previous researchers showed that the tendency to procrastinate negatively impacts college students' academic life (McCown & Roberts, 1994; Solomon & Rothblum, 1984). On the other hand, procrastination does not only affect students' academic life; it also impacts their personal lives. For these reasons, examining academic procrastination at the college level can be very helpful to educators to create and implement special programs to help college students correct their behavior before continuing on towards

graduate school or outside academia.

The present study investigated the relationship between gender and academic procrastination among gifted and talented college students. Exploring college students' procrastination in terms of gender makes an important contribution to the procrastination literature.

Research Question

The main research question of this study was, 'To what extent does academic procrastination of gifted and talented students differ by gender?'

Significance of Study

Despite the increasing number of students engaging in academic procrastination, no research has been conducted about gifted and talented students' procrastination behavior. Understanding and discussing the tendency of gifted and talented student's academic procrastination at the college level may be best achieved by the adaption of a valid and reliable measure.

In general, a gender difference with respect to academic procrastination is a controversial issue that may be difficult to predict. (Steel, 2004) Although some studies reported significant gender differences (Milgram, 2001) other studies reported no such gender at all.

Gifted and talented students hold a valued place in the academic curriculum; they are fast learners and are more likely to reach academic success than the average student. Even though they are highly capable of quickly learning large amounts of information,

they might have some issues in the learning process. From this perspective, identifying their problems would be beneficial for them and educators in order to help them use their capabilities to their best advantage.

The results of the present study may provide important cues for counselors and university staff in developing new programs that may reduce the negative effects of such behaviors on gifted student's academic performance. Consequently, it may be significant for the gifted and talented students who would like to reduce their tendency to procrastinate. The present study will expand the amount of literature available about procrastination associated with gender among gifted and talented students.

Another significant issue of this study is its contribution of new and relevant information regarding procrastination among gifted and talented students in gender basis. To the best of our knowledge there is no study regarding gifted and talented college students' procrastination and its potential contributors to their academic achievements. Thus, by investigating procrastination in gifted and talented students, this study is expected to provide an increased understanding of the role of general academic procrastination. And the findings may provide valuable information to school counseling services about gifted students who are more at risk for academic procrastination.

Definitions of Terms

Procrastination: “ Act of needlessly putting off tasks to the point of experiencing subjective discomfort” (Solomon & Rothblum, 1984, p.503)

Academic Procrastination: “ (a) self-reported tendency to put off academic tasks nearly always and always (b) the experience nearly always causes problematic levels of anxiety

associated with procrastination” (Solomon, Rothblum, & Murakami, 1986, p.388)

Gifted and Talented: Children and youth with outstanding talent who perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment. (US Department of Education, 1993.)

CHAPTER TWO

REVIEW OF THE LITERATURE

This review of the literature begins by presenting procrastination as a construct of theoretical and scientific interest. The review of literature, firstly presents definitions and a brief history of procrastination. The next section will present the literature review models of procrastination. After that, the variables associated with procrastination literature follow. Lastly, research on college student procrastination is discussed.

Definitions and History of Procrastination

In the procrastination literature, the term ‘procrastination’ comes from the Latin language, meaning “forward, forth, or in favor of,” and *crastinus*, meaning “of tomorrow” (Klein, 1971). Building on this base, one procrastinates when one delays beginning or completing an intended course of action (Beswick & Mann, 1994; Ferrari, 1993a; Lay & Silverman, 1996; Milgram, 1991; Silver & Sabini, 1981). This is a useful distinction, as there are thousands of potential tasks that one could be doing at any time, and it becomes cumbersome to think that one is putting them all off. The distinction also separates procrastination from simple decision avoidance (C. J. Anderson, 2003), with which people’s original intention is to delay. In addition, procrastination is most often considered to be the irrational delay of behavior (Akerlof, 1991; Burka & Yuen, 1983; Ellis & Knaus, 1977; Silver & Sabini, 1981), which reflects the dictionary definition: “defer action, especially without good reason” (Oxford English Reference Dictionary, 1996). Being irrational entails choosing a course of action despite expecting that it will not maximize your utilities, that is, your interests, preferences, or goals of both a material

(e.g., money) and a psychological (e.g., happiness) nature.

In general, research on procrastination explores two types of procrastination; 1) academic procrastination which reflects domain-specific procrastination on academic task such as studying for exams or writing a term paper; and 2) general, everyday procrastination, which reflects procrastination on non-academic life tasks such as delaying the payment of a bill. Combining these elements suggests that to procrastinate is to voluntarily delay an intended course of action despite expecting to be worse off because delay. On the other hand, as Wolters (2003) indicated, academic procrastination includes failing to perform an activity within the desired time frame or postponing until the last minute activities one ultimately intends to complete.

Models of Procrastination

Previous researchers examining procrastination tended to focus on explaining procrastination in one of different ways. One way suggests that procrastination is the result of one or more fairly stable personality traits that cause individuals to procrastinate across many different context or situations (Lay & Silverman, 1996; Milgram, Dangour, & Raviv, 1992; Saddler & Bulley, 1999)

In the literature, different theoretical approaches to the study of procrastination, along with many of the major empirical findings are discussed. The studies showed that learner' academic procrastination behavior is consistently linked with psychological, social, cognitive forces that direct learner's behavior.

