

ACADEMIC PROCRASTINATION: CROSS-SECTIONAL STUDY AT A PRIVATE COLLEGE

PROCRASTINAÇÃO ACADÊMICA: ESTUDO TRANSVERSAL EM UMA INSTITUIÇÃO PRIVADA DE ENSINO SUPERIOR

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Abstract. Introduction: Procrastination is the voluntary act of delaying the execution of a task, either postponing its start or prolonging its completion. **Objective:** This article aimed to analyze procrastination among students from all degrees at the Faculty of Health Sciences of Unai - FACISA. **Methodology:** This is a cross-sectional quantitative research. Data collection took place from October to November 2023 with a questionnaire composed of demographic questions; the Academic Procrastination Motives Scale (EMPA); and an evaluation of the most common feelings when procrastinating. Data analysis consisted of descriptive statistics with presentation of absolute and relative frequencies, mean, and standard deviation with a 95% confidence interval (CI95%). **Results:** The study included 251 students from the Psychology, Nursing, Veterinary Medicine, Pharmacy, and Physiotherapy courses. There was a higher participation of women and the average age of participants was 23.61 years (SD=6.05). Participants reported feeling anxiety and guilt when procrastinating. Women showed higher average procrastination scores in the items “assignments” (3.70; SD=1.51), “exercises” (3.22; SD=1.14), and “studying” (3.19; SD=1.19), while men obtained higher averages in the item “exams” (3.50; SD=1.43). The main reasons for procrastination were fatigue, lack of time, and laziness. **Conclusion:** Thus, this study contributes to understanding the dynamics of procrastination in the academic environment and highlights the need for targeted strategies to mitigate this detrimental behavior in higher education.

Keywords: Procrastination; Academic Failure; Universities; Academic Performance.

Resumo. Introdução: A procrastinação é ato voluntário de adiar a execução de uma tarefa, seja aprazando seu início ou delongando sua finalização. **Objetivo:** Este artigo objetivou apresentar analisar a procrastinação em acadêmicos de todas as graduações da Faculdade de Ciências da Saúde de Unai- FACISA. **Metodologia:** Trata-se de uma pesquisa quantitativa transversal. A coleta de dados ocorreu de outubro a novembro de 2023 com um questionário composto de questões demográficas; a Escala de Motivos da Procrastinação Acadêmica (EMPA); e avaliação do sentimento mais comum ao procrastinar. A análise dos dados consistiu de estatísticas descritivas com apresentação das frequências absolutas, relativas, média e desvio padrão com intervalo de confiança 95% (IC95%). **Resultados:** O estudo teve a participação de 251 acadêmicos dos cursos de Psicologia, Enfermagem, Medicina Veterinária, Farmácia e Fisioterapia. Observou-se maior participação de mulheres e idade média dos participantes de 23,61 anos (DP=6,05). Os participantes relataram sentir ansiedade e culpa ao procrastinar. As mulheres apresentam maiores médias de procrastinação nos itens “trabalhos” (3,70; DP=1,51), “exercícios” (3,22; DP=1,14) e “estudo” (3,19; DP=1,19), enquanto que os homens obtiveram maiores médias no item “provas” (3,50; DP=1,43). Os principais motivos para a procrastinação foram o cansaço, falta de tempo e preguiça. **Conclusão:** Assim, este estudo contribui para a compreensão das dinâmicas de procrastinação no ambiente acadêmico e destaca a necessidade de estratégias direcionadas para mitigar esse comportamento prejudicial no âmbito do ensino superior.

Palavras-chave: Procrastinação; Fracasso Acadêmico; Universidades; Desempenho Acadêmico.

1. INTRODUCTION

Procrastination is the voluntary postponement of an intended, necessary, and/or personally important activity, despite expecting potential negative consequences from the delay, as it generates psychological discomfort and negative emotions such as guilt and dissatisfaction (Geara et al., 2017).



