



# Pure Procrastination, Achievement Anxiety and Study Habits Among Professional Students, Qualitative Analysis by Gender Group

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## **Abstract:**

This study investigated the relationships between Procrastination, Study Habits, and Academic Anxiety in a sample of 150 professional Students aged 18-24. A strong negative correlation was observed between procrastination and study habits assessed through the Pure Procrastination Scale (PPS) and Study Habits Scale (SHS). Other relations were negligible with Achievement anxiety measured with Achievement Anxiety Scale (AAS). These findings, along with average scores indicating high procrastination, normal academic anxiety and Study habits, suggest the sample which report high procrastination have poorer study habits. Further research is needed to explore the complex relationships in larger and more diverse student populations, as well as factors that are involved in procrastination and achievement anxiety.

## **Introduction:**

Procrastination is conventionally characterized as an illogical inclination towards the postponement of tasks that necessitate completion. This behavior is often observed despite the potential negative consequences that may arise due to such delays. (Lay, 1986). Procrastination is postulated to be interconnected with numerous cognitive, behavioral, and affective correlates. It is perceived as a “malfunction of vital human capabilities” in the context of both routine tasks and tasks of significant life importance. This perspective underscores the potential detrimental impact of procrastination on an individual’s productivity and overall life satisfaction. (Milgram et al., 1988).

The magnitude of this dysfunction is underscored by estimations suggesting that a minimum of 25% of the student population experiences severe degrees of procrastination. This statistic highlights the pervasive nature of procrastination within academic settings and its potential implications for student success and well-being. (Hill et al., 1978; McCown et al., 1989).

There is a substantial correlation between anxiety and procrastination. It has been proposed that individuals with high levels of anxiety often exhibit irrational cognitive patterns. These may include the tendency to catastrophize minor situations and harbor a fear of failure. Such thought patterns may lead these individuals to defer tasks as a strategy to evade temporary emotional discomfort and mitigate their anxiety. This suggests

a complex interplay between emotional regulation and task management, with implications for understanding and addressing procrastination behavior. (Hobfoll, 1989; Sirois & Pychyl, 2013). Hobfoll (1989) introduced the appraisal anxiety-avoidance model to elucidate the association between anxiety and the propensity to procrastinate.

This model posits that when individuals perceive a situation as a challenge beyond their competence, they are inclined to evade the situation. Tice and Bratslavsky (2000) proposed that procrastination typically occurs when individuals perceive a task as aversive and associate it with unpleasant emotions such as stress or anxiety. McCown and Johnson (1991) discovered that individuals were more likely to delay activities that provoke anxiety than those that do not. Utilizing structural equation modeling, Ariani and Susilo (2018) demonstrated a significant positive effect of test anxiety on procrastination. It is plausible that individuals who are distressed or anxious about their current workload may resort to other activities as a means of short-term mood repair, thereby providing temporary relief from stress.

Conversely, procrastination is often deemed a maladaptive behavior that frequently results in discomfort when individuals delay tasks until nearing the deadline, leading to the realization that time is running out. This results in anxiety and stress in attempting to complete an important task punctually. Beswick et al. (1988) found that students who procrastinated by delaying exam preparation experienced heightened anxiety during the exam. Steel (2007) suggested that procrastination not only originates from negative affect and poor mood but also contributes to them. Although procrastination initially provides temporary comfort, as the deadline nears, the procrastinator experiences negative emotions and thoughts, leading to anxiety, stress, and regret (Deniz et al., 2009). Some studies have shown that procrastinators are more likely to experience stress and illness towards the end of a semester (Tice & Baumeister, 1997). By spending less time on tasks, procrastinators may experience less stress than others at the beginning of the academic year, but they experience significantly more stress as exams approach at the end of a semester.

In the context of study habits and procrastination, research indicates that the duration of time dedicated to studying influences academic performance. However, this influence is moderated by a third variable, namely, the study habits employed by students. The capacity to maintain focus consistently exerts a positive impact on student performance. The practice of scheduling or consistently keeping up with academic work may not be as crucial for all students in terms of their short-term performance. Some students who procrastinate in scheduling have demonstrated satisfactory performance in the short term. Access to comprehensive notes is essential, but its influence on the relationship between study time and performance appears to be contingent on how the time is utilized. The findings suggest that effective studying may not merely be a matter of quantity; qualitative techniques, such as sound study habits, can render study time productive for students, even if they are hindered by procrastination. (Nonis et al., 2010).

