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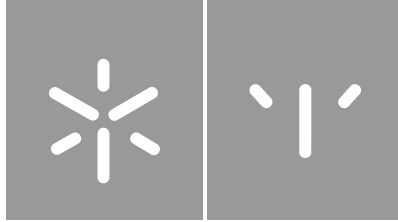
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Academic Procrastination during the Doctoral Journey: A Qualitative Study Research Protocol

Projeto de Mestrado
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Trabalho efetuado sob a orientação do

Professor Doutor Pedro José Sales Luís Fonseca Rosário
e da
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Academic Procrastination during the Doctoral Journey: A Qualitative Study Research Protocol

Abstract

Procrastination is the postponement of an activity and its replacement with another of less importance and is present in different spheres of an individual's life. In the educational context, procrastination behaviors unique to learning are termed academic procrastination. The literature shows that, during the academic path, a considerable number of students will engage in academic procrastination, resulting in a significant impact on their academic development. Academic procrastination is observed at all educational levels. However, literature on academic procrastination among postgraduate students, particularly doctoral students, is scarce. Based on the gaps in the literature and considering the detrimental effects that these behaviors may pose for the doctoral journey, a qualitative study research protocol was devised to deepen our understanding on the academic procrastination processes among PhD students. It is expected that the transposition of this study protocol into research will bring the opportunity to gather useful data to outline educational actions aligned with the needs of PhD students and with a great impact on their doctoral journey. Furthermore, the possible results of this work will not be limited to PhD students, but may expand and benefit universities and development agencies in the construction of their strategies.

Keywords: academic procrastination, PhD students, academic development, doctoral trajectory

Procrastinação Académica durante o Percurso do Doutoramento: Um Protocolo de Investigação de Estudo Qualitativo

Resumo

A procrastinação é o adiamento de uma atividade e sua substituição por outra de menor importância, e está presente nas diferentes esferas da vida de um indivíduo. No contexto educativo, os comportamentos de procrastinação exclusivos da aprendizagem são denominados de procrastinação académica. A literatura mostra que, durante o percurso académico, um número considerável de alunos se envolve na procrastinação académica, tendo um impacto significativo no seu desenvolvimento académico. A procrastinação académica é observada em todos os níveis educativos. No entanto, a literatura sobre procrastinação académica entre alunos de pós-graduação, principalmente alunos de doutoramento, é escassa. Com base nas lacunas da literatura e considerando os efeitos prejudiciais que esses comportamentos podem representar para a percurso do doutoramento, elaboramos o presente protocolo de estudo qualitativo, que visa aprofundar a compreensão sobre os processos de procrastinação académica entre alunos de doutoramento. É expectável que a transposição deste protocolo para a investigação traga a oportunidade de reunir dados úteis para o delineamento de ações educativas alinhadas às necessidades dos alunos de doutoramento e com grande impacto na sua jornada doutoral. Além disso, os possíveis resultados deste trabalho não se irão limitar aos alunos de doutoramento, mas poderão ampliar e beneficiar universidades e agências de fomento na construção das suas estratégias.

Palavras-chave: procrastinação académica, alunos de doutoramento, desenvolvimento académico, percurso doutoral

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Introduction

Procrastination is transversal to different spheres of life of the individual and has implications at different levels. In the present study, we will focus on aspects related to procrastination in the educational environment, i.e. academic procrastination. According to Steel and Klingsieck (2016), we can focus academic procrastination on procrastination behaviors that are learning and study related, and this field delimitation is shared by researchers working on this subject. However, as it is a complex phenomenon, the literature presents different definitions stressing the dysfunctional or functional aspects of this type of behavior.

For authors who share the dysfunctional view of academic procrastination, it is common to find definitions showing the voluntary delay in the intended or needed activity, and their harm (potential negative consequences) (Klingsieck, 2013a; Steel, 2007). For those who understand academic procrastination from a more functional perspective, this concept describes the existence of adaptive (active academic procrastination) and maladaptive (passive academic procrastination) behaviors. For Chun Chu and Choi (2005), active academic procrastination refers to acting intentionally in the act of postponing or not a task, while focusing the attention on tasks more important or of equal value. In passive academic procrastination, on the other hand, the intentionality and focus of procrastination are impaired. These individuals, even without the purpose of procrastinating, do it because of their lack of decision-making ability or lack of agility. For Chun Chu and Choi (2005) the "cognitive, affective and behavioral dimensions" (p. 247) involved in these behaviors are what differentiate active from passive procrastination.

The understanding of active academic procrastination presented above is still a topic of divergence among authors, as many do not consider the possibility of deliberate action, a sensible and/or rational choice associated with procrastination behaviors (Chowdhury & Pychyl, 2018). That is, procrastination requires an irrational postponement, even if it occurs voluntarily, but in associat with a delay and worsening of the situation in question (Steel & Klingsieck, 2016).

Although there are still divergent understandings about academic procrastination, Schouwenburg (1995, 2004) highlights two aspects that are common to any approach (functional or dysfunctional) and essential for understanding procrastination behavior, namely, the 'delay' of tasks and the 'substitution' of one task for another.

