

UNIVERSITY OF LISBON
INSTITUTE OF EDUCATION



HOW DO STUDENTS PERCEIVE AND DEVELOP SELF-REGULATED LEARNING
STRATEGIES IN ONLINE LEARNING?
A QUALITATIVE ANALYSIS ABOUT ACADEMIC PROCRASTINATION AND SELF-
REGULATION

Lorena da Mata Vargas Silva

MASTER'S DEGREE IN EDUCATION AND TRAINING
Field: E-learning and Distance Learning

Master Thesis supervised by the Professor Doctor Fernando Albuquerque Costa

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ABSTRACT

Procrastination is considered a cross-temporal subject, but a modern problem since the Industrial Revolution, a moment in which delaying a task received a negative status. Several authors proved that procrastination affects the major population, and its causes and consequences are the focus of different studies. The field of academic procrastination is one of the most investigated and it is commonly associated with failure on motivation and self-regulated learning strategies. Especially considering online learning environments, the literature points to higher demand for autonomy and self-regulation by students in consequence of lack of guidance and understandability of self-regulated learning strategies.

The current study investigated academic procrastination in an online learning environment by addressing the following research question: how do students perceive and develop self-regulated learning strategies in online learning?

Considering that the expectation of mastering academic tasks is also present in online learning, the qualitative investigation concentrated on identifying students' patterns of self-regulated learning strategies in this modality and the factors that can lead to failure and consequent academic procrastination.

Six semi-structured interviews with a categorized guide previously prepared were performed aiming to collect information from students enrolled in online academic courses about their perception and experiences. The interviews were transcribed to be used as documental corpus and analyzed respecting principles of exhaustiveness and homogeneity. The analysis tried not only to reply to the research question but also to understand if it was possible to relate these results to Zimmerman and Martinez-Pons' studies by finding strategy consistency as a determinant factor to high academic achievements.

The results showed that students in an online learning environment made use of only ten of the fourteen possible categories designed by Zimmerman and Martinez-Pons, of which only six were more explored, representing a low range in comparison. It was also possible to identify the students with low- or high-level achievements by the self-regulated learning strategies, and, as posited by Zimmerman and Martinez-Pons, that the consistency of the strategies is indeed related to high achievements.

This study concluded that students procrastinate every time they do not feel confident with their own knowledge about the content or when tasks or topics are not interesting or do not add any value in their lives. It was also demonstrated that students do not have metacognitive skills developed, and although they try by themselves to develop self-regulated

learning strategies, they are not enough to make them completely succeed when considering high performance and mastery and can be demonstrated as the result of failure in the pedagogical structures designed by universities not only in the online environment but also in the presential one.

Keywords: Self-regulated learning; Self-regulated learning strategies; Academic procrastination; Online learning.

RESUMO

A procrastinação é considerada um assunto atemporal, mas um problema moderno desde a Revolução Industrial, momento no qual adiar uma tarefa recebeu um status negativo. Vários autores comprovaram que a procrastinação atinge grande parte da população e suas causas e consequências são foco de diversos estudos. O campo da procrastinação acadêmica é um dos mais investigados e está comumente associado ao fracasso em estratégias de motivação e autorregulação da aprendizagem. Especialmente considerando os ambientes de aprendizagem online, a literatura aponta para uma maior demanda por autonomia e autorregulação por parte dos estudantes em decorrência da falta de orientação e compreensão das estratégias de autorregulação da aprendizagem.

O presente estudo investigou a procrastinação acadêmica no ambiente de aprendizagem online, abordando a seguinte questão de pesquisa: como os estudantes percebem e desenvolvem estratégias de autorregulação na aprendizagem online?

Considerando que a expectativa de domínio e alta performance de tarefas acadêmicas também está presente na aprendizagem online, a presente investigação qualitativa se concentrou em identificar os padrões de estratégias de autorregulação da aprendizagem de estudantes nesta modalidade e os fatores que podem levar ao fracasso e consequente procrastinação acadêmica.

Para fundamentar o tema, uma extensa literatura acerca do tema foi revista com o objetivo de embasar diversas abordagens sobre procrastinação e permitir uma compreensão global sobre a relação entre procrastinação acadêmica e autorregulação com foco na aprendizagem online, mas também sobre estratégias para mitigação de falhas na autorregulação da aprendizagem e da procrastinação. A pesquisa dedicou especial atenção ao estudo de Zimmerman e Martinez-Pons quanto a estratégias de autorregulação, em que os autores investigaram diferentes estratégias de autorregulação da aprendizagem a partir de um método qualitativo de entrevistas chamado “Self-Regulated Learning Interview Schedule”, tendo concluído que a constância no uso de estratégias de autorregulação da aprendizagem cria o diferencial entre baixa e alta performance, sendo, portanto, essencial para os altos níveis de realização.

Esta perspectiva foi a escolhida para nortear a análise de dados do presente estudo.

Para coletar as informações que formam o corpo documental deste estudo, foi adotada uma estratégia qualitativa, através da realização de entrevistas semiestruturadas. Foram realizadas seis entrevistas com estudantes matriculados em cursos de nível superior na modalidade de ensino online, utilizando um guião de entrevista previamente elaborado e

organizado por objetivos e respectivas categorias e perguntas que emergiram da fundamentação teórica, de modo a facilitar a análise de dados, a elaboração de sínteses e a respetiva interpretação de resultados. As categorias objetivaram recolher informações sobre a percepção e experiência dos estudantes quanto a escolha da modalidade online de aprendizagem, o impacto das tarefas académicas no comportamento e emoções dos estudantes, a percepção sobre procrastinação académica de forma generalista e aplicada ao ambiente online de aprendizagem e estratégias de autorregulação da aprendizagem, além de oferecer a oportunidade dos participantes discorrerem livremente sobre o tema para além do que fora perguntado.

As entrevistas seguiram o princípio da homogeneidade, na qual todos os participantes foram questionados dentro de um padrão a partir do guião de entrevista, e foram transcritas para serem utilizadas como corpo documental, respeitando os princípios da exaustividade, onde todo o conteúdo coletado nas entrevistas foi utilizado para a composição do material que fora analisado. A análise seguiu um procedimento aberto para a classificação do conteúdo das entrevistas. Este processo teve o objetivo de obter informações não apenas para responder à questão da pesquisa, mas também entender se era possível relacionar esses resultados ao estudo de Zimmerman e Martinez-Pons citado anteriormente, no que diz respeito ao uso de estratégias de autorregulação da aprendizagem por parte dos estudantes e na verificação da consistência da estratégia como um fator determinante para altas realizações académicas.

Os resultados do estudo mostraram que os estudantes em ambiente de aprendizagem online fizeram uso de apenas dez das quatorze categorias possíveis elaboradas por Zimmerman e Martinez-Pons, dentre as quais apenas seis foram mais exploradas, representando um intervalo baixo na comparação. Também foi possível identificar os estudantes com aproveitamento de baixo ou alto nível de realizações a partir estratégias de autorregulação da aprendizagem utilizada e, conforme postulado por Zimmerman e Martinez-Pons, que a constância das estratégias estão sim relacionados a grandes realizações.

O estudo permitiu ainda desenvolver inferências sobre o tema da procrastinação académica e o desenvolvimento de estratégias de autorregulação da aprendizagem. Foi possível compreender que a escolha pela modalidade online não foi uma decisão totalmente consciente pelos estudantes, pois levou em consideração apenas os benefícios da modalidade em aspectos da vida pessoal ou profissional, mas nunca houve uma reflexão sobre o grau de competência individual necessário para se obter um alto nível de desempenho nesta modalidade. Em suma, os estudantes são motivados a ingressarem na modalidade online por outros motivos que não

o foco no processo de aprendizagem em si, o que gera inúmeras consequências nos próprios resultados.

Foi constatado também que, embora os sistemas de aprendizagem – e em especial a modalidade online – exijam estudantes com habilidades metacognitivas bem desenvolvidas, esta é uma lacuna não preenchida por todos os participantes e que diz respeito diretamente às falhas no processo de autorregulação e consequente procrastinação acadêmica. Os estudantes não possuem habilidades metacognitivas suficientemente desenvolvidas e, embora tentem por si próprios desenvolver estratégias de autorregulação da aprendizagem, não são suficientes para torná-los completamente bem-sucedidos quando se considera o alto desempenho e domínio, e apareceram no presente estudo como resultado de falha nas estruturas pedagógicas concebidas pelas universidades não só no ambiente online mas também no presencial. Os estudantes já chegam na modalidade online com falhas nas competências metacognitivas e, inseridos neste sistema, não recebem suporte ou estímulo para desenvolvê-las – o que justifica a baixa utilização de estratégias demonstrado durante a comparação com o estudo de Zimmerman e Martinez-Pons.