To understand the relation between academic procrastination and its reasons properly, this section focuses on the major theoretical approaches to academic

procrastination. Although their explanations are different, the term procrastination is often used interchangeably in the theoretical approaches. Since the concept of the behavior involves psychological, cognitive, and behavioral dimensions, an understanding of each approach will lead to guidelines for future directions in academic procrastination behavior's reasons and its possible consequences.

Psychoanalytic and Psychodynamic Theories

The theoretical framework of psychoanalytic and psychodynamic theory draws upon psychoanalytic perspective and techniques (as well as other disciplines) has much to contribute to our understanding of procrastination, reasons of this behavior, and the hidden dynamics in the academic life.

Although numerous aspects of Freud's theories are no longer valid in light of a more modern approach in understanding the workings of the mind, a fundamental component of psychoanalytic theory and technique have scientifically explained a learner's procrastination behavior. Advocates of the psychodynamic approach stressed the importance of previous childhood experiences and faulty parental techniques on the likelihood of an individual to procrastinate. (Burka & Yuen, 1983; Ellis & Knaus, 1977)

Freud explored the importance of previous childhood experiences and its influence on human behavior. According to his theory, there is strong continuity between childhood and adult behavior. As the saying goes, - Scratch a man or woman and you will find a child -This simply means that by the time we reach the age of 30, a considerable part of our personality has been formed (McCrae, Costa, 1990; Heatherton, Weinberger, 1994). Unless we recognize the extent to which our present is determined by our past, it is quite

likely that we will repeat the same mistakes continuously in our lifetime. The Freudian approach helps us in understanding why we delay performing tasks and the cause of this behavior and recognize how and in which situation they occur. Therefore, recognizing the role of the psychodynamic approach in learners' academic procrastination leads to greater insight of the matter. Eventually, a closer look at procrastination confirms the link between childhood experiences and adult behavior. When we trace procrastination back to its roots, we return to a person's childhood. Freud (1926) explained avoidance problems like procrastinating with anxiety. According to him, tasks are avoided because they are threatening the ego. Another psychoanalyst Birner (1993) explained procrastination as a defense against impulses and separation.

Indeed, psychodynamic theories are often assumed to focus on a single dimension such as consequences of faulty child-rearing practices. In terms of relations with faulty parenting style, procrastinating includes certain characteristics such as perfectionist tendencies, low frustration tolerance, high need for autonomy, high need for approval, fears of failure. (Burka & Yuen, 1983; Ellis & Knaus, 1977). Most psychoanalytic theorists agree that parental expectations influence personality traits of individual. (Burns, 1980, cited in Busko, 1998; Frost, Lahart, & Rosenblate, 1990; Hamacheck, 1978; Hollender, 1965; Missildine, 1963; Pacht, 1984; Pychyl, Coplan, & Reid, 2002). For instance, Missildine (1963) emphasized the role of parents in the development of procrastination tendencies. According to him, over coercion in the family causes procrastination. A student may decide to rebel against pushy family members and test their own limits as to how late they can successfully complete an assignment just in time

before it is due. Another psychoanalyst, Spock (1971), tends to look at the individual as the composite of their parental upbringing and how particular conflicts between themselves and their parents and within themselves get worked out. Spock suggested three elements in parental management creating procrastination behavior. The first element is a parent's unconscious impulse to dominate the child, the second element is the anger of the parent toward their child's unfinished work, and the last third element is the parent's attitude of not expecting to be defeated by the child.

Parent expectation's plays an important role in students' academic achievement in many ways. In his study, Frost et al. (1990) associated high parental expectations with socially prescribed perfectionism, which positively relates to procrastination. Also, those who procrastinate tend to be perfectionistic, have low frustration tolerance, high needs for autonomy and approval, and fears of failure. (Muszynski & Akamatsu, 1991). MacIntyre (1964) on the other hand, argued that parents who are too permissive might cause procrastination tendencies in their child as well along with over controlling parents.

A major contributing factor of the psychodynamic theory is a broader perspective in understanding procrastination behavior that focuses on individual's desires, fears, and previous parental experiences that affect his or her present behavior. As every mental activity, human behavior needs to be understood in terms of conflicts, defensive behaviors, and past experiences. In that respect, when we enter the realm of someone's inner world, we should try to understand all these factors together.

Behavioral Theory

Behavioral theory integrates motivation, reinforcement, and reward and punishment

factors in human behavior. In this way, behaviorism introduces a wider range of meaning for individual's reasons for procrastination. The fundamental characteristic of behaviorist's theory is that they view the motivation environment as the principal determinant factor in human learning. So, in the classic, "nature versus nurture" debate, the behaviorist theory focus on the 'nurture' side.

In his study, Briody (1980) found that absence of motivation is associated with student's procrastination behavior. According to his study results, students procrastinate due to lack of motivation.