According to van Eerde (2003, p. 1401), in general, research on procrastination does not share a unified theory, which can make the act of explaining how the phenomenon occurs in the lives of individuals confusing. In this tangle of possibilities, (Klingsieck, 2013a) organizes and

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synthesizes studies that aim to understand procrastination among students from four psychological perspectives, which are internal or external to the individual, and are related to: i) Differential psychology, which relates procrastination to traits of personality. ii) Motivational and volitional psychology, which relates procrastination to behaviors that affect intention-action. iii) Clinical psychology, which links procrastination to clinical aspects (e.g., depression, stress, anxiety). iv) Situational perspective, which relates procrastination to the context and/or characteristics of the task. It is necessary to emphasize that the studies taken by Klingsieck (2013a) are not exclusive to academic domains and may explain the occurrence of procrastination in other areas. Below, without detailing each perspective, we will refer to procrastination through a more general terminology, but considering aspects closely related to academic procrastination.

The first perspective refers to differential psychology, which conceives procrastination as a personality trait. This perspective is widespread in the literature and associate's procrastination with specific personality factors (Big Five Model), such as less conscientiousness and greater neuroticism, and less associated with factors such as openness (van Eerde, 2004). Still regarding personality, there are studies associating procrastination with low self-esteem (Ferrari, 2001), lower levels of optimism (Klingsieck, 2013a), specific aspects of the individual's identity (Ferrari & Díaz-Morales, 2007), and perfectionism, the latter being closely associated with academic procrastination behaviors (Onwuegbuzie, 2000).

Regarding the perspective of motivational and volitional psychology, different studies relate procrastination to behavioral failures with a direct effect on intention-action (Klingsieck, 2013b). For studies that focus on motivational aspects of procrastination, issues related to intrinsic and extrinsic motivation (Brownlow & Reasinger, 2000), internal or external locus of control (Janssen & Carton, 1999), self-determination (Senécal et al., 2003), and self-efficacy (Klassen et al., 2008) are considered. With regard to volitional aspects of procrastination, some studies associate procrastination with self-regulation processes (Fulano et al., 2018, 2020; Magalhães et al., 2020), self-control (Schouwenburg & Groenewoud, 2001), time management (Schouwenburg, 2004), and learning strategies (Wolters, 2003). Among this approach is common to find different studies and interventions that associate academic procrastination behaviors with students' academic performance (Steel et al., 2018).

Studies that refer to procrastination from a clinical perspective associate this behavior with psychological disorders or clinically relevant conditions (Klingsieck, 2013a). In this context, there are studies linking procrastination to clinical circumstances associated to anxiety/depression

(Stöber & Joormann, 2001), stress (Beutel et al., 2016), and certain disorders, such as Attention Deficit/Hyperactivity Disorder (Rist et al., 2011). To consider procrastination from a clinical perspective, it is important that these behaviors are evaluated based on their duration, intensity, and certain physical/psychic aspects (Klingsieck, 2013a)

Finally, studies investigating procrastination from a situational perspective are still incipient, as this field has been neglected over the years. However, for authors who consider this approach, factors such as characteristics of the task, teacher or institution (Ackerman & Gross, 2005; Schraw et al., 2007) are closely linked to procrastination behaviors. For Svartdal et al. (2020), studying procrastination considering "exogenous factors" (p. 3) is essential, especially in academic contexts, as it is known that factors related to culture, context, and the educational organization itself can influence the acquisition or maintenance of behaviors of procrastination among students.

Even though it is a complex phenomenon with divergent aspects, researchers reaffirm the importance of studying procrastination, as it is a highly prevalent behavior in the lives of individuals, especially among students. In the university context, about 80% of students report having been involved in an episode of procrastination during their academic cycle (O'Brien, 2002). In addition, it is a behavior that tends to increase in frequency over time and seems to be endemic during students' university path (Steel, 2007).

Although procrastination behaviors are evident at different educational levels, in this study we will focus our attention on academic procrastination among doctoral students. In addition to being an audience of great relevance in educational, social, and economic contexts, it is an academic path of great expansion over the years. According to data from the Organization for Economic Co-operation and Development (2014), between 2000 and 2012 there was a 56% increase among students who obtained a doctoral degree. PhD students also have greater age and professional diversity, with an academic level increasingly sought after by mature students, who divide their time between academic routines and other professional and family activities (Gittings et al., 2018).

Regarding research on academic procrastination, investigation on postgraduate students (master or doctorate) tend to receive less attention from researchers than other educational stages (elementary, high school, and university; Liu et al., 2020). For authors such as (Johnson et al., 2000), an explanation for this discrepancy is the fact that PhD students are considered more autonomous and show greater self-efficacy in their academic journey compared with students at

other levels. In a study related to supervisors' assumptions about doctoral students, Manathunga and Goozée, (2007) reported that doctoral students tend to be regarded as talented, intelligent, excellent critical thinkers, and with excellent writing skills, requiring little pedagogical intervention or outside assistance throughout the academic process. Still, and despite this, doctoral programs have a high dropout rate, which can vary from 35% to 50% according to the disciplines or countries studied (Stubb et al., 2012). For these authors, issues related to problems with learning, workload, frequency of assessments, a highly competitive environment, supervisors/teachers and co-workers, and difficulty in reconciling academic life with private life are some of the factors that may be associated with evasion during the doctoral process. Kearns et al. (2008) mention that some forms of self-deficiency may be associated with academic failure of PhD students, with behaviors such as overcommitting, perfectionism, procrastination, and disorganization being some of the most frequently found in the literature.