Foi ainda possível mostrar que os estudantes procrastinam toda vez que não se sentem confiantes com o próprio conhecimento sobre algum conteúdo ou quando as tarefas ou tópicos não são interessantes ou não agregam valor em suas vidas. Os estudantes passam de um estado de alívio e satisfação ao procrastinar a execução de uma atividade, especialmente no que tange a iniciá-la, mas ao constatarem a proximidade dos prazos passam a experimentar emoções negativas como culpa, medo, ansiedade, desespero e solidão. Ficou evidente nos resultados que os estudantes têm apenas o prazo como principal motivador para a execução e conclusão de uma tarefa e neste processo nenhuma dimensão metacognitiva é aplicada.

Comparado a análise e interpretação do corpo documental do presente estudo com as conclusões de Zimmerman e Martinez-Pons quanto a utilização de estratégias de autorregulação, foi possível constatar um decréscimo na quantidade de estratégias de autorregulação da aprendizagem pelos alunos na modalidade online, sendo confirmada apenas a constância do uso dessas estratégias como um fator determinante e diretamente ligado aos resultados de alto nível de performance. Foi possível determinar que os estudantes não possuem competências metacognitivas desenvolvidas, mas que existe um esforço individual de cada um na tentativa de desenvolver estratégias de autorregulação da aprendizagem no ensino online, mas sem a percepção e conhecimento de conceitos importantes ligados a metacognição e ao processo de aprendizagem em si.

Uma vez que as lacunas nos mecanismos de autorregulação que levam à procrastinação acadêmica são decorrência não apenas da ação singular de um estudante, mas também de lacunas no design acadêmico, o estudo foi finalizado com a sugestão de redesenho das estruturas pedagógicas de ensino, bem como a necessidade de inclusão e implicação de outras partes interessadas no processo, como as instituições e professores, de modo que o conceito de metacognição seja compreendido, respaldado e mecanismos para desenvolvê-lo sejam criados.

Palavras-chave: Autorregulação da aprendizagem; Estratégias de autorregulação da aprendizagem; Procrastinação acadêmica; Aprendizagem online.

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INTRODUCTION

It is a consensus among researchers that procrastination is a cross-temporal subject existent since the B. C. era, but a modern problem with origins at the Industrial Revolution when the theme got the negative perspective of delaying something important generating impacts. Procrastination achieves most of the population and up to 20% of the procrastinators are considered chronic ones. Researchers discussed the character of procrastination as intentional or voluntary behavior, and its cause, and most of the studies conclude that low-conscientiousness and self-regulation are the main reasons for procrastination.

Following this perspective, academic procrastination is shown as a relevant theme because of its relationship with students' achievement. One of the most known perspectives about procrastination was resumed by Park and Sperling (2012) by suggesting it is the failure of motivation and self-regulated learning strategies. This perspective represents the main indicator and point of concern of researchers when considering academic procrastination. Klingsieck et al. (2012) posited that most of the studies related to the theme are focused on academic procrastination and even highlighted that it affects most students even in a chronic way. When talking about online and/or distance learning, the concern about this topic increases, once this type of environment presupposes autonomy and higher self-regulated learning strategies by students – which is completely affected by the lack of immediate support and social interaction.

To think about strategies to mitigate the impacts on academic achievements caused by procrastination became necessary and studies pointed to the development of metacognitive skills as essential, because it allows the students to plan, monitor, reflect and adjust learning strategies. Many researchers sustain that metacognitive skills can be acquired and promoted by training and become a continuous practice where students will reach positive academic achievements. Howell et al. (2006, in San, Roslan, & Sabouripour, 2016) stated that academic procrastination was associated to lower cognitive and metacognitive strategies. Cho and Shen (2013) explained that self-regulated learning strategies could be measured through different constructs, as the regulation, that includes the metacognitive skills. A self-regulated student is the one that can plan, monitor, analyze and adjust the learning process. However, it is also stated that especially in online learning environments the students face difficulties in developing it due to a lack of guidance and comprehension about self-regulated learning strategies. Cho and Shen (2013), for example, considered self-regulated learning a challenge in online modality due to the lack of support and the perceived feeling of loss and social

isolation. Students keep being judged by their academic performance as a result of their high or low appliance of self-regulated learning strategies and, at the same time, they face a lack of guidance and understanding about these types of strategies.

Identifying and analyzing the students' perspective of how procrastination and self-regulated learning strategies are presented and perceived on a daily basis, as well the role of the institutions and teachers on that process in online learning environments is the main concern of this study. The following research question is addressed: how do students perceive and develop self-regulated learning strategies in online learning?

For this purpose, a qualitative method was chosen, where previous theories will be presented and utilized to support the analysis and interpretation of data collected in semi-structured interviews focused on the research question.

The content will be presented in three main chapters: literature review, methodology, and results. The research question will be answered in the conclusion.

In the literature review chapter, a theoretical foundation will be presented to support the comprehension of procrastination, self-regulation, self-regulation learning strategies, and all these factors applied to online learning.

The methodology chapter will present the methods and materials chosen, and details about the participants and procedure applied. A qualitative perspective was chosen, and information about the theme was collected through a semi-structured interview with students enrolled in courses in the online modality.

The third chapter will evidence the results and their analysis and interpretation. The interviews were categorized and synthesized with the aim of validating and relating the students' perceptions and experiences with previous theories about procrastination and self-regulation. In addition to this qualitative analysis, it will be defined if it is possible to make a relation between the information collected and Zimmerman and Martinez-Pons' studies (1986) by finding strategy consistency as a determinant factor to high academic achievements. This chapter will end with inferences about this analysis and possible outcomes.

The conclusion will summarize the main impressions arising from the analysis and interpretation, answer the research question, and state if strategy consistency can also be considered a determinant factor to high academic achievements among the participants of this study.

1 LITERATURE REVIEW

Procrastination is considered a failure of self-regulation. Steel (2007) analyzed several concepts of procrastination and recognized two important points from other authors' studies that guided his definition of procrastination. The first was the negative meaning of procrastination being always related to the existence of a "postponing, delaying, or putting off of a task or decision" (p. 66), letting something for tomorrow. The second point was that procrastination is considered an "irrational delay of behavior" (p.66), once a person chooses to act even knowing there will be no benefits on that. On this basis, Steel (2007) defined procrastination as "to voluntarily delay an intended course of action despite expecting to be worse off for the delay" (p.66).

The studies about procrastination using this perspective are recent although the theme dates from the B.C. era. Steel (2007) mentioned that in the past, procrastination seemed neutral and result from a lack of action and considered the book 'Procrastination and task avoidance: Theory, research, and treatment' (Ferrari, J. R., Johnson, J. L., & McCown, W. G., 1995) a landmark regarding the theme when the Industrial Revolution was pointed as the event that gave to procrastination its negative connotation. It is unanimity among authors that procrastination is a cross-temporal subject but a modern problem.

1.1 Approaches to Procrastination

Beswick, Rothblum, and Mann (1988) analyzed three psychological approaches to procrastination: indecision (based on the theory of decision making of Janis & Mann, 1977), irrational beliefs about self-worth (based on the studies of Ellis & Knaus, 1977), and fragile self-esteem (based on the studies of Burka & Yuen, 1983, in Beswick, Rothblum & Mann, 1988). These three studies had students as the main focus.

Beswick et al. (1988) mentioned that Janis and Mann (1977) defined procrastination as a "major 'copying pattern' for dealing with difficult decisions" (p. 208). In this sense, the decision of procrastinating is related to a conflict about doing or not something – what meant for Janis and Mann (1977) the dealing with conflict and indecision.

Ellis and Knaus (in Beswick, Rothblum & Mann, 1988) considered procrastination as "an emotional disturbance stemming from irrational thoughts" (p.208). The action is motivated to somehow prove how worthwhile a person is, directly related to self-esteem and the failure provokes irrational beliefs that lead to the loss of it and/or motivate the resistance to start or complete a task.