Other behaviorist studies view procrastination as a result of as a learned habit from primary caregivers and preference for doing pleasurable activities while gaining short-term rewards. (McCown, 1986). On the other hand, according to Kachgal's study (2001) students procrastinate most on the tasks if they find it unpleasant. In his study, "aversiveness of the task" is the most eminent factor of procrastination behavior.

Senecal et al. (1995) suggested that academic procrastination is a motivational problem including more than time management or trait laziness. They also suggested that procrastination may be associated with self-regulation styles, and that students who had intrinsic reasons were less likely to procrastinate compared to the ones who had extrinsic reasons. Similarly, Tuckman (1998) claimed that procrastinators are difficult to motivate and they may have difficulty acquiring new knowledge if steps are not taken to enhance their motivation. In contrary to the researchers mentioned above, Lee (2005) examined the relationship of academic procrastination to motivation and flow experience. Lee (2005) defined flow as "becoming totally immersed in the activity to the point of losing

awareness of time, surroundings and all other things except the activity itself” (p. 7) and suggested different results. According to Lee (2005) students who were motivated in a self-determined manner reported low procrastination levels.

Furthermore the relationship of extrinsic motivation with procrastination varied depending on whether the task was self-determined or non- self-determined. This can be an indication that procrastination was an individual behavioral tendency associated with the lack of self-determination. Lastly, motivation did not contribute significantly to the variance in procrastination when the effects of flow experience were considered.

These approaches enrich our understanding of the motivational influences in individual’s tendency to procrastinate a task, especially in terms of what individuals believe influences their procrastination behavior, and how other factors are connected to this behavior.

Cognitive Behavioral Theory

Cognitive-behavioral theory emphasizes the cognitions or thoughts an individual has and offers an explanation as to how people develop and how they sometimes get a mental disorder. Most of the studies of procrastination include the effect of the role of irrational beliefs on procrastination. Ellis and Knaus (1977) examined how behavior and environment have an effect on the individual and whereas beliefs have a profound mediator role in this relationship.

Relations between affect and behavior of individual’s daily life were demonstrated in the study. Although the findings are limited, cognitive interpretations of individuals for specific situations are effective.

Much of work on individual's behavior and thinking has focused on their beliefs, thoughts, and attitudes towards the world and themselves. Within cognitive behavioral theory, some of the behaviors of individuals are seen as rational and some are seen as irrational. Indeed, procrastination behavior is explained particularly with respect to the effects of interactive dysfunctional cognitive and behavioral process. Ellis and Knaus (1977,p.7) found 11 steps that seem to be inevitable for procrastinators. These steps are:

1. Wishing to accomplish a task,
2. Making a decision to do it,
3. Needlessly delaying doing it,
4. Observing the disadvantage,
5. Continuing to postpone working on the tasks,
6. Scolding oneself for the procrastination,
7. Continuing to procrastinate,
8. Completing tasks at a last minute or never complete,
9. Feeling uncomfortable,
10. Assuring oneself about not procrastinating again, and lastly,
11. Shortly thereafter, engaging in procrastination again.

According to Ellis and Knaus (1977), during this eleven-step procrastination process, feelings of anxiety, depression, and despair accompanied by low self-esteem and feelings of worthlessness are experienced in a vicious cycle.

These research findings indicated that procrastination stems from three reasons; self-doubt, low frustration tolerance and rebellion against control. Evidence is increasing

that people who tend to procrastinate seem to find an excuse for their perfectionist behavior.

When explaining academic procrastination problem in school settings, research frequently focuses on learner's fear of failure. Considerable researches have documented that fear of failure is one of the most common reason why people procrastinate their academic tasks. At the same time, however, Schouwenburg (1992) clarified the discrepancy between fear of failure for a noteworthy reason and test fear of failure unrelated to procrastination. He tried to validate the findings of Solomon and Rothblum (1984) by examining the responses of procrastinating students and provides an explanation for the lack of correlation between fear of failure as a trait and trait procrastination. The study was conducted with 278 students and they were administered Lay's (1987) Procrastination Scale, Procrastination Checklist Study Tasks (Schouwenburg, 1991) and the reasons part of the PASS (Solomon & Rothblum, 1984). In various factor analyses, it was found that trait procrastination and trait fear of failure loaded on different factors. Accordingly, no substantial relationship between fear of failure and procrastination was found.

Variables associated with Procrastination

Most studies focus, not surprisingly, on the effects of the association between procrastination and age. Building on decades of research did not yield significant age differences in terms of procrastination scores. Haycock (1998) was conducted to investigate the relationship of procrastination with self-efficacy and anxiety among 141 college students. In his study, he found no significant difference in terms of age and

gender. On the other hand, recent findings suggest that there is a significant difference between age and self-reported reasons for procrastination. Watson (2001) investigated the relationship between procrastination and Big-Five Personality Factors among 349 university and high school students aged between 18 and 53. The results of the study revealed that there is a significant difference between age and self-reported reasons for procrastination. For instance, participants who between the ages of 25 and 53 were found to have lower scores on the rebellion against control and task aversiveness, compared to those participants who were between the ages of 18 and 25.