Despite the scarce literature on the assessment of academic procrastination among doctoral students, this behavior is frequently reported as a predictor of situations of delay, failure, or dropout within doctoral programs (Johnson et al., 2000). As an example, Ahern and Manathunga (2003) found that academic procrastination was closely associated with typical behaviors of students who are "stuck" in their PhD. According to these authors, some behaviors are warning signs of this situation, including: i) changing the subject or work planning frequently; ii) avoiding communication with the supervisor; iii) avoiding socializing with others (department colleagues and peers); and iv) avoiding submitting the work for review.

In general, students engaged in academic procrastination activities experience poor academic performance, increased anxiety, and high levels of stress (Ackerman & Gross, 2005). These reports translate to an added difficulty to the academic path, as many PhD students describe the natural path of the PhD as a true emotional and behavioral "rollercoaster" (Morrison-Saunders et al., 2010), permeated by situations of pressure, depression, anxiety, and emotional exhaustion/exhaustion (Levecque et al., 2017).

Although it is naturally a stage of ups and downs, the doctoral path is a stage of great academic importance and with great scientific impact. According to Ampaw and Jaeger (2012), the doctorate is an individual investment (the student himself), but with a strong collective investment (universities, governments, and funding agencies). Therefore, it is essential for those who follow this path that the objectives, deadlines, and performance initially drawn are achieved with quality and efficiency. Therefore, understanding behaviors such as academic procrastination,

which can impact the development of this educational path, is extremely important for the construction of successful trajectories.

This study protocol was built upon the literature gaps on academic procrastination among PhD students, and the implications that these behaviors may represent for the doctoral course. The main objective of this work is, therefore, to understand how PhD students understand academic procrastination throughout their doctoral trajectory. Therefore, we dedicate our work to the construction of tools and guidelines that enable a deeper investigation into how PhD students perceive and experience procrastination behaviors throughout their doctoral course.

Method

Participants

The present research will be aimed at PhD students. To ensure diversity among the participants, students from different areas of knowledge (human sciences, exact sciences, technological sciences, and health sciences) will be recruited. To guarantee data saturation (Adler & Adler, 2012; Creswell, 1998), about 30 participants will be invited to participate. The recruitment will use the official communication channels of the Universities (institutional e-mail, academic and schools portal) and social networks (Facebook, LinkedIn). Student participation will occur on a voluntary basis.

Instruments and Measures

Individual variables

The participants' age, sex, doctoral studies in which they are enrolled, year in which they are enrolled, and the domain of knowledge/field of study were asked.

Semi-structured interview

To carry out this study, an interview protocol containing eleven open questions was elaborated (see Appendix A - Interview Protocol). The questions were based on the three types of knowledge: Declarative, procedural, and conditional (Alexander & Judy, 1988). The first question was designed to understand from the participant's point of view what academic procrastination is (declarative knowledge). Questions two through six focus on how academic procrastination manifests in the daily lives of each interviewee (procedural knowledge). Questions seven through 10 demand a more critical reflection on the topic, which will lead interviewees to revisit the reasons underlying procrastination behaviors and their consequences (conditional knowledge). Finally, question 11 explores participant's perspective on a possible positive understanding of academic procrastination.

Procedure

This study is subject to prior acceptance by the Ethics Committee of the University of Minho. At the beginning of each interview, participants will receive the Informed Consent Form, which requires acceptance to proceed with the study. Data collection will involve the filling-in of a sociodemographic questionnaire and enroll in a semi-structured interview. The interviews should use an audio recording feature and will last about 30 minutes. Data collection will be carried by the researcher individually at a quiet location, in-person or online, with prior appointment at the participant's discretion.

Data Analysis

After conducting the interviews, the material collected must be transcribed verbatim. The transcriptions must be reviewed and validated by a second researcher to ensure the accuracy of the information. Thematic Analysis will be the approach for data analysis, for it "is a method for systematically identifying, organizing, and offering insight into patterns of meaning (themes) across a data set" (Braun & Clarke, 2012, p. 57). To facilitate the process of systematization and evaluation of the collected data, NVivo 12 Pro Software (Richards, 2005; QSR International Pty Ltd., 2018) is recommended.

Codebook

In this work, we suggest the use of a codebook developed following the deductive process, where the themes and codes set are created from topics and concepts present in the literature (Braun & Clarke, 2012). To facilitate the understanding of the material, below we present the structure of the codebook, which is divided into theoretical basis, themes, sub-themes, and codes (see Figure 1).

Next, a more detailed analysis of each item in the codebook will be presented. This will contribute to a clear understanding of the purpose, and importance, of each element for the future study. For a better flow of information, the presentation of this codebook will be organized in accordance with the theoretical basis, i.e., the three types of knowledge (declarative, procedural, and conditional), followed by the corresponding themes, sub-themes, and codes.