In the same line of thought, Burka and Yuen (1983, in Beswick, Rothblum & Mann, 1988) also analyzed the impact of low self-esteem on procrastination. The differential of their studies was the emphasis on procrastination as a self-defense strategy, working as a protection of the “vulnerable sense of self-esteem” (Beswick, Rothblum & Mann, 1988, p. 209). Beswick, Rothblum, and Mann (1988) mentioned that although these three approaches seem functional to help students deal with conflict and indecision, there are psychological implications, as anxiety and depression, and this state makes people “painfully aware that procrastination is a problem” (p. 209).

The Big Five Personality Factors (Traits) Model is the most influential theory in procrastination research. Originally developed by Fiske in 1949, it was expanded by different researchers in different contexts, but in a general overview, quoting Saucier and Goldenberg, the model “claims to represent comprehensively the basic factors that organize human traits” (p. 790). Mann (2016) assumed the perspective of Costa and McCrae to identify these factors as conscientiousness, extraversion, agreeableness, neuroticism, and openness to experience (p. 48). Chew and Dillon (2014) described conscientiousness as “a tendency to exhibit goal-directed behavior, such as persistence, organization, and motivation” (p. 1178). Extraversion was defined as “being outgoing and active, along with a tendency to seek and to prefer the company of others” (p. 1178). Agreeableness is the “tendency to be compassionate, good-natured, and eager to cooperate and avoid conflict” (p. 1178), while neuroticism was defined as a “tendency to be sensitive, emotional, and to be prone to experience negative emotions” (p. 1178). Openness to experience, the last of the five factors, reflects “an inclination for a diverse and broad range of new experiences” (p. 1178). Chew and Dillon (2014) assumed that neuroticism and extraversion are generally associated with a negative perspective, while conscientiousness, agreeableness, and openness to experience are commonly linked to a positive perspective, especially regarding academic achievements.

The Temporal Motivation Theory (TMT) is considered one of the most comprehensive frameworks of procrastination. Steel and König (2006) made a resume of motivational formulations and included time as a fundamental term. Procrastination is considered by Steel and König (2006) as an example of TMT (p. 897). This theory is derived from four motivation theories: Picoeconomics, Expectancy Theory, Cumulative Prospect, and Need Theory. According to Steel and König (2006), TMT “indicates that motivation can be understood by the effects of expectancy and value weakened by delay, with differences for rewards and losses” (p.897).

Steel and König (2006) stated that TMT has all three advantages of what they consider essential for an integrative approach: provide a common language between social scientists, be applicable for complex and realistic situations and facilitate the generation of novel and plausible hypotheses (pp. 900-901). The theory is expressed by an equation:

$$\text{Motivation} = \frac{\text{Expectancy} \times \text{Values}}{1 + \text{Impulsiveness} \times \text{Delay}}$$

At the equation, motivation represents the desire for determinate outcomes. Expectancy is the success level, values represent the reward from the outcome, impulsiveness is one's sensibility to delay, and delay is the time to realize (San, Roslan, & Sabouripour, 2016, p. 461).

Steel and König (2006) defined four core features for the TMT: “value, expectancy, time, and different functions for losses versus gains.” (p. 897). The value represents how much an outcome can lead to satisfaction or drive reduction. The authors say the attractiveness of an event will depend on the situation and individual differences. Expectancy represents the probability of an event to occur, and it is also influenced by situation and individual differences. Time, named by Steel and König (2006) as temporal discounting, establish that closer events impose more influence. They defined three components of TMT that caught the effect of time: a factor similar to impulsiveness that refers to prediction to delay, the delay itself, that will represent the time to achieve an outcome, and a constant called Z that “prevents desire or utility becoming infinite when delay is effectively zero” (p. 897).

And least, losses and gains represent the perception of the outcome as positive or negative.

Steel and König (2006) considered TMT in the highest level of hierarchy among the other motivational theories because it grouped all the previous ones. TMT became a prominent theory to “explain situations where expectancy, value, and time all affect decision-making simultaneously and are all influenced by individual differences.” (p. 899). The authors defined procrastination as a “prototypical motivational problem” (p. 899), being a phenomenon that reaches a large percentual of the population. Steel and König (2006) explained that 95% of the population procrastinate and between 15% to 20% of the adult population can be considered chronic procrastinators. Among students, the percentage achieves between 33% to 50% (p. 899).

A meta-analytical study made by Steel and quoted by Steel and König (2006) showed a strong correlation between procrastination and task characteristics and individual differences

that are related to expectancy, value, and prediction to delay. They considered that among all theories, only TMT could address all these three elements.

Steel and König (2006) presented a scenario based on procrastination to show the relation between TMT and behavior. The authors created this scenario by having an essay paper for college as a starter. From one's original intention, the paper is irrationally delayed until a closer deadline and this leads to stress and lack of performance. Steel and König (2006) affirmed that through the TMT perspective, it is not a surprise, because the theory assumes that "we pursue whatever course of action that has the highest level of utility (p. 900). To write an essay is an aversive task for most students once the reward of achievement seems very far. Students are also affected by social activities and other immediate activities that represent joy and it makes one prefer to face the consequences always later.

From the five factors, Mann (2016) mentioned the studies of Schouwenburg in 2004, which suggested that "all forms of procrastination have a common foundation in low conscientiousness" (p. 48). This was the basis for another study developed by Steel (2007) regarding academic procrastination, where low conscientiousness was considered the pillar or source factor that could explain the dynamics between personality and procrastination. According to Steel (2007), conscientiousness is the factor that determines the level of procrastination, and the other ones contribute to how it will be expressed. Steel (2007) pointed some possible causes for procrastination: nature of the task (environment), individual differences, possible outcomes, and demography.

Steel (2007) defined that procrastination "involves the voluntary choice of one behavior or task over other options" (p. 67). For this, the nature of the task matters and influence the decision for procrastinating, because if not it would be a simple random situation. He suggested two environmental factors: timing of rewards and punishments and task aversiveness. The first is related to temporal proximity, where it is noticed a tendency to present and/or temporary events cause less impact on one's decision, as well the preference to perform tasks that can cause a better impression to others. The last, also known as 'dysphoric affect' or 'task appeal', is related to unpleasant actions that someone wants to avoid. Steel (2007) reinforces that to be considered procrastination, task avoidance must be linked to the timing of rewards and punishments, because by itself it is only avoidance and not a delay.

The relation between procrastination and individual differences was treated by researchers into the Five-Factor model. Steel (2007) grouped facets of the factors that had a theoretical association with procrastination. Neuroticism was pointed by Steel (2007) as like aversiveness and a cause of procrastination by the negative effect meaning. Four facets of

neuroticism were considered: irrational beliefs, self-efficacy/ self-esteem, self-handicapping, and depression.

Irrational beliefs create anxiety and as happens on neuroticism, “make certain tasks increasingly unpleasant” (p. 68). Steel (2007) pointed that only two of all possible irrational beliefs were “closely related to procrastination: believing oneself to be inadequate and believing the world to be too difficult and demanding.” (p. 68). The following studies identified among procrastinators not only the presence of irrational beliefs, as well fear of failure, perfectionism, self-consciousness, and evaluation anxiety.

The fear of failure is related to self-efficacy and self-esteem – the second facet of neuroticism mentioned by Steel (2007) – and, consequently, related to procrastination. Low self-efficacy represents the doubt one has related to its own abilities to do something well, as low self-esteem represents the belief that failure means inadequacy as a person. The third facet is self-handicapping, defined by Steel (2007) as an emotion-oriented style and dysfunctional self-regulation that creates the tendency of placing obstacles that impede someone’s own success. The belief, in this case, is that no action can change its own situation, and to protect its own self-esteem the person tries to find an external reason. Depression is mentioned by Steel (2007) as the fourth facet of neuroticism. Depression has many characteristics that can lead to procrastination, as a lack of pleasure in performing life tasks, lack of energy, and problems concentrating.

Openness to experience, another factor, couldn’t be linked directly to procrastination Steel (2007) demonstrated that studies regarding agreeableness related rebelliousness, hostility, and disagreeableness to procrastination (p. 69). The ones with this trait of personality have the tendency to be disturbed by imposed schedules and to avoid it. Tasks are delayed and an own calendar starts, which leads to an autonomy reassert. Steel (2007) pointed to the “development of paradoxical treatments” (p. 69), once a situation leads to procrastination and rebellion leads to the adoption of an own calendar that motivates the early work.