Another study by McCown and Roberts (1994) was conducted with 360 participants aged between 18 and 77; and results of this study showed that males who were aged 20 and higher got the highest scores on procrastination. Procrastination scores for males decreased towards the age of 60 and increased after 60. Similar findings were also reported for females. Prohaska and et al. (2000) investigated the academic procrastination among an ethnically, economically, and culturally diverse number of 386 college university students. Results revealed that there is a significant negative relationship between age and academic procrastination. It is not surprising that procrastination is closely related to academic and non-academic outcomes. Academic achievement might be defined in terms of grades in college settings.

Various research studies on academic achievement and procrastination have been conducted in the earlier literature. According to Solomon and Rothblum's (1984) study, course grade was not significantly correlated with self-reported procrastination.

In his research, Prohaska et al. (2000) sought to understand the relationship between academic procrastination and academic achievement. There was no significant relationship between academic procrastination and academic achievement. Collectively, there appears to be consistent empirical evidence suggesting no relationship between academic achievement and procrastination behavior.

In contrast, some research studying academic procrastination suggested that academic achievement might be related to procrastination. There is some empirical evidence to suggest that poor academic evidence was related to procrastination. (Semb,1979)

In a similar vein, Rothblum, Solomon and Murakami (1986) concluded that procrastination is negatively associated with course grades. In addition, higher levels of procrastinators get lower grades from final and mid-term exams compared to non-procrastinators. (Tice and Baumeister 1997) In a discourse on procrastination within academic context, Senecal et al. (1995) who claimed that self-regulation and motivational difficulties are associated with procrastination found that grade point average is significantly negatively correlated with academic procrastination.

Taken together, while there is some research linking academic achievement to procrastination, empirical evidence is not conclusive at this point. However, it is important to conclude that that procrastination has some maladaptive aspects that are associated with undesirable academic outcomes such as decreased learning, impaired academic work, and low grades.

Finally, procrastination might be associated with academic achievement concerning

the extent to which higher ability students procrastinate more than lower ability students. In his study, Ferrari (1991) studied that procrastination increases as students advance in their academic careers and become more self-regulated. This finding suggests that procrastination, which is common among successful students, has no negative impact on academic performance and even may be adaptive. However, if procrastination does not play an adaptive role in certain situations, many students have low academic performance because of regular academic procrastination.

Extensive research conducted on procrastination shows little evidence of gender differences. Milgram et al. (1995) conducted a study investigating the relationship between procrastination and related variables among 115 male and 85 female students, concluding that males were more likely to procrastinate than females. Similarly, Senecal et al. (1995) conducted a study with 498 French-Canadian junior university students and investigated the role of autonomous self-regulation as a predictor of academic procrastination. As they expected, female university students reported to have less procrastination tendency compared to their male peers. They explained this gender difference by the fact that females are more intrinsically motivated than males. In another study by Brownlow and Reasinger (2000), the relative impact of intrinsic and extrinsic motivation toward academic work, fear of failure, perfectionism and locus of control on academic procrastination were investigated among 96 university students. The results of this study revealed that low extrinsic motivation coupled with perfectionism lead to academic procrastination, especially for female students. On the other hand, procrastination of male students was not predicted by perfectionism, but by the lack of

extrinsic motivation. External attribution style predicted procrastination behavior of male students.

On the other hand, a majority of the studies in the literature did not reveal gender difference. For instance, Solomon and Rothblum (1984) did not find any gender difference for the total self-reported procrastination. Another study conducted by Haycock et al. (1998) investigating the role of self-efficacy and anxiety on general procrastination of 141 university students, showed that there was no main gender effect. Also in the same study, the results revealed that there was no relationship between age and procrastination level.

Research on Gifted and Talented College Student's Procrastination

Students at all levels in college, from freshman to graduate, are always concerned with increasing academic procrastination in their academic tasks. College life is an excellent context in which students can do their coursework at any time in order to meet long-term deadlines. This means, procrastination is a chronic problem in college life and will continue to be one. Indeed, there is no single 'right' solution to this issue, but providing new and different research studies, new solutions can be made for this problem.

While much has been studied about procrastination among college students in the United States, there is surprisingly no research exploring this subject among gifted and talented college students. Specifically, research to date has mainly focused on students in the United States and the findings report that procrastination can affect academic performance (Tuckman, 2002. Ferrari, 2001, Steel, et al. 2001), stress level (Tice et al

1997), and thus overall satisfaction of university life. Interestingly students who self-report as procrastinators are as intelligent as students who do not (Van Eerde, 2003) but often underachieve due to leaving complex tasks until the last minute. Some students enjoy the challenge of the “last minute all-night stint” but as one progresses through academia, such rushed performances will not accomplish an extensive or complex piece of work such as an extended essay, a masters thesis or a PhD. Procrastinators thus become increasingly frustrated by their inability to control their own behavior to start earlier so that their writing tasks are paced and enjoyed.