Figure 1

Codebook Structure

| THEORETICAL BASES	THEMES/SUB-THEMES		CODES
Declarative Knowledge	Conceptualization of Procrastination		Complete Conceptualization
			Partial Conceptualization
			Different Conceptualization
			Does not know
	Positive/Adaptive Procrastination		Identify positive aspects
			No identify positive aspects
			Does not know
Procedural Knowledge	Academic Procrastination Styles		Non-procrastinators
			Academic Productive Procrastinators
			Non-academic Productive Procrastinators
			Non-academic Procrastinators
			Classic Procrastinators
	Procrastination in the spheres of life		Academic and work
			Every routines and obligations
			Health
			Leisure
			Family and partnership
			Social contacts
	Procrastination Situations in the Doctorate		Procrastination situations in the doctorate
	Strategies Types	Planning Strategies	Self-evaluation
			Goal setting and planning
			Environmental structuring
			Seeking social assistance
		Execution Strategies	Organizing and transforming
			Seeking information
			Keeping records and monitoring
			Rehearsing and memorizing
		Evaluation Strategies	Self-consequences
			Reviewing data
Conditional Knowledge	Procrastination Frequency		Frequency
	Procrastination Reasons	Internal Reasons	Affective
			Mental and Physical States
			Cognitive
			Personal Beliefs
			Personality
			Competence
			Learning experience
			Perceived Characteristics of the Task
		External Reasons	Individual Work Condition
			Lecturers' characteristics
			Institutional Conditions
	Consequences of Procrastination	Positive Consequences	Affective
			Course of Studies
		Negative Consequences	Affective
			Mental and Physical States
			Behavior
			Personality
			Course of Studies
			Private Life
		No Reported Consequences	No consequences

Declarative Knowledge. The first stage of the codebook refers to the declarative knowledge, which concerns to factual information about something – "what" (Alexander & Judy, 1988; see Figure 2). Choosing this approach to start the coding process is important because, according to (Rosário, 2013), learning or gaining knowledge about something starts from the basic knowledge about the content that one intends to understand. Thus, the first step aims to explore participants understanding of academic procrastination and explore whether participants perceive positive/adaptive aspects associated with the academic procrastination topic.

The first theme seeks to unveil the participants conceptualize of academic procrastination. Considering that in adaptive or maladaptive approaches, the concept of procrastination comprises aspects such as the "delay" of the task and the "substitution" of the task by another (Schouwenburg, 2004), we subdivided the theme into four codes: i) complete conceptualization, when the participant mentions both aspects, that is, "delay" and "substitution"; ii) partial conceptualization, when the participant mentions only one of the aspects of the definition, either the "delay" or "substitution", in his answer; iii) different conceptualization, when the participant does not mention any aspect of the definition, that is, neither "delay" nor "substitution'" of the task; lastly, iv) does not know, when the participant reports not knowing the answer to the question.

As this work also aims to explore whether doctoral students can conceptualize academic procrastination not only considering the negative aspects associated with the concept, but also from a positive or productive perspective (Abramowski, 2018), the second theme refers to the identification of positive/adaptive aspects of academic procrastination. In this theme, the codes are defined as: i) identify positive aspects, when the participant perceives positive/adaptive aspects related to academic procrastination behaviors; ii) does not identify positive aspects, when the participant does not perceive positive/adaptive aspects related to academic procrastination behaviors; and iii) does not know, when the participant says he does not know the answer to the question.

Figure 2

Declarative Knowledge
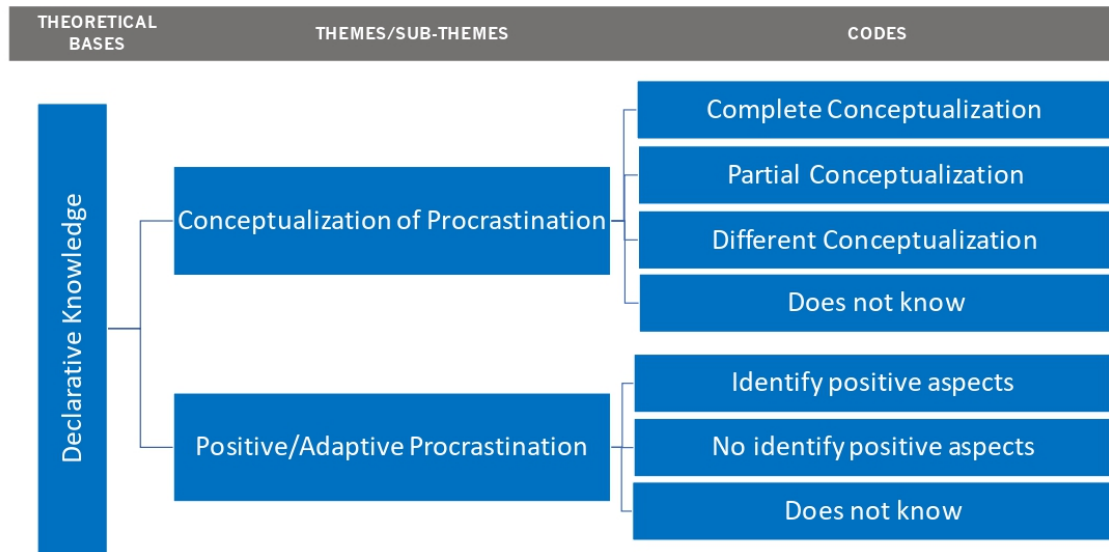
Procedural Knowledge. The second stage of the codebook refers to the procedural knowledge, which deals with the match between declarative knowledge and the specific strategies for the execution of a task – "how" (Alexander & Judy, 1988; see Figure 3). That is, it describes how something occurs (Rosário, 2013). In the codebook, the procedural knowledge stage aims to describe how academic procrastination becomes operational in the doctoral project and in the participants' lives.