Entering higher education represents a new social and academic phase, involving changes in various areas of a student's life, such as relationships with family and friends, their perception and conception of the world, the establishment of new bonds, and routine organization, among others (Pereira & Ramos, 2021; Souza et al., 2016). This transition period can be experienced as stressful, impacting the student's psychological aspects and academic performance (Monteiro & Soares, 2017).

Pursuing a higher education degree can encompass various trials (Vieira-Santos & Rodrigues Malaquias, 2022) and result in changes in different areas of life (Mayhew et al., 2016). One of the challenges faced is the management of time and academic tasks, which, compared to those from high school and elementary school, become more complex, extensive, and require a higher level of independence and judgment to be executed (Vieira-Santos & Rodrigues Malaquias, 2022).

It is common to use avoidance tactics to delay completing academic work, which can be detrimental to the student's well-being and development, as this leads to performance damage and the occurrence of the intended activity (Brito & Bakos, 2013; Pereira & Ramos, 2021). Harmful coping tactics often followed by students include intense alcohol and drug use, procrastination of studies and assignments, going out the night before exams and tests, among others. Procrastination stands out as one of the most frequently employed self-damaging tactics by university students (Geara et al., 2017; Machado & Schwartz, 2018).

This can occur mainly because people tend to postpone activities they find unpleasant or for which they do not feel competent enough to complete (Sampaio & Bariani, 2011).

Paula et al. (2022) show that delaying the completion of a task can lead to advantages, even becoming an ally for individuals to make more thoughtful decisions, which becomes possible when specific conditions exist, such as time for reflection and thought, management competence and resources, and personal convictions that can be used to achieve desired goals. However, it is important to differentiate between comfortable and adaptive postponement from procrastination. The difference lies in the magnitude of discomfort that procrastination can generate in individuals and how this condition, constituting an avoidance of facing reality, can lead to personal distress, even approaching significant external effects, such as extensive dilemmas at work, school, relationships, or family life (Paula et al., 2022).

In this sense, this study aimed to analyze procrastination and associated factors among students at a college in the northwest region of Minas Gerais, Brazil. The complexity of the procrastination factor, its high recurrence, and the scarcity of studies on the topic at the higher education level in Brazil make this work pioneering in this subject area.

2. METHODS

2.1 Study Design

This is a cross-sectional quantitative research aimed at understanding the aspects related to procrastination in the academic environment.

2.2 Population/Sample and Study Setting

The study population consisted of students from five undergraduate courses at the Faculty of Health Sciences of Unaí - FACISA. FACISA is located in the municipality of Unaí, Minas Gerais, Brazil, and offered the following undergraduate courses during the data collection period, with the respective numbers of students: Psychology (112 students), Nursing (116 students), Veterinary Medicine (96 students), Pharmacy (67 students), and Physiotherapy (17 students), totalling 408 students.

The following inclusion criteria were adopted: students should be regularly enrolled in the second semester of 2023 in one of the undergraduate courses from the first to the tenth period.

Exclusion criteria included: being absent on the day of data collection through questionnaire administration and being under 18 years of age. A census survey was chosen, in which all FACISA students who met the criteria for participation in the study were invited to participate.

2.3 Data Collection

The data were collected from October to November 2023 through a self-administered questionnaire composed of the following items: Demographic questions (gender, age, marital status, course, semester, whether it is the first undergraduate degree); the Academic Procrastination Motives Scale (Escala de Motivos da Procrastinação Acadêmica - EMPA) (Geara et al., 2017), which consists of 13 items about procrastination; and assessment of the most common feeling when procrastinating (anxiety, guilt, incompetence, and an open-ended response option for other feelings).

The first part of the EMPA, consisting of four items, aims to identify which academic activity among assignments, exams, exercises/reading, and revisions is most procrastinated. The respondent indicates the frequency with which they procrastinate each activity and also selects the task they procrastinate the most. Responses are scored using a 5-point Likert scale: 1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Always.