In addition, numerous studies draw attention to the circumstances under which students are likely to procrastinate. For instance, when asked to report why they procrastinate, college students offered reasons related to task aversiveness and fear of failure (Solomon & Rothblum, 1984). Moreover, research showed that academic procrastination could stem from less effort on the task (Sadler & Buley, 1999), low self-efficacy (Haycock, McCarthy, & Skay, 1998), low task capability (Milgram, Marshevsky, & Sadeh, 1995), high level of performance anxiety (Ferrari, 1991a; Flett, Hewitt, & Martin, 1995; Milgram & Toubiana, 1999; Solomon & Rothblum, 1984), and non-self-determined academic motivation (Sénécal, Koestner, & Vallerand, 1995). In addition, academic procrastination may be affected by personality characteristics such as trait of procrastination, socially prescribed perfectionism (Sadler & Sacks, 1993), concern for a favorable public impression (Ferrari, 1991b), and low levels of conscientiousness (Schouwenburg & Lay, 1995). Research has typically linked academic procrastination to a variety of academic variables without considering what happens in other life contexts

(e.g. Haycock et al., 1998; Milgram & Toubiana, 1999; Sadler & Buley, 1999).

Nevertheless, students do not have only one significant life context (or role) in their day-to-day life but multiple ones. For instance, research conducted with college students indicated that they devoted not only a lot of time to their academic curriculum but also to their interpersonal relationships (Blais, Vallerand, Pelletier, & Briere, 'Construction et validation de l'Inventaire de motivation dans les relations interpersonnelles', unpublished manuscript, 1994; Vallerand, 1997). Thus, it seems reasonable to believe those students' academic and interpersonal roles may sometimes be incompatible and thus create role conflict, which in turn may produce higher levels of academic procrastination. Role conflict is defined by the amount of conflict that exists between self-identities. In their study, they assessed role conflict by asking participants to rate the amount of conflict felt within student and friend roles. This procedure is an extension of the methodology used by Sheldon, Ryan, Rawsthorne, and Ilardi (1997) and Emmons and King (1988) in their studies of role conflict. For instance, a student may feel conflict between studying for an exam and going out with friends to a party. The student may then experience conflicting emotions and have difficulty in sustaining his initiative in pursuing academic goals and thus postpone his exam study. (Sénécal, Vallerand, and Guay (2001) provided some indirect support for the hypothesis that role conflict leads to academic procrastination. They showed that family and worker roles could interfere to produce role conflict. In addition, Emmons and King (1988) reported that conflict and ambivalence were associated with high levels of negative affect, depression, neuroticism, and psychosomatic complaints.

CHAPTER THREE

METHODOLOGY AND RESEARCH DESIGN

This methods chapter consists of six sections. The beginning section is the overall design of the study. In the second section the characteristics of the students participated in the study are described. The third section includes the data collection instruments. The fourth section explains the data collection procedure. Data analysis is presented in the fifth section. Finally, the limitations of this study were presented in the sixth section.

Overall design of the Study

The overall design of the study is survey. The aim of the study was to investigate the role of gender on predicting procrastination levels among gifted and talented college students.

Participants

This study was implemented in the Honors College from in an urban large Texas University. A total of 35 gifted and talented college students, 18 female and 17 male, voluntarily participated to our survey in the Spring 2011 semester (See Table 1) Their ages ranged from 19 to 22 years. Students' ethnicity was not recorded in the demographic form. However, according to Honor College Students profile, the college has a large majority of white students (44%). In general, the college students consisted of 25% Asian, 17% Latino, 6% Black, and 8 % other. In the same way, With respect to SAT scores, as is typical at this institution; all general Honor Colloge students had average high math and critical reading scores. 1400-1600 12%, 1300-1399 35%, 1200-1299 30%, 1100-1199 18%, Below 1100 5%

Procedure

The Honors College has a meeting with all students every two weeks in their meeting room. At the beginning of their meeting, the volunteer student introduced my research to the participants and asked for their cooperation and full attention to the researcher. Then the researcher read a prepared introduction to explain the purpose of the study. Participants were told that all of their answers would be confidential and that they did not have to answer any question that they did not feel comfortable answering.

Approval for the study was obtained from Committees for the Protection of Human Subjects prior to beginning survey. The participants took part in this study on a voluntary basis and all participants' responses were anonymous. Questionnaires were administered in Honor College one of regular meetings. As a compensation for their participation, \$25 Gift Cards was offered in a random drawing.

The following research question regarding gender difference in gifted and talented college students' academic procrastination in academic settings was addressed.

1. Is there a significant difference in the degree of academic procrastination among gifted and talented college males and females?

TABLE 1

Demographic Characteristics of Participants

Variable	n	%
Female	18	51 %
Male	17	49%
Total	35	

Data Collection Instrument

In this study, data were collected from 35 Honor College Students who completed the Procrastination Assessment Scale- Students (PASS).