## Review of Literature

### Procrastination

Procrastination is defined as the act of “voluntarily delaying or postponing an intended course of action despite expecting to be worse off for the delay” (Steel, 2007). The adverse consequences of delaying an intended course of action could be a response to a fear of failure or an aversion to undertaking unpleasant or challenging tasks (Solomon and Rothblum, 1984). Regardless of the underlying motivation, procrastination is a prevalent issue among college and university students, with estimates suggesting that approximately 80-85% of students engage in academic procrastination (Ellis & Knaus, 1977), and over 50% of students procrastinate regularly and problematically (Day et al., 2000). Academic procrastination is most associated with writing term papers, preparing for exams, and completing homework assignments (Solomon & Rothblum, 1984). It is detrimental to academic performance due to its link to adverse behaviors such as poor study habits, cramming for exams, test anxiety, late submission of homework assignments and term papers, lower grades, and feelings of guilt and depression (Lee, 2005; Özer et al., 2009). Academic procrastination is perceived as a complex phenomenon that encompasses cognitive and behavioral components (Schraw et al., 2007).

### Achievement Anxiety

Anxiety is a pervasive, uncontrollable, diffuse, and persistent state of negative affect, characterized by apprehensive anticipation of unpredictable and unavoidable future danger, accompanied by physiological symptoms of tension and a constant state of heightened vigilance (Barlow et al., 2002). Anxiety and anxiety disorders are among the most prevalent mental health concerns, with 29% of the population suffering from at least one anxiety disorder (Kessler et al., 2005). A significantly higher lifetime incidence is demonstrated in females than males, and the early age of onset has a substantial impact on the individual and society. Achievement Anxiety refers to the anxiety that affects academic performance, such as tests, examinations, homework, and assignments (Alpert, R., 1957).

### Study Habits

Regarding study habits, given that time is a variable over which students have the most control and that there is clear evidence that today's college students are devoting less time to studies and more time to other activities (Nonis et al., 2006), researchers need to understand the influence of time spent studying outside of class on academic performance, as well as the true nature of this influence. Krohn & O'Conner (2005) reported that study time negatively correlates with academic performance. This essentially means that the grades of students who cram for exams are as good as or better than those of students who use other strategies, and the longer students are in college, the more likely they will resort to cramming. Crammers' grade point averages are also relatively high, and they dedicate a substantial amount of time to studying. In fact, crammers appear to study more hours than most students, perhaps because they must compensate for the inefficiency of massed study with more total hours. While crammers study more than most students, their study strategy also affords them a significant amount of uninterrupted time to devote to other activities, perhaps to other courses or extracurricular activities (Vacha, E.F., 1993).

## Purpose

The purpose of this study is to investigate and understand the complex relationships among the variables of Academic Anxiety, Procrastination, and Study Habits in Professional Students.

## Hypothesis

1. There is a positive correlation between Procrastination and Achievement Anxiety.
2. Study Habits in Professional Students is Positively correlated with Achievement Anxiety.
3. Procrastination is negatively correlated with Study Habits.

## Method Sample

In this study 150 professional students from India participated, with ages ranging from 18 to 24 years.

## Measures

1. **The Pure Procrastination Scale (PPS)** developed by Steele and colleagues, is a self-rated questionnaire derived from items of various existing procrastination scales, namely the Decisional Procrastination Scale, General Procrastination Scale, Irrational Procrastination Scale, and Adult Inventory of Procrastination. These items were selected following factor analyses of responses from over 4000 respondents. The PPS assesses Decisional Procrastination, Delay in Implementation, and Timeliness/Lateness. Twelve items generate these three types of procrastination, and the sum of scores for these three components yields one global score (Svartdal, F. et al., 2017).
2. **Achievement Anxiety Scale (AAS)**, developed by Richard Alpert and Ralph N. Haber, is a self-administered questionnaire comprising 19 questions that measure anxiety about academic achievement. The AAS consists of two separate scales: a “facilitating scale” that assesses anxiety as a motivator, and a “debilitating scale” that measures the extent to which anxiety interferes with performance. These two scales are administered on one questionnaire but scored separately. The value of these scales lies in their specificity in defining the two aspects of anxiety and in measuring anxiety specifically related to academic achievement. The AAS predicts academic performance, particularly verbal aptitude, more accurately than general anxiety scales. Each item has a different response category, although all are on 5-point scales indicating the degree to which the statement applies to the respondent (Alpert, R. et al., 1960).
3. **Study Habits Scale (SHS)** developed by Nonis, is a 10-item, 3-scale study habits questionnaire that measures three scales: access to good quality notes, scheduling and time management, and ability to concentrate. Students are asked to report the frequency of a particular behavior on a 5-point Likert scale ranging from “never” to “very often” (Nonis, S.A. et al., 2010).

## Methodology

Participants received an explanation regarding the research's objectives before completing questionnaires via Google Forms. Each participant received gratitude for their cooperation. Subsequently, standardized psychological assessments were administered to the participants.

## Analysis of Data

### Results

The research used Spearman Ranked Correlation to understand the relationship between Procrastination, Achievement Anxiety, and Study. Table 1 presents mean and standard deviation data, Meanwhile, Table 2 illustrates correlations among Procrastination, Achievement Anxiety, and Study Habits. Table 3 shows mean and standard deviation for both genders. Table 4 shows T-Test for independent samples test.