Extraversion is considered a strong cause of procrastination. Steel (2007) stated that although pessimism and low energy are aspects related to depression, both are also a central part of extraversion. It means that lethargy and impulsiveness are expected when talking about procrastination, where lethargy indicates a lack of extraversion, while impulsiveness indicates an excess of it. It is not expected relevant results due to this inconstancy. Bringing up past studies, Steel (2007) indicated that impulsive people are more likely to procrastinate because they are more affected by momentaneous desire, focusing their attention on that. The lack of projection of the future leads people with this trait of personality to “often pursue immediate

gratification, neglecting or ignoring longer term responsibilities” (p. 70). Another characteristic of people with this trait is boredom and a constant seek for excitement, which leads to an intentional delay to feel the excitement of working with a short deadline.

Steel (2007) reminded that procrastination’s concept is related to low conscientiousness and self-regulation failure. However, he stated that other aspects of conscientiousness should be considered: distractibility, poor organization, low achievement motivation, and intention-action gap. Distractibility represents a lack of attention – a key factor for self-control. Steel (2007) stated that managing distraction facilitates the prevent of procrastination (p. 70). The organization is seeming like an important self-regulatory technique that can reduce procrastination. Achievement motivation leads to engagement for a task, which directly reduces procrastination, as a person can set up challenge goals and enjoy the performance of it when the achievement motivation level is high. And finally, the intention-action gap indicates how much people follow up their original plans. Procrastination appears in between intention and behavior, where failing into acting means automatically a self-regulatory failure (Steel, 2007, p. 70).

The third cause of procrastination explicated by Steel (2007) is the possible outcomes. The self-regulation failure is related to the decrease in mood and performance. As procrastination normally seems like an anxiety avoidance, it improves the mood in the initial stage but leads to a drastic fall in a short period later, as described in the depression state that leads to procrastination. Steel (2007) highlighted that a poor mood not only may result from procrastination but can also develop it (p. 70). Procrastination also leads to poor performance when considering it as an irrational act consequent of low conscientiousness, having as result lower self-efficacy that can make it worse the procrastinator behavior.

The last cause of procrastination pointed by Steel (2007) is demography. Three aspects were defined by previous researchers as relevant: age, gender, and year. Studies revealed that people tend to procrastinate less as they get older and learn. The repeated practice leads people to learn how to avoid procrastinating. Although Steel (2007) considered it difficult to predict how gender influences procrastination, a meta-analysis study showed that girls had higher scores on effortful control, leading to “expect procrastination to be weakly associated with males” (p.71). Researchers believe that procrastination is in increasing line along the years as new ways of self-regulatory failure come up. However, Steel (2007) reinforces that the historical prevalence of procrastination can be affected also by cultural changes that lead to a better self-assumption of being a procrastinator – what in the past was frequently a characteristic that people prefer to hide.

Steel (2007) reminds that procrastination is conceptually related to conscientiousness, and it turns special attention to the theme because of possible insights about the “relationship of traits to performance and motivation” (p. 81). Studies link procrastination to almost all trait constructions and Steel (2016) set it as ideal to test the TMT and establish self-regulation’s nomological web.

Regarding the nomological web, procrastination is considered representative of low conscientiousness and self-regulatory failure. Also, procrastination is associated with distractibility, organization, achievement motivation, and the intention-action gap. Although the stronger link remains with conscientiousness, neuroticism and its facets gained special relevance in academia. Steel (2007) considered the popular press and counseling resources as spreaders of this focus, where the facets of irrational beliefs and perfectionism were demonstrated in “almost any self-help book or Web site (...)” (p.81). His criticism was based on the assumption that procrastination has less to do with anxiety and more with impulsiveness and lethargy (depression) – the energy level to complete a task (p. 81). The fear of failure, common as an irrational belief, is connected to low self-efficacy and low self-confidence and not to perfectionism. Steel (2007) stated that procrastinators tend to be less perfectionists, delaying the beginning of a task – while perfectionists tend to start a task, but delay its conclusion.

The convergence of empirical studies and TMT was highlighted by Steel (2007), associating procrastination with “individual difference variables of self-efficacy, need for achievement, proneness to boredom, distractibility, impulsiveness, self-control, and organization” (p.81). The conclusion was that people procrastinate if tasks are aversiveness or the rewards are delayed, going against their original intentions – an aspect more observed in young people. Steel (2007) also stated that some variables do not represent expressive relation to procrastination as the ones mentioned. Are included in this analysis: agreeableness, sensation seeking, and neuroticism.

Studies pointed by Mann (2016) show two types of procrastination: behavioral and decisional. Behavioral procrastination refers to the “delay of completion of major and minor tasks” (p. 49) while decisional procrastination describes the “delay in making decisions within some specific time frame” (p. 49). Milgram and Tenne (2000) defined behavioral procrastination as inhibit actions that make it difficult for a person to sustain a behavior after making a decision, as the decisional procrastination was understood as an action before the decision-making that can be affected by internal and external sources impacting on that. Hen and Goroshit (2018) quoting Ferrari et al. (2007) considered self-esteem and social-esteem

protection as a possible explanation for the decisional procrastination, leading to excuses to avoid revealing own or others' incompetence. In Steel's meta-analysis of procrastination study was established a relevant correlation between behavioral and decisional procrastination, existing as overlapping constructs (Mann, 2016).

Ferrari (2000) resumed that experimental studies stated that procrastinators "often self-handicap their task performance, avoid self-relevant diagnostic information, recommend severe reprimands for poor performance observed in other procrastinators, experience conflicts with their fathers and rely on their friends for social/ emotional support, and prefer evening over daytime to perform unpleasant tasks" (pp. 185-186). He performed a study known as "Factor Analysis" to define if behavioral or decisional procrastination forms were related to attention deficits, boredom, self-esteem, and intelligence. Ferrari (2000) considered behavioral procrastination as arousal and avoidance, and decisional procrastination as a cognitive aspect. The study was conducted with a group of 142 undergraduate students enrolled in the same course that were required to complete several self-report instruments divided in small groups. For this study, Ferrari (2000) used the following inventories: Decisional Procrastination Scale (Mann, 1982, in Ferrari et al., 1995), Adult Inventory of Procrastination (McCown & Johnson, 1989, in Ferrari et al., 1995), General Procrastination Scale (Lay, 1986), Attention Deficit Disorder-Hyperactivity Check-list (Copeland, 1993), Boredom Proneness Scale (Farmer and Sundberg, 1986), Intelligence Scale (Shipley, 1940) and Self-esteem Scale (Rosenberg, 1965). The content and presets of these inventories were resumed by Ferrari (2000, pp. 188-190) and used in his factor analysis. As result, it was noted that behavioral and cognitive procrastination followed similar profiles. Ferrari (2000) stated that procrastination forms were "significantly positively related to boredom proneness" (p. 191) but showed a weak relation with attention deficits. The author infers that the difficulties to make a decision may be linked with the necessity of stimulation, time perception, and affective difficulties. Ferrari (2000) also reinforced those results occurred independently of intelligence and that decisional procrastination is the only one that can be related to the necessity of sensory stimulation.

Some authors consider procrastination from a positive and beneficial perspective. Schraw et al. (2007, in Park & Sperling, 2012) defined two positive aspects of procrastinating: cognitive efficiency and peak experience. According to this study, students considered that working within short deadlines makes them concentrate effort and focus, turning boring tasks into a source of motivation and challenge (p. 13). Another study from Chu & Choi (2005, in Park & Sperling, 2012) affirms that "procrastination could serve as self-regulatory processing" (p.13) because some people choose deliberately to delay tasks believing the procrastination

will provide better performance. Generally, this is related to intrinsic motivation and Cao (2012) brought up several studies starting in the '90s that demonstrated that not every case of procrastination was related to self-regulation failure. The active procrastinators were defined as a positive group that intentionally “delay a task for the adaptive values of procrastination” (p. 516). Students belonging to this group reported the delay as beneficial, where materials became more interesting, efforts more concentrated, distractions were eliminated and a larger number of flow-like experiences were perceived, for example.

Chu and Choi (2005, in Cao, 2012) demonstrated that active procrastinators can finish tasks before deadlines and with satisfactory outcomes, performing better than the passive ones. The active procrastinators' characteristics are similar to the non-procrastinators ones, noticed by demonstration of time perception, attitudes, coping styles, and academic performances. Active procrastinators can make better use of time, time control, and self-efficacy (p. 516).