The second part consists of nine items as possible reasons that lead the respondent to procrastinate the indicated task, aiming to identify how much each of the following reasons reflects the motivation for procrastination in that task. The response scale used is a Likert-type scale, ranging from 1 to 3: (1 - Does not reflect at all; 2 - Somewhat reflects; 3 - Perfectly reflects). The possible reasons are: 1. Doing the task makes me anxious because I'm afraid of not being able to do it right or achieve a good result; 2. I feel lazy to do the task; 3. I don't feel capable of doing the task alone; 4. I expect to do the task so well that I have difficulty starting it; 5. I feel tired and lacking energy to start the task; 6. I find the task's difficulty level too high; 7. I really don't like doing the task; 8. I lack time to do the task; 9. I am more motivated to do the task when I am under pressure.

The questionnaires were administered by psychology students who were previously trained to collect data. The data collection took place in a classroom setting, with each participant completing the questionnaire individually. The administrators attended all classes of all courses at the college, presented the research proposal, and invited students to participate in the study, explaining the ethical aspects and the Informed Consent Form (Termo de Consentimento Livre e Esclarecido - TCLE). They remained in the room to clarify any doubts about how to respond, refraining from making any comments about the content of the items.

2.4 Data Processing and Analysis

The data obtained from the research were tabulated using Microsoft Excel and later exported to the Statistical Package for the Social Sciences for Windows, Inc., USA (SPSS), version 27.0, to construct a database and perform statistical analyses. From this data, descriptive statistical analyses were conducted, presenting absolute and relative frequencies, mean, and standard deviation with a 95% confidence interval (CI95%).

2.5 Ethical Aspects

This study was conducted following the guidelines established in Resolution 466/12 of the National Health Council, which regulates research involving human subjects. All participants were provided with necessary information to decide on participation in the research and signed the TCLE. The research project was approved by the institutional Research Ethics Committee, under protocol number 6.433.274 (#CAAE 75034423.5.0000.0245).

3. RESULTS

The population of this study consisted of 408 students enrolled in the following courses: Psychology (112 students), Nursing (116 students), Veterinary Medicine (96 students), Pharmacy (67 students), and Physiotherapy (17 students). Of this total, 157 students were either not present during the data collection period or declined to participate in the research. Thus, 251 students participated in the study, distributed among the courses as follows: Psychology (74 students), Nursing (60 students), Veterinary Medicine (65 students), Pharmacy (38 students), and Physiotherapy (14 students).

Of the 251 study participants, the majority (73.7%) were female. The average age was 23.61 years ($SD=6.05$). There was greater participation from students in the Psychology (74 students), Veterinary Medicine (65 students), and Nursing (60 students) courses. Most of the sample were single (220 students) and were pursuing their first undergraduate degree (228 students). The most frequently experienced feelings when procrastinating were anxiety (116 students) and guilt (62 students) (Table 1).

Regarding the most procrastinated activities by the students, it was found that women had higher averages in the items "assignments" (3.70; $SD=1.51$), "exercises" (3.22; $SD=1.14$), and "studying" (3.19; $SD=1.19$), while men had higher averages in the item "exams" (3.50; $SD=1.43$). Concerning the courses, the Physiotherapy course had the highest averages of procrastination in the items "exercises" and "exams." For the item "studying," the courses with the highest procrastination were Psychology (3.28; $SD=1.15$) and Veterinary Medicine (3.27; $SD=1.81$). In the item "assignments," the courses with the highest procrastination were Nursing (3.92; $SD=1.33$) and Pharmacy (3.70; $SD=1.73$) (Table 2).

It was observed, regarding academic tasks, that students in the eighth (3.43; $SD=1.20$) and second semesters (3.17; $SD=1.04$) procrastinate the most when studying; students in the sixth (3.50; $SD=1.16$) and first semesters (3.43; $SD=0.85$) procrastinate the most on exercises; students in the first (3.86; $SD=1.51$) and eighth semesters (3.59; $SD=1.28$) procrastinate the most on exams; and for assignments, the most procrastinating students are in the fourth (3.87; $SD=1.54$) and sixth semesters (3.69; $SD=1.56$). Single students procrastinate more in all categories compared to students with partners. First-degree students procrastinate more in all categories compared to students pursuing their second degree (Table 2).