Solomon and Rothblum (1984) developed the Procrastination Assessment Scale- Students (PASS) to measure the frequency of cognitive-behavioral antecedents of academic procrastination. The PASS contains two parts. The first part assesses the prevalence of procrastination in six academic areas: (a) writing a term paper, (b) studying for an exam, (c) keeping up weekly reading assessment, (d) performing administrative tasks, (e) attending meetings, (f) performing academic tasks in general. Subjects indicate on a 5-point Likert scale the extent to which they procrastinate on each task. (1=never procrastinate; 5= always procrastinate) and the extent to which procrastination on each task is a problem for them (1= not at all a problem; 5= always a problem). Because definitions of procrastination include both behavioral delay and psychological distress, the extent of self-reported procrastination and the extent to which it presents a problem are summed for each academic task (score ranging from 2 to 10) as well as across the six academic areas (total score ranging from 12 to 60). For the first part, which includes 18 items, scoring accounts for the fact that the definition of procrastination emphasizes both behavioral delay and psychological distress. The first two items (the degree of procrastination and the degree to which it presents a problem) are added to obtain a score that can range from 2 to 10 points. In other words, first two questions of each of the six procrastination areas (1+2+4+5+7+8+10+11+13+14+16+17) are summed for a total score ranging from 12 to 60.

The second part of PASS describes a procrastination scenario; delay in writing a term paper and then suggests many possible reasons for procrastination in the task. These reasons include: (a) evaluation anxiety, (b) perfectionism, (c) difficulty making decisions, (d) dependency and help seeking, (e) aversiveness of the task and low frustration tolerance, (f) lack of self-confidence, (g) laziness, (h) lack of assertion, (i) fear of success, (j) tendency to feel overwhelmed and poor manage time, (k) rebellion against control, (l) risk-taking and (m) peer influence. For each of these reasons, two statements are given, and students rate each statement on a 5-point Likert scale according to how much it reflects why they procrastinated the last time they delayed writing a paper. For example, the two perfectionism statements are ‘You were concerned you wouldn’t meet your own expectations’ and ‘You set very high standards for yourself and you worried that you wouldn’t be able to meet those standards.’

There are number of studies have indicated that PASS possesses adequate reliability and validity. (Beswick et al., 1998; Ferrari, 1989’ Onwuegbuzie,2004; Senecal et al., 1995; Solomon & Rothblum,1984) In the study of Ferrari (1989), conducted with university students, and found adequate levels of coefficient alpha, .75 for the first part and .70 for the second part of the PASS. Test-retest reliability over a six- week interval yielded .74 and .65 for the first and the second part of the PASS, respectively. Senecal et al. (1995) also found that the scale highly reliable (alpha coefficient = .88). Onwuegbuzie (2004) carried out a study with 135 graduate students, and he found .85 coefficient alpha scores for total scale, .82 for the first and .89 for the second part of the scale. To determine validity of the

PASS, it was compared with other personality measures such as indecision (.32), depression (.27), irrational beliefs (.20) (Beswick et al., 1988), and trait anxiety (.13) (Solomon & Rothblum, 1984). Moreover, Rothblum et al. (1986) reported that total PASS/Part 1 scores were negatively correlated with the course grades (-.22).

Procedure

The data were collected during Spring 2011 semester. Prior data collection, required permission was taken from the Committees for the Protection of Human Subject.

Data Analysis

The data were collected during the Spring 2011 semester. Administration of the survey took 30 minutes to complete. A one-way t-test was conducted to examine the relation between male and female gifted students academic procrastination behavior. Differences between the procrastination levels of participants in relationship to gender were analyzed using independent samples t-tests. SPSS 10.0 (Statistical Package for Social Sciences) for Windows was used to perform the data analyses.

CHAPTER IV

RESULTS

As stated in Chapter 1, the purpose of this study was to investigate gifted and talented students' academic procrastination in relation to gender. In the study, an independent-samples t –test was conducted to examine to what extent gender predicts academic procrastination among gifted and talented college students. This section will present the results of the study by outlining the t-test result from the survey.

The results from one way t-test analysis predicting gifted and talented student's academic procrastination scores are presented in Table. 2. indicate that there was not a significant difference in the scores for female students (M= 33.2778, SD= 5.96860) and the male students (M= 35.4118, SD= 9.19279).These results suggest that academic procrastination does not differ based on gender. ($t=-0.819$; $p=0.419>0.05$).

TABLE 2

Does degree of academic procrastination among gifted and talented college students differ by gender?

PASS Score	Gender	N	Mean	SD	t	p
(Procrastination	Female	18	33.278	5.969	-0.819	0.419
Assessment	Male	17	35.412	9.193		
Scale-Student						

CHAPTER FIVE

DISCUSSION

Throughout this section, the results of the study will be discussed in relation to relevant literature; implications of findings and recommendations for future research will be presented. The purpose of this study was to investigate gifted and talented students' academic procrastination in relation to gender. This study aims to answer the following research question: "To what extent does gender predicts the academic procrastination of gifted talented students?"

Implications

Based on the results of this study, implications can be made about the target population in this study. Several implications may be drawn from the findings of the current study. Overall, the major findings of this study indicated that academic procrastination among gifted and talented students does not differ, according to their own self-report.

Academic Procrastination in relation to gender among gifted and talented college students

The main aim of this study was to investigate to what extent academic procrastination in relation to gender affect gifted and talented college students. Overall , there was no gender difference among these students. This study appears to be the first study on gifted and talented college student's academic procrastination behavior.