The first theme of this stage aims to associate the participants responses to the styles of academic procrastination present in the literature. To achieve this goal, we follow the approach of Westgate et al. (2017, p. 125). According to these authors, individuals procrastinate in different ways, making it necessary to classify these behaviors according to their most adaptive or less adaptive forms. Thus, the authors developed five styles associated with academic procrastination: non-procrastinators, academic productive procrastinators, non-academic productive procrastinators, non-academic procrastinators, and classical procrastinators. In this codebook, the theme codes were defined as follows: i) non-procrastinators, when the participant asserts not procrastinating the PhD-related tasks and starting the activities immediately; ii) academic productive procrastinators, when the participant asserts postponing an academic task and replacing it with another academic activity of lesser importance or easier (e.g., data review, search for articles) than the task that is being delayed; iii) non-academic productive procrastinators, when the participant asserts postponing an academic task and replacing it with a non-academic, but still productive, activity (e.g., house cleaning, exercising, paying the bills); iv) non-academic

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procrastinators, when the participant asserts postponing an academic task and replacing it with a non-academic activity, not necessarily productive (e.g., navigating on Facebook, watching television, socializing with friends); and v) classic procrastinators, when the participant asserts postponing any task, academic or not, and replacing it by an unproductive (maladaptive) activity (e.g., postpone health care and invest in inappropriate eating habits).

The second theme in this stage seeks to identify the spheres of life in which the participants report to procrastinate. As the literature has already revealed, procrastination is not exclusive to the academic domain, but it can manifest itself in other domains of an individual's life (Schouwenburg, 2004; Steel, 2007). The domains considered in this study, here called life spheres, follow the organization proposed by (Klingsieck, 2013b) and are divided into the following codes: i) academic and work, when the participant reports situations related to the studies or work (e.g., write an academic article, respond to a work email, schedule/attend a professional meeting); ii) everyday routines and obligations, when the participant reports situations related to daily activities, but not related to study or work (e.g., household chores, bill payment, tax returns); iii) health, when the participant reports situations related to healthcare (e.g., going to the doctor, practicing physical exercises, maintaining a healthy diet); iv) leisure, when the participant reports situations related to leisure or hobbies (e.g., doing volunteer work, participating in cultural activities); v) family and partnership, when the participant reports situations related to or to the family and affective partners (e.g., visiting the family, buying gifts and/or participating in commemorative events); and vi) social contacts, when the participant reports situations related to social activities (e.g., meeting friends, calling to acquaintances).

The third theme present in this phase aims to assess situations in the PhD path that contribute to participant's procrastination behaviors. In research with university students, situations related to writing, reading, face-to-face activities or even administrative activities (e.g., reporting) may be associated with procrastination behaviors in the academic context (Schouwenburg, 2004; Solomon & Rothblum, 1984). In addition, it is possible to find information related to the time of the year (e.g., greater procrastination at the beginning of the semester), demographic variables (e.g., living close to the University or research unit) or situational (e.g., less procrastination when the deadline of a task approaches) (Moon & Illingworth, 2005; Muszynski & Akamatsu, 1991). For coding reason, it was established the code: Procrastination situations in the doctorate, which refers to the situational factors that are most associated with academic procrastination behaviors.

The fourth theme in this stage concerns the strategies used to avoid, reduce, or circumvent the occurrence of procrastination behaviors. As procrastination is often presented as a failure of the self-regulation processes (Blunt & Pychyl, 2005; Steel, 2007; Wolters, 2003), we seek to understand the strategies students use to prevent procrastination in light of the self-regulated learning strategies. Self-regulated learning strategies refer to "actions directed" for the execution of a skill and involve issues such as "agency, purpose (goals), and instrumentality self-perceptions" (Zimmerman & Martinez-Pons, 1986, p. 615). For reasons of clarity, both coding scheme and the compilation of the results, we propose the separation of the theme into three sub-themes, each corresponding to one of the phases of the self-regulated learning process as proposed by Rosário (2004) in the PLEE model (Planning, Execution and Evaluation). In line with this theoretical option, we also used the compilation of self-regulated learning strategies proposed by Rosário et al. (2007), to define the 10 codes corresponding to the sub-themes.

In the first sub-theme, referring to the Planning phase, four codes are considered: i) Self-evaluating, which refers to the participant's assessment of the quality and progress of the performed activities; ii) goal-setting and planning, which refers to the participant's actions to set goals and planning actions having into consideration aspects such as distribution of small activities in time and completion of related activities; iii) environmental structuring, which refers to the participant's actions to select or change the physical/psychological environments to facilitate the performance of the activities; iv) seeking social assistance, which refers to the participant's actions to seek help from peers, teachers, or advisors for their activities.