Klingsieck et al. (2012) posited that most of the studies about procrastination had focused on academic procrastination, suggesting that students suffer from chronic procrastination. Academic procrastination achieves the majority of university students and has a negative effect on academic performance and its outcomes, and subjective well-being (p. 296).

1.2 Academic Procrastination and Self-regulation

Different authors agree that academic procrastination affects most students. According to Hen and Goroshit (2018), academic procrastination is considered a type of procrastination that affects more than 70% of students. Years before, Ellis and Knaus (1977, in Solomon & Rothblum, 1984) affirmed that this number was close to 95%. Day, Mensink, and O'Sullivan (2000) highlighted studies that concluded that around 25% of the procrastinator students do it to a degree that causes stress and the diminution of the academic performance and that 52% of the students assume they need external help to deal with procrastination. Besides that, procrastination is a recurrent problem that involves all levels of studies respecting an equal proportion among genders.

Park and Sperling (2012) suggested that different studies pointed to academic procrastination as a self-regulation failure. Bringing up the studies of Pintrich, the authors defined self-regulated students as able to proactively learn, set their own goals, and plan their study strategies. On the opposite way, the lack of self-regulation leads students to fail in defining learning strategies and highlight irrational beliefs, fear of failure, and anxiety.

Solomon and Rothblum (1984) performed a factor analysis of students' reasons for procrastination, where self-reports lead to identifying two main factors: fear of failure and task aversion. By analyzing previous studies, Solomon and Rothblum (1984) highlighted that procrastination in the academic environment affects performance, "including poor grades and course withdraw" (p. 503) and the tendency is old students to procrastinate more than the fresh ones.

Day, Mensink, and O'Sullivan (2000) settled the ideas of different authors about academic procrastination. From Ferrari (1992), Day et al. (2000) highlighted other two factors: evaluation anxiety and high introspective focus (on one's own thoughts). From McCown et al. (1989) came to light three components of procrastination: neuroticism (related to test anxiety and low academic self-confidence), extraversion (related to the time spent in social activities and confidence about the exams), and psychoticism (related to course dissatisfaction). From Lay (1987), Day et al. (2000) resumed four groups of procrastinators: a group of self-engaged and independent people, another group focused on social activities, one group high on rebelliousness, and the last one with depressive aspects. From that, Lay (1987) had named five patterns of procrastination: "evaluation anxiety, depression, rebelliousness, disinterest in task, and social focus combined with academic confidence" (Day, Mensink, & O'Sullivan, 2000, p. 122).

Hen and Goroshit (2018) quoting Steel (2007), stated the association of academic procrastination to "task aversiveness, task delay, self-efficacy, and impulsiveness, as well conscientiousness and its facets of self-control, distractibility, organization, and achievement motivation" (p. 557). The authors also brought the studies of Klingsieck (2013) about four theoretical approaches to understand the reason of the procrastinator behavior: the differential psychology perspective that understands procrastination as a personality trait linked to others, as consciousness, neuroticism, and perfectionism; the motivational psychology perspective that understands procrastination as a motivational failure; the clinical psychology perspective that links procrastination to anxiety, depression, stress, and personality disorders; and the situational perspective that focus on investigating the context of procrastination, as the characteristics of a task or of the teachers (Hen & Goroshit, 2018, p. 558).

Park and Sperling (2012) pointed that procrastinators have a deficit in controlling their cognition and behavior. The authors used previous studies' ideas to state the lack of metacognition presented by procrastinators, as well as difficulties in defining effective learning strategies and in time management and easiness to engage in disorganization. Early studies

reinforce the tendency of procrastinators to fail in keeping plans and to have motivational problems related to self-regulation (Park & Sperling, 2012, p. 12).

One of the first qualitative studies about academic procrastination was performed by Schraw et al. (2007, in Steel & Klingsieck, 2016), where three sources of antecedents for academic procrastination were defined: self, teacher, and task. Steel and Klingsieck (2016) explained that self is related to interest and organizational skills, teacher is related to course quality, materials, tests, and expectations for the course, for example, and task is related to the level of difficulty and background knowledge. Klingsieck et al. (2013, in Steel & Klingsieck, 2016), revealed that studies who affirmed needed help because of procrastination related anxiety or serious illness as a cause. The authors also highlighted that all qualitative studies mentioned had self-regulation as a key factor for academic procrastination in the case of personal antecedents, as well gave importance to other antecedents related to task characteristics, institutional conditions, and social aspects (p. 38).

Steel and Klingsieck (2016) brought the TMT perspective also to explain academic procrastination. As previously mentioned, this theory uses constructions of motivational theories to name expectancy, value, and time as predictors of procrastination. In this sense, “procrastination is more likely to occur if the outcome of a presently unpleasant activity (e.g., essay writing) offers rewards, even ample ones, in the distant future (e.g., better grades)” (p. 38).

From the Temporal Motivation Theory (TMT), San, Roslan, and Sabouripour (2016) exemplify that between socializing or studying face a task with a deadline, students tend to consider the reward for studying not immediate, which leads to procrastination. This equation tends to change according to the time when the students realize there is less time to finish the task (p. 461).

Senécal et al. (1995, in San, Roslan, & Sabouripour, 2016) defined that the level of procrastination is related to the level of intrinsic motivation. In this sense, a low level of procrastination could be observed on the ones with high intrinsic motivation and high level of efficacy expectations (p. 461).

Wouters (2003, in San, Roslan, & Sabouripour, 2016) associated academic procrastination with self-efficacy and work avoidance goal orientation. The author postulated that the faith students have in their own ability to accomplish a task and the level of effort they intend to dedicate to a task is directly related to procrastination. The conclusion was that procrastination is related to task averseness (p. 461).

Howell et al. (2006, in San et al., 2016) demonstrated the association of academic procrastination with lower cognitive and metacognitive strategies. The author defined cognitive strategies as the use of rehearsal, elaboration, and organization strategies adopted by students. The metacognitive strategies were defined by planning, monitoring, and regulation strategies adopted by students (p. 461).

The stronger line adopted by researchers is to relate academic procrastination to self-regulation failure. The literature suggests that self-regulation learning and motivational components could be useful to explain academic procrastination. Park and Sperling (2012) chose the model proposed by Pintrich to perform a study that could provide additional findings on the theme. Pintrich (2000, in Park and Sperling, 2012) believed that cognition, motivation, and behavior of learners are balanced when there is self-regulation. These three aspects represent different areas of regulation where different processes can be identified, having academic self-regulation as perspective. San et al. (2016) brought up ideas from Pintrich and De Groot (1990) about the definition of three components involved in self-regulation: metacognition strategies, management and control of efforts, and learning (cognitive) strategies.

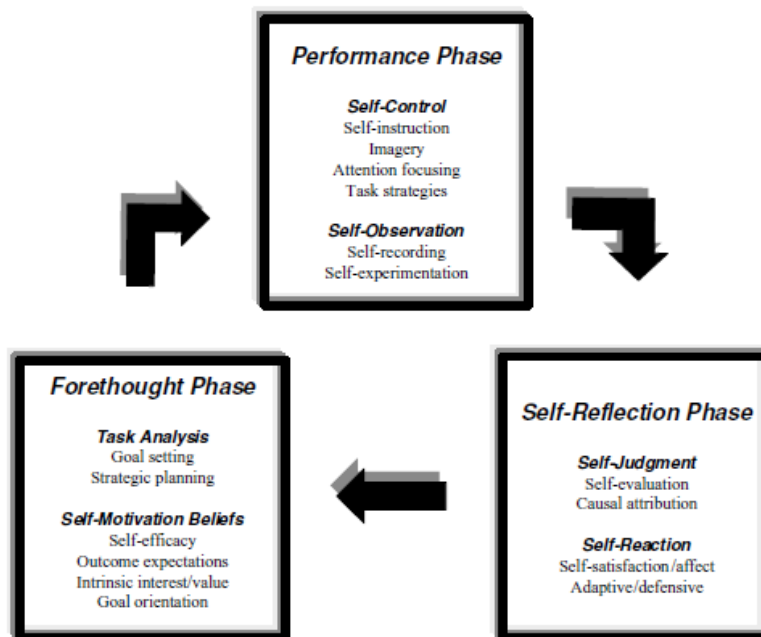
Self-regulated learning presupposes a combination of motivational and learning strategies and their analysis can explain the relation with academic procrastination. San et al. (2016) highlighted the motivational components as value component (intrinsic and extrinsic goal orientation, and task value), expectancy (control of learning beliefs and self-efficacy for learning and behavior), and affective (test anxiety). The learning strategies components were defined as cognitive/ metacognitive strategies (rehearsal, elaboration, organization, critical thinking, and metacognitive self-regulation), and resource management strategies (p. 460). The authors performed a study to determine the relationship between self-regulated learning and academic procrastination, having, as a result, a strong indicator of a positive relationship between test anxiety and academic procrastination. Another find was the lack of relation between extrinsic goal orientation and academic procrastination, fitting to previous studies that declared a high probability to delay was identified when there are low task pleasantness or task value, and when there are low efficacy expectations.