Based on their self-report survey scores, gender did not appear to play a part in the levels of their procrastination. Contrary to the findings of this study, some researchers

(Haycock et al., 1998) reported a greater risk of procrastination for women than men, and explained this finding by hypothesizing that procrastination is related to anxiety experienced by women.

In fact, a majority of the studies in the literature did not reveal gender differences in academic procrastination. For instance, Solomon and Rothblum (1984) did not find any gender difference for the total self-reported procrastination. Another study conducted by Haycock et al. (1998) investigating the role of self-efficacy and anxiety on general procrastination of 141 university students, showed that there was no main gender effect.

In conclusion, this study was conducted among gifted and talented college students; therefore, the previous studies may not be an appropriate comparison as they focused on all college student population.

Limitations

Like all social science research, several limitations exist in this study. Although this study attempts to describe a specific group (Honor College Gifted and Talented Students), it is not guaranteed that the sample completing the survey is representative of all gifted and talented college students. This creates a limitation of external validity because the results of the study cannot be generalized to the entire target population.

Furthermore, the number of participants is insufficient for generalizing the results to all gifted and talented college students. A small sample size increases the possibility that the sample selected is not representative of the population.

Regarding the instrument used in this study (PASS), limitations exist as well. The main limitation of this instrument was its self-report nature. As typical with self-report

surveys, social desirability may be present in participant's responses. Thus, the instrument may not be appropriate for reflecting the actual level of participants.

Recommendations for Further Research

Based on the results of this study, recommendations for future research can be offered.

As described in the limitations section, the sample size was insufficient for generalizing all gifted and talented college students. Future studies should be conducted with larger, demographically more diverse samples from different universities, different faculties and different ethnicities. These changes would be helpful in extending the generalization and strengthening of the findings.

Additionally, the results of the present study are based on students' perceptions and in this kind survey type studies participants may be subject to social desirability demands and response biases. Considering the fact that procrastination is best understood when it is evoked in a context of a particular task, future studies might be conducted by utilizing context- specific measures of this construct.

REFERENCES

- Akerlof 1991. "Procrastination and Obedience," *American Economic Review*, Papers and Proceedings 81, pp. 1–19.
- Beswick, G., Rothblum, E. D. & Mann, L. (1988). Psychological antecedents of student procrastination. *Australian Psychologist*, 23(2), 207-217.
- Birder, L. (1993). Procrastination: Its role in transference and countertransference. *Psychoanalytic Review*, 80, 541-558
- Briody, R. (1980). *An exploratory study of procrastination*. Unpublished doctoral dissertation, Brondeis University.
- Brownlow, S., & Reasinger, R. D. (2000). Putting off until tomorrow what is better done today: Academic procrastination as a function of motivation toward college work. *Journal of Social Behavior and Personality*, 15, 15-34.
- Burka, J. B. & Yuen, L. M. (1983). Procrastination: Why do you do it, what to do about it. CA: Addison-Wesley Publishing Company.
- Burns, L. R., Dittmann, K., Nguyen, N. & Mitchelson, J. K. (2001). Academic procrastination, perfectionism and control. Associations with vigilant and avoidant coping. *Journal of Social Behavior and Personality*, 15(5), 35-46.
- Busko, D. A. (1998). *Causes and consequences of perfectionism and procrastination: A structural equation model*. Unpublished Master's Thesis, University of Guelph, Canada.
- Ellis, A. & Knaus, W. J. (1977). *Overcoming Procrastination*. NY: A Signet Book.
- Ferrari, J. R. (1989) Reliability of academic and dispositional measures of procrastination. *Psychological Reports*, 64, 1057-1058.

- Ferrari, J. R., Johnson, J. L. & McCown, W. G. (Eds.) *Procrastination and Task Avoidance: Theory, Research and Treatment*. NY: Plenum Press.
- Ferrari, J. R. & Tice, D. M. (2000). Procrastination as a self –handicapping for men and women: A task avoidance strategy in a laboratory setting. *Journal of Research in Personality*, 34, 73-83.
- Frost, R., Lahart, C. & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14, 449-468.
- Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology*, 15, 27-33.
- Haycock, L. A., McCarthy, P. & Skay, C. L. (1998) Procrastination in college students: the role of self-efficacy and anxiety. *Journal of Counseling & Development*, 76, 317-324
- Hill, M., Hill, D., Chabot, A. & Barral, J. (1978). A survey of college faculty and student procrastination. *College Student Personal Journal*, 12, 256-262.
- Kachal, M. M., Hansen, L. S. & Nutter, K. J. (2001). Academic procrastination prevention/intervention: Strategies and recommendations. *Journal of Developmental Education*, 25, 14-21.
- Lay, C. H. (1987). A modal profile analysis of procrastinators: A search for types. *Personality and Individual Differences*, 8, 705-714.
- Lay, C. (1996). Trait procrastination, agitation, dejection and self-discrepancy. In Ferrari, J. R., Johnson, J. L. & McCown, W. G. (Eds.) *Procrastination and Task Avoidance: Theory, Research and Treatment*. NY: Plenum Press.