In the second sub-theme, referring to the Execution phase, four codes were considered: v) organizing and transforming, which refers to the participant's actions to reorganize and improve the materials needed to carry the activities; vi) seeking information, which refers to the participant's actions to acquire extra information, from non-social sources, to carry out the activities; vii) keeping records and monitoring, which refers to the participant's actions to record events or outcomes related to the activities; and viii) rehearsing and memorizing, which refers to the participant's actions to memorize the materials related to the activities.

Finally, in the third sub-theme, referring to the Evaluation phase, two codes were considered: ix) self-consequating, which refers to the participant's actions of imagination or actual attribution of rewards or punishments for the outcomes of the activities, successes, or failures respectively; and x) reviewing records, which refers to the participant's actions linked to

efforts/initiatives to review information or to better prepare themselves to perform the activities in the future.

Figure 3

Procedural Knowledge
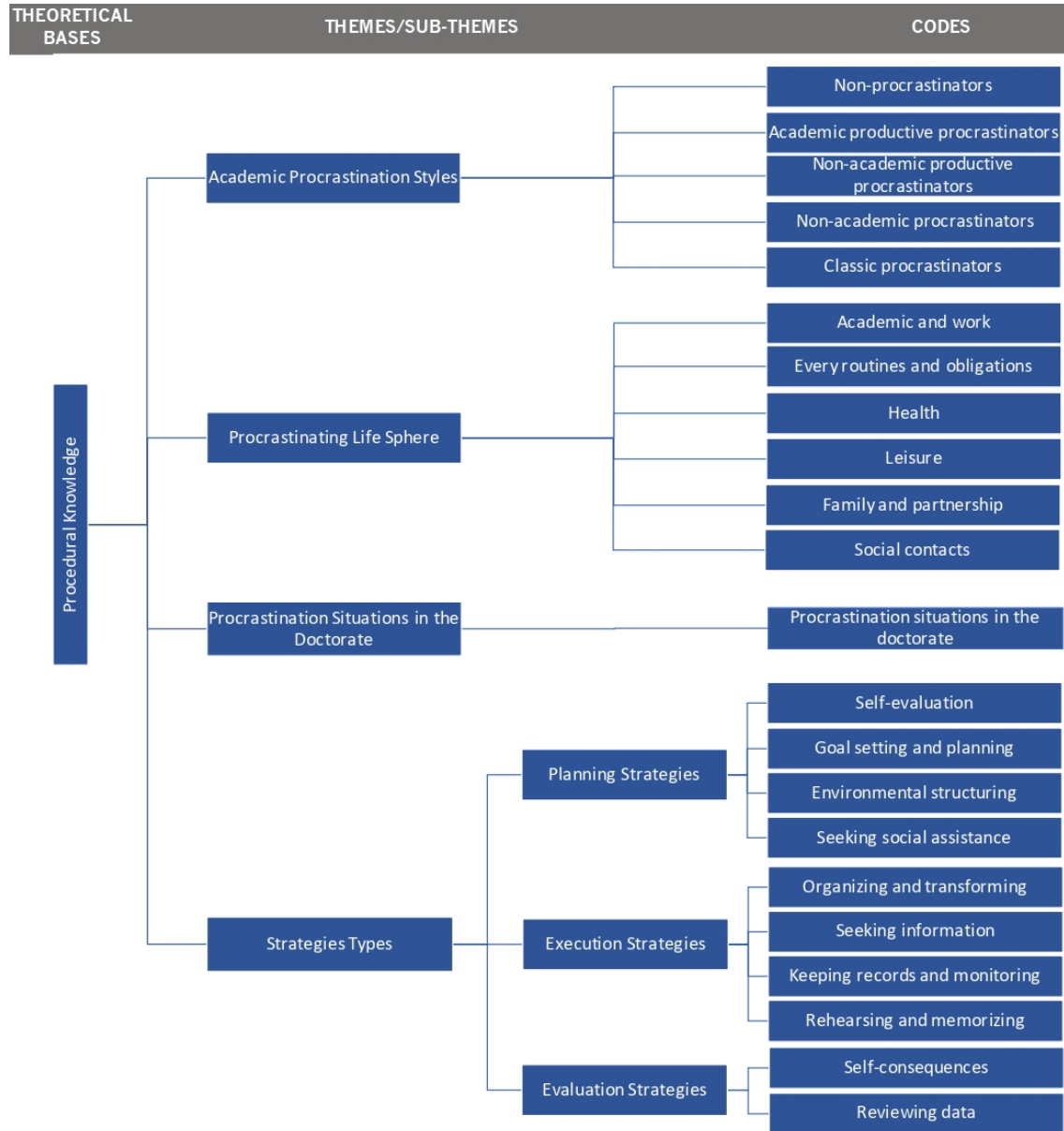
Conditional Knowledge. The third and final stage of the codebook refers to conditional knowledge and it deals with a deeper understanding about the use of strategies, and when and why to apply them - "when and why" (Alexander & Judy, 1988; see Figure 4). For Rosário (2013) both learning and knowledge are closely related to the characteristics of the task and the environment in which they are performed. Thus, it is at this stage that we will have the opportunity to understand the context, situations, reasons, and consequences related to procrastination behaviors in the doctoral project.