**Table 1**

*Mean and Standard Deviation scores of 150 Professionals Students with Variables Pure Procrastination, Achievement Anxiety, and Study Habits.*

|                    | Procrastination | Achievement Anxiety | Study Habits |
|--------------------|-----------------|---------------------|--------------|
| N                  | 150             | 150                 | 150          |
| Mean               | 39.18           | 58.15               | 28.02        |
| Standard Deviation | 10.22           | 4.07                | 7.69         |

**Table 2**

*Spearman ranked correlation of Procrastination, Achievement Anxiety, and Study Habits.*

|                     | Procrastination | Achievement Anxiety | Study Habits |
|---------------------|-----------------|---------------------|--------------|
| Procrastination     | —               |                     |              |
| Achievement Anxiety | 0.1             | —                   |              |
| Study Habits        | -.659           | -0.109              | —            |

Note.  $p < 0.01$

**Table 3**

*Mean and Standard Errors for independent samples of Procrastination, Achievement Anxiety and Study Habits*

|                  | Gender | N  | Mean | Standard Deviation |
|------------------|--------|----|------|--------------------|
| Procrastination  | Female | 78 | 39.3 | 10.9               |
|                  | Male   | 72 | 38.9 | 9.4                |
| Academic Anxiety | Female | 78 | 57.6 | 3.8                |
|                  | Male   | 72 | 58.5 | 4.2                |
| Study Habits     | Female | 78 | 28.5 | 7.8                |
|                  | Male   | 72 | 27.5 | 7.5                |

Table 4

*Independent Samples T-Test for Gender Difference*

|                  |                               | Significance | t     | Degree of Freedom | Significance of t | Mean Difference |
|------------------|-------------------------------|--------------|-------|-------------------|-------------------|-----------------|
| Procrastination  | Equal Variance is Assumed     | 0.33         | 0.23  | 155               | 0.81              | 0.37            |
|                  | Equal Variance is not Assumed |              | 0.23  | 154.9             |                   |                 |
| Academic Anxiety | Equal Variance is Assumed     | 0.76         | -1.38 | 155               | 0.16              | -0.88           |
|                  | Equal Variance is not Assumed |              | -1.37 | 145.1             |                   |                 |
| Study Habits     | Equal Variance is Assumed     | 0.79         | 0.82  | 155               | 0.41              | 1.01            |
|                  | Equal Variance is not Assumed |              | 0.82  | 152.3             |                   |                 |

**Discussion**

The study aimed to explore the relationships between Procrastination, Achievement Anxiety and Study Habits. The results found a single strong but other weak or negligible correlations. Firstly, a strong negative correlation was observed between procrastination and study habits ( $r=-.659$ ,  $p<.01$ ), which shows that high procrastination contributes to weaker study habits. Secondly, a negligible-negative correlation was observed between achievement anxiety and study habits ( $r=-0.109$ ,  $p<.01$ ). This inference presents itself to be highly inconsistent with the research conducted by Wittmaier & B.C (1972) which revealed that students with lower debilitating anxiety had better study habits and avoided delaying academic tasks. Lastly a negligible correlation was found between academic anxiety and procrastination ( $r=0.1$ ,  $p<.01$ ) which although not in line with previous theories and research, is consistent with Yerdelen et al. (2016)'s findings who showed that procrastination and test anxiety vary significantly through a university semester and anxiety and procrastination are not related from the data.

For all three parameters, there is negligible difference between the associated genders in the sample. According to the t-test, there is no significant mean difference between the genders. This is in line for study habits with the findings from Nonis & Hudson (2010) which also found negligible difference between the genders. These findings are inconsistent in the case for achievement anxiety with the study by Hembree (1988) which found that females consistently show higher text anxiety in academic settings (which is a facet of achievement anxiety).



## Conclusion

This study investigated the relationships between Procrastination, Achievement Anxiety, and Study Habits among a sample of professional students. While previous literature suggests strong correlations between these variables, the current findings revealed mostly negligible relations except for a strong negative correlation between procrastination and study habits, which was to be expected. This discrepancy might be attributable to the sample characteristics, with mean scores indicating high procrastination, normal achievement anxiety and study habits. Future research with larger and more diverse samples is warranted to confirm these findings.

Despite the negligible correlations observed, it is crucial to acknowledge the significance of high procrastination for a student's well-being. Cramming has been shown to increase anxiety levels & stress. These factors can negatively impact their cognitive performance and emotional well-being. Therefore, prioritizing healthy study habits remains essential for promoting optimal mental and physical functioning among students.

## Limitation and points for further research

This study has several limitations. First, it relied on self-reported study, which may not accurately reflect the number of hours studied (Nonis et al., 2010). Second, the study did not explore the specific factors that can contribute to procrastination or academic anxiety such as University Environment, Gender, and Ability level (Hembree R., 1988). Finally, a more concise way to measure study habits (with factors such as their GPA and Hours studied) for participants might have yielded more focused results.

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