- Senecal, C., Koestner, R. & Vallerand, R. J. (1995). Self-regulation and academic procrastination. *Journal of Social Psychology, 135*(5), 607-619.
- Senecal, C., & Lavoie, K., & Koestner, R. (1997). Trait and situational factors in procrastination: An interactional model. *Journal of Social Behavior & Personality, 12*(4), 889-903.
- Lay, C. H. (1987). A modal profile analysis of procrastinators: A search for types. *Personality and Individual Differences, 8*, 705-714.
- Lay, C. (1996). Trait procrastination, agitation, dejection and self-discrepancy.
- McCown, W. (1986). An empirical investigation of the behaviors of procrastinators. *Social and Behavioral Science Documents, 16*, 1-89.
- McCown, W., Petzel, T. & Rupert, P. (1987). An experimental study of some hypothesized behaviors and personality variables of college student procrastinators. *Personality and Individual Differences, 8*(6), 781-786.
- McCown, W. & Roberts, R. (1984). A study of academic and work-related dysfunctioning relevant to the college version of an indirect measure of impulsive behavior. Integra Technical Paper 94-28, Radnor, PA: Integra, Inc.
- MacIntyre, P. (1964). Dynamics and treatment of passive aggressive underachievers. *American Journal of Psychotherapy, 18*, 95-108.
- Merriam-Webster's collegiate dictionary* (10th ed.). (1993). Springfield, MA: Merriam-Webster.
- Milgram, N. A., Marshevsky, S., & Sadeh, C. (1995). Correlates of academic procrastination: discomfort, task aversiveness, and task capabilities. *The Journal of Psychology, 129*(2), 145–155.

- Milgram, N. (1988). Procrastination in daily living. *Psychological Reports*, 63, 752-754.
- Missildine, H. (1963). *Your inner child of past*. New York: Simon & Shuster.
- Muszynski, S. Y. & Akamatsu, T. J. (1991). Delay in completion of doctoral dissertations in clinical psychology. *Professional Psychology: Research and Practice*, 22, 119-123.
- Oxford English Reference Dictionary, 1996
- Pacht, A. R. (1984). Reflections on perfection. *American Psychologist*, 39(4), 386-390.
- Pychyl, T. A., Coplan, R. J. & Reid, P. A. M. (2002). Parenting and procrastination: Gender differences in the relations between procrastination, parenting style and self-worth in early adolescence. *Personality and Individual Differences*, 33(2), 271-285.
- Pychyl, T. A., Lee, J. M., Thibodeau, R., & Blunt, A. (2001). Five days emotion: An experience sampling study of undergraduate student procrastination. *Journal of Social Behavior & Personality*, 16(1), 239-255
- Rothblum, E. D., Solomon, L. J., & Murakami, J. (1986). Affective, cognitive and behavioral differences between high and low procrastinators. *Journal of Counseling Psychology*, 33(4), 387-394.
- Sadler, C. D., & Buley, J. (1999). Predictors of academic procrastination in college students. *Psychological Reports*, 84, 686-688.
- Sheldon, K. M., Ryan, R. M., Rawsthorne, L. J., & Ilardi, B. (1997). Trait self and true self: Cross-role variation in the Big-Five personality traits and its relations with psychological authenticity and subjective well-being. *Journal of Personality and Social Psychology*, 73, 1380-1393.

- Schouwenburg, H., C. (1992). Procrastinators and fear of failure: An exploration of reasons for procrastination. *European Journal of Personality*, 6, 225- 236.
- Senecal, C., Koestner, R. & Vallerand, R. J. (1995). Self-regulation and academic procrastination. *Journal of Social Psychology*, 135(5), 607-619.
- Senecal, C., & Lavoie, K., & Koestner, R. (1997). Trait and situational factors in procrastination: An interactional model. *Journal of Social Behavior & Personality*, 12(4), 889-903.
- Silver, M., & Sabini, J. (1981). Procrastinating. *Journal for the Theory of Social Behaviour*, 11, 207-221.
- Spock, B. (1971). Helping the procrastinating child, Redbook, In M.E. Aitken (1982). A personality profile of the college student procrastinator. Unpublished Doctoral Dissertation, University of Pittsburg.
- Tice, D. M. & Baumeister, R. F. (1997). Longitudinal study of procrastination, performance, stress, and health: The cost and benefits of dawdling. *Psychological Science*, 8(6), 454-458.
- Tuckman, B. W. (1998). Using tests as an incentive to motivate procrastinators to study. *Journal of experimental education*, 66(2), 141-147.
- Vallerand, R. J., Blais, M. R., Bri  re, N. M., & Pelletier, L. G. (1989). Construction et validation de l'  chelle de Motivation en   ducation (EME). *Canadian Journal of Behavioural Science*, 21, 323–349.

Van Eerde, W. (2003). A meta-analytically derived nomological network of procrastination. *Personality and Individual Differences*, 35, 1401-1418.

Watson (2001) Procrastination and the five factor model: A facet level analysis. *Personality and Individual Differences*, 30, 149-158

Wolters, C. A. (2003). Understanding procrastination from a self-regulated learning perspective. *Journal of Educational Psychology*, 95(1), 179-187.