The first theme in this phase is related to the frequency of procrastination and seeks to uncover the periodicity in which these behaviors occur. Procrastination seems to be something common in the lives of university students, with a quarter reporting being frequently involved in academic procrastination behaviors (Day et al., 2000). In the literature, measures related to frequency, intensity and periods in which procrastination behaviors occur are extremely relevant. They are an important input to assess the impact that procrastination can have on individuals and their academic performance (Svartdal et al., 2016). For our analysis, the theme has a single code called: Frequency. This code refers to any temporal information related to academic procrastination behaviors during the doctoral course.

The last two themes present in the code book concern the reasons and consequences of academic procrastination. Many studies report the reasons behind academic procrastination and its consequences (Schouwenburg & Lay, 1995; Steel, 2007; Wolters, 2003). However, as a way to systematize the presentation and facilitate the coding process, we use the proposal by Grunschel et al. (2013), who analyzes in an exploratory and qualitative way the reasons and consequences of academic procrastination in university students. In this study, the authors establish codes in a deductive and inductive way. The reasons for procrastinating can be internal (for example, affective reasons, personality, physical well-being) or external (for example, working conditions, characteristics of the teacher/advisor) to the individual, while the consequences of procrastination can be positive, negative, or no reported consequences (no consequences)

Thus, the second theme present in this phase concerns the reasons to procrastinate in the doctoral project, being divided into two sub-themes, internal reasons, and external reasons. In the sub-theme related to internal reasons, we defined eight codes: i) affective, when the participant reports reasons related to anxiety, dissatisfaction, frustration, overload, tiredness, among other affective/emotional aspects; ii) mental and physical states, when the participant reports reasons related to exhaustion (pathological) or other aspects constituting ill health; iii) cognitive, when the participant reports reasons related to frequent and repetitive thoughts, such as rumination or others; iv) personal beliefs, when the participant reports personal considerations about themselves and how they tend to act in certain situations; v) personality, when the participant reports reasons related to personality traits, such as openness, conscientiousness, extraversion, agreeableness, and neuroticism; vi) competence, when the participant reports reasons related to the lack of study skills, lack of knowledge, lack of organizational skills, low self-regulation, among others; vii) learning experience, when the participant reports reasons related to negative learning experiences,

previously learned behaviors, dropout, among others; and viii) perceived characteristics of the task, when the participant reports reasons related to perceiving the activity as being aversive, complex, difficult, non-urgent, uninteresting, time-consuming, unattractive, important, unimportant, or others.

In the sub-theme related to external reasons, we defined three codes: ix) individual working conditions, when the participant reports reasons related to high workload, problems in the research/study group, not having social integration with others, among others; x) lectures' characteristics, when the participant reports reasons related to the disorganization of the superior, the level of demand, lack of support, poor teaching competence, among others. We emphasize that in our study this code will be considered as characteristics of the advisor/co-advisor or supervisor of PhD students; and xi) institutional conditions, when the participant reports reasons related to the educational institution, lack of resources or workspaces, a lot of bureaucracy, among others.

The third and final theme of this stage refers to the consequences associated with the academic procrastination behaviors perceived by the participants. This theme was divided into three sub-themes that relate to the positive, negative, and no reported consequences. In the sub-theme referring to positive consequences, two codes are described: i) affective, when the participant reports consequences related to satisfaction or other affective/emotional characteristics; ii) course of study, when the participant reports consequences related to success in the course of study. About the sub-theme referring to negative consequences, six codes were organized: iii) affective, when the participant reports consequences of anger, anxiety, shame, dissatisfaction, remorse, among others; iv) mental and physical states, when the participant reports consequences related to mental and physical stress, problems related to sleep, tiredness (pathological) or other health problems; v) behavior, when the participant reports consequences related to the change or not of behavior; vi) personality, when the participant reports consequences related to negative self-concept or other consequence related to personality; vii) course of studies, when the participant reports consequences related to time pressure, delays, accumulation of work, dropout, low quality at work, among others; and viii) private life, when the participant reports consequences related to financial issues, social relations, future prospects, among others. Finally, in relation to the sub-theme no reported consequences, we consider the following criteria: ix) no consequences, when the participant does not report positive or negative consequences.