Zimmerman and Campillo (2003) stated that self-regulation “refers to self-generated thoughts, feelings, and actions that are planned and cyclically adapted for the attainment of personal goals, such as solving a problem” (p. 238). Zimmerman and Schunk (2011, in Cho and Shen, 2013) pointed to self-regulated learning – also known as SRL – as a process that “involves a student’s effort to manage learning processes systematically oriented to achieve

goals” (p. 290). The self-regulated learning model from Zimmerman and Campillo (2003) is the most popular and was designed to explain how self-regulatory processes and motivational beliefs guide problem-solving in different settings, having the performance feedback as a strategy for that. The model presupposes three cyclical phases: forethought, performance, and self-reflection, where it is observed a movement of each phase influencing the others. The forethought phase is the preparation that will precede the efforts to solve a problem. The performance phase is the engagement of efforts to solve the problems. And finally, the self-reflection phase is the moment after the performed efforts where one self-evaluates and self-react. (p. 239). This cyclical process was explicit by the authors in the following scheme:

Figure 1

Phases and subprocesses of self-regulation



Source: Zimmerman and Campillo, 2003, p. 239

Zimmerman and Campillo (2003) classified the forethought phase into task analysis and self-motivation belief. Extracting examples from previous studies, the authors called attention to forms of task analysis: goal setting (when a person defines the desirable outcomes generate by an effort) and strategic planning (systematic method selected or created to solve a problem). Aligned to task analysis are the self-motivational beliefs, named by the authors as self-efficacy (personal beliefs about the conditions to learn), outcome expectations (beliefs

about achieving a solution), intrinsic interest (to value a task by its own properties and not by an external outcome), and goal orientation (also defined by other researchers as mastery or learning orientation, means the focus on developing and improving competences based on self-reference standards) (p. 241). Zimmerman and Campillo (2003) posited the social cognitive aspect of this model implies motivational constructs closely related to metacognitive constructs (for example planning and strategy use), being “predictive of persistence and effort during problem-solving because they assess beliefs about personal competence and value, whereas metacognitive constructs are predictive of learning and solution methods because they assess solution knowledge” (pp. 241-242).

Zimmerman and Campillo (2003) classified the performance phase into self-control and self-observation. Self-control processes are strategies focused on the physical task and optimization of efforts, such as self-instruction (thinking aloud when performing a task), imagery (create mental pictures of the successful execution of a task), attention focusing (concentration that eliminates distractions during the execution of a task), and task strategies (reorganize the task in a meaningful way by extracting the essential parts) (p. 242). The self-observation processes are defined by the authors as tracking of one’s own performance, conditions, and effects by self-recording (that provides information about previous successful solutions) or by self-discovering (varying functional aspects as experimentation), per example (p. 243).

The third phase described by Zimmerman and Campillo (2003) was self-reflection, classified into self-judgments and self-reactions. Self-judgment is the action to evaluate the own performance and establish a causal relation with the outcomes and it can be done in four different ways: mastery (comparison to a full solution), previous performance (also known as self-criteria, where unstructured contexts that do not allow mastery will lead a person to compare its current performance to past ones), normative (social comparison of performances), and collaborative (used in team problem solving) (p. 244). Self-reactions imply two forms: self-satisfaction (level of satisfaction perception related to a performance, where people would tend to put effort into what results in satisfaction) and adaptative inferences (measurement of adaptations or changes that a person does on its problem solution approach during the process) (p. 246).

The study from Pintrich (2004, in Cho and Shen, 2013) complements this idea when demonstrated that skilled self-regulated learners have higher goal orientation and self-efficacy, being able to adjust their learning processes. According to Cho and Shen (2013), SRL could be

measured through different constructs, as per example goal orientation, academic self-efficacy, and three types of regulation: effort, metacognitive, and interaction regulation.

Goal orientation can be classified as intrinsic or extrinsic and refers to the intention of a student to engage and persist in a learning task. The intrinsic goal orientation shows the disposition to master a task, while the extrinsic goal orientation shows the disposition in succeeding in achievement situations. Different authors agreed to positively relate intrinsic goal orientation to student's self-regulation and performance, as the extrinsic goal orientation is negatively related (Cho and Shen, 2013, p. 291).

Academic self-efficacy represents the level of confidence of students in their learning and performance. Early studies concluded that it is positively related to self-regulation and performance. From the regulation types, the effort represents the commitment of students to managing tasks and challenges related to their learning and it is explained by metacognitive regulation and self-efficacy. Metacognitive regulation represents the ability of students on planning, monitoring, analyzing and adjust their learning processes. And interaction regulation shows the students' ability on regulating social interaction (Cho and Shen, 2013, p. 291).

Motivation has an important role in academic procrastination. Cao (2012) associated a higher level of procrastination with less autonomous forms of motivation. This means that students who have intrinsic reasons to perform their tasks are less likely to procrastinate than the ones who rely on extrinsic motivations (p. 521). Deadlines can be considered an example of extrinsic motivation. The motivation and the extent of procrastination are also linked to learning strategies – plans of actions to achieve a goal that shows the level of commitment and cognitive processes and behavior engaged.

Zimmerman and Campillo (2003) pointed that problem-solving processes will require a high level of self-motivation and self-regulation, and when teachers observe a lack of mastery, they should investigate its cause and determine if the students have a deficit in self-efficacy, outcome expectations, intrinsic interest, mastery, or a combination of them (p. 255).

Cho and Shen (2013) highlighted that different studies reported that students' self-regulated learning determines the success of learning experiences in technology-mediated learning environments (p. 290). According to Klingsieck et al. (2012), there is a higher demand for self-regulation in distance education settings in comparison to traditional ones and, in this sense, "the issue of procrastination should be of even greater relevance in distance university settings" (p. 295).

1.3 Procrastination and Self-regulation in online learning

Yen (2020) defined a virtual learning environment as a “web-based system that is designed to aid teachers with the administration and delivery of their teachings” (p. 01). Distance and online learning environments presuppose autonomy in the learning processes, which demand from students higher self-regulation. Cho and Shen (2013) put SRL as a challenge at this modality of learning due to the lack of immediate support and the perceived feeling of loss and social isolation.

In the past, the profile of students at distance learning settings showed differences in comparison to traditional universities. Klingsieck et al. (2012) posited that students at distance universities were often older and more motivated, performing their studies in addition to regular work and family life. It was expected that the decision for a distance university was linked to own perception of the student about its high level of self-regulation skills and their ability of training in these skills. In this sense, it was expected a small number of procrastinators among students at distance university when compared to the traditional education systems. However, the data of different studies revealed a higher dropout rate in distance universities compared to the traditional ones. Lee and Choi (2011, in Cho and Shen, 2013) related the gap in the ability to self-regulate learning by online students as an important reason for this dropout rates (p. 291), and different authors posited that the failure on SRL could be noticed by lack of goal commitment, the position of control, academic self-efficacy, coping strategies, resilience, and time management (p. 291). Azevedo et al. (2009a, in Yen, 2020) stated the dependency relation between the add-value aspects of an online learning environment and the abilities of students to take advantage of these spaces (p. 01). What happens is that students didn't develop learning strategies for online learning because they have been used to the traditional systems. Kauffman (2004, in Yen, 2020) posited that students will not develop these metacognitive strategies for online learning if they are not stimulated and guided for that. As stated by previous researchers that students with higher metacognitive skills can perform better academic results and satisfaction, the self-regulation process acquires more relevance.

Cho and Shen (2013) postulated some analysis regarding SRL in an online environment considering goal orientation, self-efficacy, and regulation.