The main reasons for procrastination were found to be: feeling tired and lacking energy to start the task (2.23; $SD=0.75$); lacking time to do the task (2.09; $SD=0.75$); and feeling lazy to do the task (1.99; $SD=0.70$) (Table 3).

4. DISCUSSION

Analyzing the data from 251 students, it is observed that the majority of respondents are women, with an average age of 23.6 years, from the Psychology course, single, and in their first undergraduate degree. The students reported feeling anxiety and guilt when procrastinating. It was also observed that 61.51% of the students responded to the survey, which already indicates signs of procrastination, reflected in absenteeism and delays observed during the data collection period.

In this study, it was observed that women reported procrastinating more, a controversial topic in scientific literature. Research on procrastination tendencies between genders presents mixed results. While some findings suggest that women procrastinate more than men (Frayon et al., 2023), others indicate that men tend to exhibit higher procrastination tendencies in both general and academic contexts (Lu et al., 2022). Interestingly, a study on young adults found no significant difference in procrastination levels between genders, highlighting a negative correlation between self-efficacy and procrastination, as well as a negative correlation between procrastination and conscientiousness (Singla, 2021). Therefore, while some research points to

greater procrastination among women, the overall picture is more complex, with various factors such as cultural context, personality traits, and self-efficacy influencing procrastination tendencies differently between genders.

Table 1. Characterization of FACISA students (n=251).

Variables	n (%)
Sex	
Female	185 (73.7)
Male	66 (26.3)
Age*	23.61 (6.05)
Course	
Physiotherapy	14 (5.6)
Pharmacy	38 (15.1)
Nursing	60 (23.9)
Veterinary Medicine	65 (25.9)
Psychology	74 (29.5)
Period	
1st	14 (5.6)
2nd	50 (19.9)
4th	61 (24.3)
6th	36 (14.3)
8th	55 (21.9)
10th	35 (13.9)
Marital Status	
Without partner	220 (87.6)
With partner	28 (11.2)
First graduation	
Yes	228 (92.3)
No	28 (11.3)
Feelings when procrastinating	
Anxiety	116 (46.2)
Guilt	62 (24.7)
Powerlessness	31 (12.4)
Other	42 (16.7)

* Mean (standard deviation)

Source: Authors (2024)

The average age (23.6 years) of the participants in this study was relatively young, a factor that can influence procrastination levels since age plays a significant role in procrastination habits, with various factors affecting this relationship. Older students tend to be more resistant to procrastination, as age is an important predictor of procrastination tendencies (Markiewicz & Oryshchyn-Buzhdyhan, 2023).

Regarding the most procrastinated tasks, women reported procrastinating more in studying, exercises, and assignments, while men reported more procrastination in preparing for exams. This trend reflects the two main sources of assessment in the classroom (exams and assignments), indicating that many students do not concern themselves with grades beyond what is necessary to achieve the average and pass. This demonstrates a lower value placed on learning, with a greater focus on obtaining the diploma rather than on knowledge development. Students often procrastinate in academic settings, focusing on specific tasks that vary across levels of education. Undergraduate students tend to procrastinate more on study tasks, driven by factors such as fear of failure, task aversion, and lack of assertiveness (Rahimi & Hall, 2021). Factors contributing to procrastination among students include poor time management skills, lack of planning, laziness, and stress, leading to delays in tasks such as writing final papers, studying for exams, and keeping up with weekly readings (Svartdal et al., 2020).

Procrastination is a common behavior among students (Araya-Castillo et al., 2023), significantly impacting undergraduates, increasing dropout rates, and decreasing completion rates (Arnold, 2022). It is a prevalent issue among college students that affects academic performance and mental health (Cárdenas Mass et al., 2021).

Table 2. Mean and standard deviation for tasks procrastinated by FACISA students according to the academic procrastination motives scale (n=251).