Figure 4

Conditional Knowledge
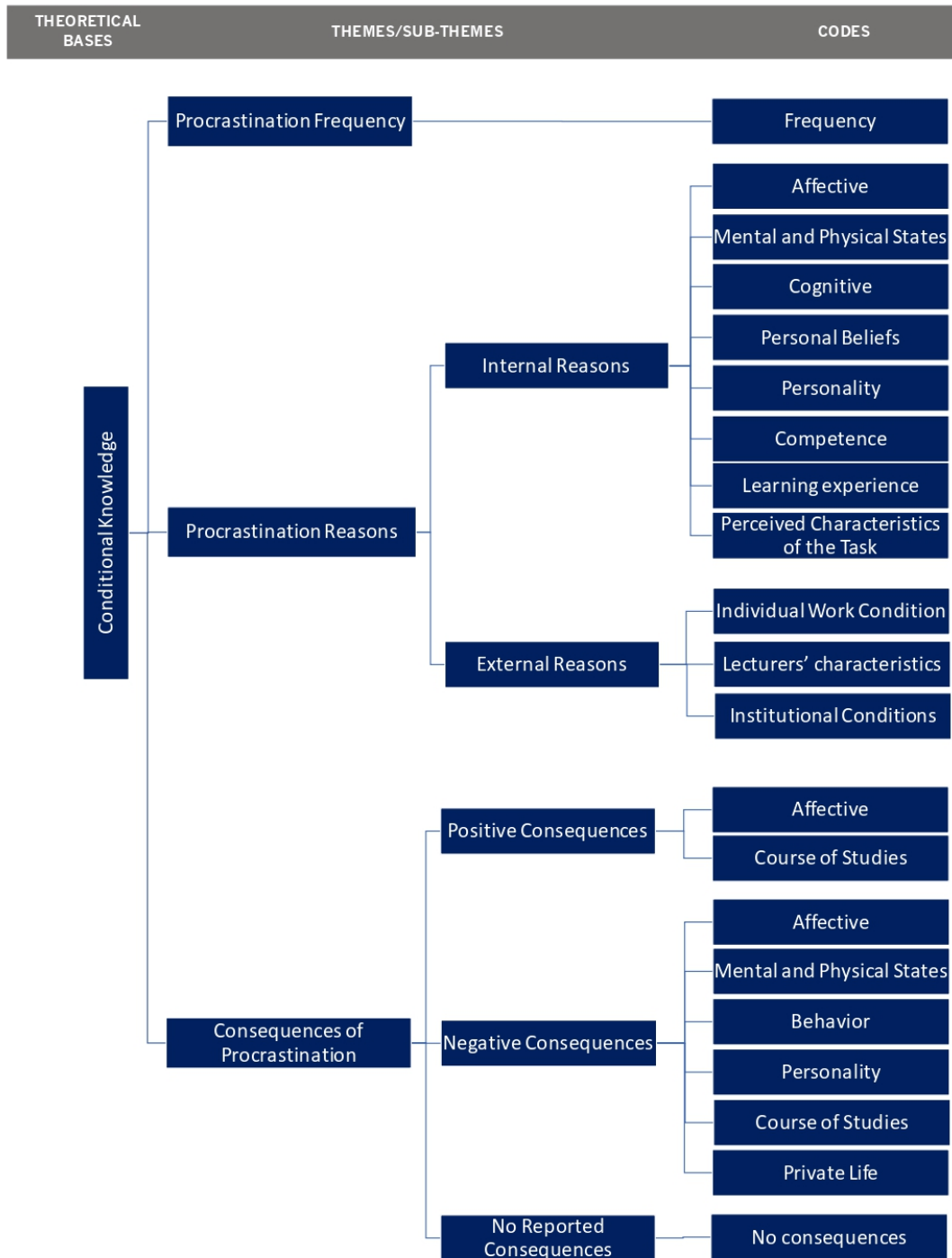
As aforementioned, considering that this is a study protocol, the themes, subthemes, and criteria presented here are suggested following a deductive perspective. However, the execution of the project and future interviews can lead to changes in the items presented, making the codebook more adjusted for the data coding process.

Discussion

This study protocol aims to provide a better understanding of academic procrastination among PhD students. However, to understand how academic procrastination relates to the educational context of PhD students, it is first necessary to understand how individuals perceive these behaviors in their daily lives and their implications for learning trajectories. Thus, it is essential to set strategies likely to enable an immersion in the meaning and relationship of PhD students with academic procrastination. The tools established in this protocol, both for data collection and analysis, serve as a facilitator in the exploration of each phase of knowledge (Declarative, Procedural, Conditional), providing opportunities for a closer contact with the thoughts, feelings, and beliefs of the PhD students on academic procrastination. By transposing this study protocol into research practice, we will have the opportunity to gather data helpful to outline educational actions aligned with the needs of PhD students, and with great impact on their doctoral pathways. In addition, the possible results of this work will not be limited to PhD students, but may extend and benefit universities and funding agencies in the construction of their strategies. It is expected that the knowledge acquired in this protocol will be transferred and will help in the construction of interventions of greater quality and effectiveness.

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APPENDIX A

INTERVIEW PROTOCOL

Declarative knowledge:

1. What do you understand by academic procrastination?

Procedural Knowledge:

2. According to this definition, what would it be like to procrastinate in the doctoral project?

3. Do you identify this type of behavior in your daily life?

4. What spheres of life do you procrastinate?

5. How often does this type of behavior occur?

6. What strategies could you use to prevent, reduce, or circumvent the occurrence of these behaviors? Can you give examples of strategies to avoid procrastination? (cognitive, behavioral, emotional strategies)

Conditional Knowledge

7. Do you identify any external / situational factors that are associated with this type of behavior? (times of the day, phases of the doctoral project, times of the year ...)

8. What drives you to procrastinate? / What is behind this behavior? [Internal reasons (e.g., anxiety; perfectionism), situational reasons (parties with friends; family problems)]

9. Do you identify any kind of consequences resulting from these behaviors in the way you manage your project?

10. How do you feel about this type of behavior?

Reconceptualization of the concept of procrastination:

11. Procrastination is usually considered negative. How could procrastination be understood in a more positive dimension? (Why do you say that, to what extent can, you be positive? / Under what circumstances, how does it manifest? / When where and why?