Goal orientation, classified into intrinsic or extrinsic, will reveal the level of engagement and persistence of a student in learning activities. The intrinsic goal orientation, related to the will to master a task, is negatively related to procrastination. Self-efficacy shows the level of confidence of students in their learning and performance and when in higher levels will lead them to regulate efforts in online learning environments. Regarding regulation, the authors

highlighted the achievements from previous studies that considered that the ability of students in managing tasks and learning challenges in online environments was different according to their achievement level. This effort regulation was higher among students that reached higher grades (Puzziferro, 2008, in Cho and Shen, 2013). The metacognitive regulation could be noticed in students in online environments with clear career goals, and more satisfaction. And finally, the authors pointed the necessity of considering interaction regulation as an important variable as online environments will require interaction with others.

According to Yen (2020), metacognition is one's ability to know and control its own mental functioning. Azevedo et al. (2009a, in Yen, 2020), stated that metacognition describes "abilities and opportunities for learners to understand, control, direct, and manipulate their thinking and learning processes" (p. 02). The lack of metacognitive skills leads to failure in forecasting problems, planning, and monitoring learning strategies. Considering online learning environments, different authors agree that students with weak metacognitive skills tend to fail more in comparison to traditional learning systems where it is possible to count on structured teaching and environment (Yen, 2020, p. 02). It leads to the conclusion that "regardless of students' intellectual ability, motivation and self-efficacy beliefs, a lack of self-regulated learning skills, in particular metacognitive skills, is related to lower levels of achievement" (Barkracevic-Vukman and Licardo, 2010, in Yen, 2020, p. 02). The challenge for the students on distance and online education is to balance motivation and self-efficacy with metacognitive skills that can measure their learning processes. Stanton (2015, in Yen, 2020) highlighted the lack of metacognitive skills as responsible for a judge failure, where students can't judge what they know or not (p. 02).

Yen (2020) wrote that "metacognitive skills can be acquired and promoted in learning environments that have high learner's control, student choice, autonomy and self-reflection (...)" (p. 02). Zimmerman (1989, 2002, in Delen & Liew, 2016), posited that student could improve their self-regulation by using strategies acquired through training. Delen and Liew (2016), based on previous studies from different researchers, stated that self-regulation can become a continuous practice when students can experience self-efficacy, sense of achievement, and mastery through successful learning experiences (p. 27). Reinforcing the relation between self-regulation strategies and positive academic performance, the literature suggests that investments in self-regulation strategies in instruction in online environments can reduce academic achievement gaps.

1.4 Strategies to mitigate self-regulation failure and procrastination

Zimmerman and Martinez-Pons (1986) defined self-regulated learning strategy as “actions directed at acquiring information or skill that involve agency, purpose (goals), and instrumentality self-perceptions by a learner” (p. 615). The authors explained that the basis literature presents several categories of self-regulated learning strategies, such as goal setting, environmental structuring, self-consequences, self-evaluation, organization and transforming, rehearsal and mnemonic, seeking for social assistance, and reviewing previous class notes (p. 615). It reinforces the status of self-regulated learning strategies being decisive on academic achievements. Zimmerman and Martinez-Pons (1986) performed a study to investigate the use of 14 self-regulated learning strategies in non-classroom and classroom contexts through a qualitative method of interviews to “avoid suggesting any specific self-regulation strategies to the students” (p. 616). The instrument was called “Self-Regulated Learning Interview Schedule”. Those categories were resumed as shown in table 1. The authors named six learning contexts (in classroom situations, at home, when completing writing assignments outside class, when completing mathematics assignments outside class, when preparing for/ taking tests, and when poorly motivated). For each one of these contexts, the students should name the methods they used to participate in class, to study, and to complete the tasks, having as a starter a hypothetical situation described and creating a ranking of the ones most used in the same context. With the answers, Zimmerman and Martinez-Pons (1986) started relating the strategies with the outcomes. The participants selected were classified as high and low achievement track students and with this distinction, the authors could identify the common self-regulated learning strategies presented by each group, classified into three measurement possibilities: SU (strategy use, referring to the occurrence or not), SF (strategy frequency, referring to the number of times each strategy was mentioned), and SC (strategy consistency, referring to the estimative of use). They concluded that high achievement students reported greater use of 13 of 14 categories and that 93% of the students were correctly classified into a high or low achievement based on knowledge of their self-regulated learning strategies.

Zimmerman and Martinez-Pons (1986) concluded that strategy consistency measure was the one that could differ the two achievement groups of students, being highly related to the ones with high achievements track. Another observation was that high achievement students relied more on social assistance, using teachers and peers as sources of assistance, or adults in general, especially the parents. The only strategy category that failed in this study on relating to student achievement was self-evaluation, although the authors kept believing in its importance as an SRL strategy (pp. 625-626).

Table 1

Self-Regulated Learning Strategies

<i>Self-Regulated Learning Strategies</i>	
Categories of strategies	Definitions
1. Self-evaluation	Statements indicating student-initiated evaluations of the quality or progress of their work, e.g., "I check over my work to make sure I did it right."
2. Organizing and transforming	Statements indicating student-initiated overt or covert rearrangement of instructional materials to improve learning, e.g., "I make an outline before I write my paper."
3. Goal-setting and planning	Statements indicating student setting of educational goals or subgoals and planning for sequencing, timing, and completing activities related to those goals, e.g., "First, I start studying two weeks before exams, and I pace myself."
4. Seeking information	Statements indicating student-initiated efforts to secure further task information from nonsocial sources when undertaking an assignment, e.g., "Before beginning to write the paper, I go to the library to get as much information as possible concerning the topic."
5. Keeping records and monitoring	Statements indicating student-initiated efforts to record events or results, e.g., "I took notes of the class discussion." "I kept a list of the words I got wrong."
6. Environmental structuring	Statements indicating student-initiated efforts to select or arrange the physical setting to make learning easier, e.g., "I isolate myself from anything that distracts me." "I turned off the radio so I can concentrate on what I am doing."
7. Self-consequences	Statements indicating student arrangement or imagination of rewards or punishment for success or failure, e.g., "If I do well on a test, I treat myself to a movie."
8. Rehearsing and memorizing	Statements indicating student-initiated efforts to memorize material by overt or covert practice, e.g., "In preparing for a math test, I keep writing the formula down until I remember it."
9-11. Seeking social assistance	Statements indicating student-initiated efforts to solicit help from <i>peers</i> (9), <i>teachers</i> (10), and <i>adults</i> (11), e.g., "If I have problems with math assignments, I ask a friend to help."
12-14. Reviewing records	Statements indicating student-initiated efforts to re-read <i>tests</i> (12) <i>notes</i> (13), or <i>textbooks</i> (14) to prepare for class or further testing, e.g., "When preparing for a test, I review my notes."
15. Other	Statements indicating learning behavior that is initiated by other persons such as teachers or parents, and all unclear verbal responses, e.g., "I just do what the teacher says."

Source: Zimmerman and Martinez-Pons, 1986, p. 618

Veiga Simão and Frison (2013) posited that language works as a mediator on learning processes and has an important role in learning regulation. In this sense, teachers should create confronting situations, space for interaction, exchanges, and decision-making, to make it possible for students to expose ideas and plan (p. 05). The authors highlighted the studies from Perrenoud (1999) which demonstrated that interrelation interactions make an individual advance from an assisted external regulation to self-regulation. Veiga Simão and Frison (2013)

considered the students regulated learning as a result of personal factors that allow them to plan, organize, control, and assess processes, achievements, and context (pp. 5-6).

Cho and Shen's studies (2013) demonstrated that intrinsic goal orientation can positively influence students' self-regulation and how important is to help students to keep this level high (p. 297). The authors stated that problem-based learning can contribute to that because people tend to engage more when things make sense. Problem-based learning is shown as "authentic or real-life problems" that can easily engage students in learning. The authors also stated that promoting teachers' presence in online environments can increase students' self-efficacy, including metacognitive regulation. This presence is related to instructional design and organization, where teachers care about content, facilitate online discussions and activities, and provide positive feedback to students (pp. 297-298). Self-efficacy can also be influenced by challenging students through achievable goals (Bandura, 1997, in Cho and Shen, 2013).

Delaval et al. (2017) indicated the tools presented on web-based training environments allow immediate and accurate feedback (p. 36). Feedback is known as an important factor in several learning theories and can be standardized (students receive the same information) or adaptative (personalized to each student's answer). This theme brings up the necessity of people improving their own performance through feedback received coming from the comparison to other people or a group of people (social comparison) or from their own performance along the time (self-temporal comparison). According to the author, the feedback can "stimulate the learning of complex notions" (p. 36). It was also observed that students will receive and process feedback in different ways, and the way they are affected by it could impact their performance during the online activities.