Variables	Tasks			
	Study* M(SD)**	Exercise* M(SD)**	Exams* M(SD)**	Assignments * M(SD)**
Sex				
Female	3.19 (1.19)	3.22 (1.14)	3.40 (1.41)	3.70 (1.51)
Male	3.11 (1.18)	3.05 (1.17)	3.50 (1.43)	3.56 (1.50)
Age*				
Course	3.00 (1.04)	3.43 (0.85)	3.86 (1.51)	3.57 (1.65)
Physiotherapy	2.95 (1.05)	3.22 (1.40)	3.43 (1.50)	3.70 (1.73)
Pharmacy	3.10 (1.35)	2.88 (1.16)	3.34 (1.36)	3.92 (1.33)
Nursing	3.27 (1.81)	3.32 (1.16)	3.68 (1.35)	3.81 (1.52)
Veterinary Medicine	3.28 (1.15)	3.21 (1.02)	3.19 (1.44)	3.33 (1.46)
Psychology				
Period	3.00 (1.04)	3.43 (0.85)	3.86 (1.51)	3.57 (1.65)
1st	3.17 (1.04)	3.00 (1.15)	3.28 (1.57)	3.52 (1.47)
2nd	3.07 (1.20)	2.89 (1.10)	3.51 (1.47)	3.87 (1.54)
4th	3.11 (1.30)	3.50 (1.16)	3.42 (1.32)	3.69 (1.56)
6th	3.43 (1.20)	3.39 (1.89)	3.59 (1.28)	3.65 (1.48)
8th	3.06 (1.25)	3.12 (1.17)	3.06 (1.37)	3.53 (1.48)
10th				
Marital Status	3.20 (1.18)	3.21 (1.12)	3.44 (1.42)	3.71 (1.48)
Without partner	2.89 (1.23)	2.89 (1.37)	3.36 (1.39)	3.32 (1.68)
With partner				
First graduation	3.17 (1.17)	3.18 (1.13)	3.46 (1.41)	3.70 (1.48)
Yes	3.16 (1.38)	3.05 (1.35)	3.00 (1.45)	3.21 (1.71)

* The range of the means covers values from 1 to 5, which correspond to the response options of the scale (1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Always).

** Mean (standard deviation)

Source: Authors (2024)

The results of this study show that married students and those pursuing a second undergraduate degree, who are generally older, tend to procrastinate less. A similar result was found regarding the participants' academic years, as a higher level of procrastination was observed in the first year of the Physiotherapy course. This suggests a greater commitment and dedication from these older students and those in more advanced stages of their education. As students gain experience and maturity, the tendency to procrastinate decreases. It is noteworthy that students procrastinate less at earlier educational levels, such as in high school. However, this behavior tends to increase at the beginning of the first year of undergraduate studies and decrease again in the final periods, before obtaining the university degree. These results indicate that maturity and academic experience play a crucial role in reducing procrastination, while the transition to higher education represents a critical period where procrastination may be more prevalent (Markiewicz & Oryshchyn-Buzhdyhan, 2023).

Table 3. Mean and standard deviation for the reasons for task procrastination among FACISA students according to the academic procrastination motives scale (n=251).

Reasons	Mean (standard deviation) *
Doing the task makes me anxious because I'm afraid of not being able to do it right or achieve a good result	1.63 (0.70)
I feel lazy to do the task	1.99 (0.70)
I don't feel capable of doing the task alone	1.33 (0.57)
I expect to do the task so well that I have difficulty starting	1.71 (0.75)
I feel tired and without energy to start the task	2.23 (0.75)
I find the task's difficulty level to be high	1.54 (0.85)
I really don't like doing the task	1.62 (0.72)
I lack time to do the task	2.09 (0.75)
I am more motivated to do the task if I am under pressure	1.84 (0.84)

* The range of the means covers values from 1 to 3, which correspond to the response options of the scale (1 = Not at all; 2 = Somewhat; 3 = Completely).

Source: Authors (2024)

In this study, students reported fatigue and lack of energy as the main reasons for procrastination, followed by a shortage of time, possibly associated with the nocturnal nature of courses and the daytime employment of many students. Additionally, the study observes that students procrastinate even when they enjoy the task, have the capability, are aware of the negative impact on the quality of academic activities, and face few difficulties in starting. This behavior can be attributed to internal factors such as laziness, fear of failure, perfectionism, and inadequate study routines, all of which play a significant role in academic procrastination among students (Sudirman et al., 2023).

A significant number of students were observed to enjoy completing tasks under pressure, corroborating the research of Geara, Hauck Filho, and Pereira Teixeira (2017), which discuss active procrastination. In this phenomenon, the ability to successfully complete tasks at the last minute tends to be reinforced and maintained over time.

Regarding the feelings experienced while procrastinating, participants in this study more frequently reported anxiety, followed by feelings of guilt. Studies show that procrastination is associated with discomfort, anxiety, and negative affective experiences (Hen & Goroshit, 2020; Turato & Santos, 2022). Decisional procrastination can lead to discomfort, while academic procrastination may not necessarily evoke discomfort but can prompt a desire to change procrastination habits. Additionally, procrastination is related to anxiety as a form of productivity, with individuals using defense mechanisms to avoid taking responsibility for tasks. Affective temperaments such as depressive, cyclothymic, irritable, and anxious, along with emotional reactivity, are positively correlated with procrastination, while hyperthymic temperament shows a negative correlation. Overall, procrastination is closely linked to feelings of discomfort, anxiety, negative affect, and various affective temperaments, highlighting the complex emotional landscape associated with this behaviour (Ferrari & Beck, 1998; Oniszczenko & Stanisławiak, 2020).

Another factor that impacts procrastination is the substitution of academic activities for more enjoyable activities. Procrastinating students tend to engage in distracting activities, being more predisposed to replace the execution of academic work with more appealing options that provide quick feedback, such as the use of social media, the internet, and electronic devices in

general. Studies show that excessive smartphone and internet use are significantly prevalent among students, being associated with higher rates of procrastination, causing a negative impact on academic performance (Hayat et al., 2020; Tian et al., 2021). Additionally, a study evaluating internet dependence in psychology students and psychologists showed an association between internet dependence and higher prevalence of anxiety, depression, and stress, and lower life satisfaction in all participants (Andrade et al., 2023).

To effectively combat academic procrastination, it is essential to adopt a multi-level approach that integrates institutional, pedagogical, and psychosocial support strategies. Practical interventions led by instructors, such as breaking tasks into smaller steps, continuous assessment with consistent feedback, and the use of frequent quizzes and action plans for delays, prove highly effective by structuring the learning environment and promoting self-regulation. Simultaneously, the institution must provide systemic support, including teacher training to implement these strategies, time management and study skills workshops for students, and access to psychological and tutoring services to address underlying causes such as anxiety and perfectionism. This combination of well-designed pedagogical practices and a robust institutional support network constitute the most viable and comprehensive path to reducing procrastination and fostering a culture of healthy productivity and self-regulated learning (Zacks & Hen, 2018).

A limitation of this study is the high absenteeism rate of students, which led to a significant reduction in the study population, impairing the researchers' proposal to conduct a census study. It is inferred that a possible reason for the absences may be related to procrastination, the subject of study in this research, as more engaged or less procrastinating students may be more likely to participate in the survey. However, it is noteworthy that this study presents relevant findings that are little explored in the scientific literature, especially in research conducted in Brazilian educational institutions.

5. CONCLUSION

Analysis of procrastination among students from various university courses revealed significant trends related to students' profiles and attitudes toward academic tasks. The majority of participants were female, single, and in their first undergraduate program, suggesting a specific demographic profile of students in higher education. Data indicated that anxiety and guilt are common feelings associated with procrastination. Women showed a greater tendency to procrastinate on assignments, exercises, and studies, while men procrastinated more on exams. Different courses also showed variations in procrastination rates. Single students and those in their first undergraduate program showed a higher tendency to procrastinate, indicating that marital status and academic experience influence this behavior. The main reasons for procrastination included fatigue, lack of time, and laziness, factors that should be considered by educational institutions when developing interventions to reduce procrastination among university students. Thus, this study contributes to understanding the dynamics of procrastination in the academic environment and highlights the need for targeted strategies to mitigate this harmful behavior in higher education.

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