Steel (2007) conveys that to decrease procrastination the self-efficacy expectancy level should be increased. The author quoted Bandura (1997) by stating the susceptibility of self-efficacy to verbal persuasion and emotional arousal, and "especially influenced by modeling and actual accomplishments" (p. 81). Modeling is to observe and mirror someone's action and accomplishment is the action to complete a task itself. Both happen through a skills' improvement line.

Steel (2007) also pointed that task aversiveness can be decreased to reduce procrastination by adopting challenge but reachable tasks, by using the impulse pairing principle (where a usual unpleasant situation can be neutralized by putting together another one more interesting), and by the principle of classical conditioning (where rewards along the process stimulate and reinforce the work). Procrastinators are sensitive to delays, so Steel

(2007) suggested two ways to reduce distractions: stimulus control (reinforcement of what is appropriate by rewards and banishment of any signs that remind the temptations) and automaticity (the prioritization of habitualized actions that requires minimum or no conscious attention). Lastly, Steel (2007) reinforces that delays can be avoided when one sets proximal goals (pp. 82-83).

Zacks and Hen (2018) stated that basically the interventions on academic procrastination can be characterized between therapeutical prevention, therapeutical intervention, and instructor/teacher intervention. (p. 122). Therapeutical approaches are generally related to counseling groups to prevent negative effects of procrastination, or a direct intervention focused on behavior modification when students present this trait behavior, and studies had demonstrated a decrease in procrastination tendencies when these kinds of methods are used. Another study mentioned by Zacks and Hen (2018) was performed by Scent and Boes (2014) using principles of acceptance and commitment therapy by establishing a three-step process program to avoid procrastination behavior: “recognizing procrastination as an avoidant mechanism, expanding behavior repository, and increasing participant’s connection with their goals and values to generate motivation” (p. 123). When talking about teacher intervention, the authors gave as an example a study where teachers should teach students how to better manage time. Some instructional interventions were considered effective, as per example grade-contribution spot quizzes to motivate students to study continually along the entire course and not only when exams are close. Another example was the perception that students were studying more and regularly when modular online study material was only accessible after the completion of previous study modules (p. 124).

Zacks and Hen (2018) mentioned two more personal interventions: personal instructor communication, where teacher and student meet to discuss the learning progress and establish a working plan together, and the adoption of an SMS reminder system to remind students about relevant tasks to be done (p. 125).

Cho and Shen (2013) stated that students’ self-regulation “predicted academic achievement and the amount of time they spent online” (p. 298). In this sense, it is part of the instructors/ teacher’s responsibility to stimulate students by monitoring the online activities, as well by promoting social interaction.

Zimmerman and Campillo (2003) recommended the use of instructional models to demonstrate self-regulatory techniques and provide supportive feedback. The authors understand that the use of social modules helps students “to set goals, focus on the relevant information, estimate solutions, select or construct strategies, interpret the results, and modify

their future efforts”. (p. 256). They suggest that problem-solving skills can be acquired by training following a four-level hierarchy of problem-solving and effective feedback. These four levels are observation (when a person can observe a model strategy and verbally predict future moves before they happen), emulation (when a person can imitate a strategy by following verbal guidance and feedback of an instructor), self-control (when a person can apply the principles of a strategy by its own), and self-regulation (when a person can adapt the strategy model to other problems by its own).

Delen and Liew (2016) highlighted the importance of the self-regulation strategies at online learning environments to “recognize and meet the self-regulatory needs of diverse learners” (p. 29), as each person will follow methods and have self-beliefs that differs from others. The authors also pointed to the use of learning management systems (LMS) as one more factor to demand from students higher skills on self-regulation. The systems are built with many functionalities to help self-regulation, however, most of the students are not aware of them. Guiding students deeply on the functionalities of the LMS is also an important strategy to increase self-regulation.

Hays and Handler (2020) posited that different studies demonstrated that the practice of self-regulation in learning requires students’ autonomy in choosing and controlling the process. Even so, the instructor/ teacher’s presence keeps as important for students to develop academic self-regulation and this presence can occur through the features of a learning management system (p. 128).

The Universal Design for Learning (UDL) implementation for online learning appears highly relevant to designing courses. Its principles aim to develop multiple ways to engage students with different learning needs. The authors pointed that the use of UDL “allow all users opportunities for self-regulation” (Brand et al., 2012, in Hays & Handler, 2020, p.129). Self-regulation has an important role in online learning once the environment differs from the traditional one and the lack of face-to-face contact can compromise the learning achievements.

Another field that brings important contributions to academic self-regulation is learning analytics. A large data amount can be collected from LMS platforms and allow a better understanding of learning processes. Jivet et al. (2020) pointed to an inexpressive use of this information by students and teachers when the knowledge about the way students interact with learning analytics should be a point of interest of all institutions. The authors stated that the learning analytics dashboards can help students and teachers “in making decisions about the learning and teaching process” (p.01). This type of application is considered by them as a powerful metacognitive tool. The work of presenting these data in a friendly interface is still a

challenge, as well the decode and use of the information by the students in a metacognitive way, what the authors called “sense-making” (p. 02).

Jivet et al. (2020) explained that by the self-regulated learning perspective, students are protagonists and can “plan, set goals, self-monitor and self-evaluate their knowledge acquisition process” (p. 03), and in this sense, also able to evaluate the external feedback, including the ones coming from learning analytics dashboards. Interventions on these applications are considered by the authors beneficial for user decision-making.

As demonstrated in this chapter, several previous studies revealed the dynamics of academic procrastination and self-regulated learning strategies. For the purpose of answering the research question of this study, semi-structured interviews with students enrolled in online courses were performed to collect qualitative data about students’ perceptions and experiences. The overall perspective about the theme presented in chapter 1 was used as a base for the interview guide construction, in order to detail questions that could cover different aspects of academic procrastination and self-regulated learning strategies.

2 METHODOLOGY

2.1 Methods and materials

The current investigation employed the interview as a method to obtain qualitative data regarding academic procrastination and students' self-regulation. The decision of choosing a qualitative interview was made to collect the students' perspectives and perceptions about the theme without providing technical assumptions that would reflect the opinion of researchers and my own concerns about the chosen topic. In this sense, a semi-structured interview guide was previously developed to include questions to be covered during this process but stating the freedom of the interviewees to reply to them in their singular way and giving me as interviewer the possibility of including new questions as a consequence of their responses.

As the object of this investigation was defined and aimed to identify the perception of students about academic procrastination and self-regulation, as well their own strategies for mastery, the adoption of a semi-structured interview guide seemed more appropriate. The interview guide aims to collect information that helps to identify how students perceive and develop self-regulated learning strategies in online learning and is explicit in appendix 1.

The principle of categorization was applied in the construction of the interview guide to immediately classify the data collect into categories, which facilitates the posterior synthesis, analysis, and interpretation. In this case, the classification followed an open procedure, defined by Esteves (2006) as categories that emerge from the proper material study where the perceived theoretical approaches turn into a creative process of reasonable categories that fit the research problem.

The interview guide was divided into eight blocks with specific purposes, as defined below:

- study purpose explanation and consent confirmation, that aimed to explain to participants the reason for the interview, ethics assumptions, expected results, and publication, clarify any further doubts from them, and receive a verbal confirmation of consent before proceeding with the other blocks. All participants confirmed by written term and verbally the consent. This block will not be considered as part of the analysis and interpretation once it would not generate any information relevant to the research question;
- online learning modality, which questions were focused on identifying what led the participants to the online modality and get their impressions about how is to study online in comparison to the traditional presential models;

- academic tasks, which questions aimed to identify how students receive academic tasks and their impact on emotions and behavior;
- academic procrastination, which questions were structured to identify patterns of academic procrastination that may be revealed by the participants;
- perception of academic procrastination, which questions aimed to identify how students perceive the theme of academic procrastination and collect data that can allow a comparison to previous theories about chronic procrastination and patterns of procrastination;
- procrastination in the online learning environment, which questions were developed to identify how students perceive procrastination in the online learning environment, as well help the establishment of self-regulation failure patterns;
- self-regulation strategies, which questions aimed to identify the patterns of self-regulation strategies and the influence of external parts on that processes;
- conclusion, which aimed to finalize the interview and give space to participants to include any information they consider relevant and was not questioned. It also includes a thank message to each participant for joining the interview process and contributing with relevant information about the theme.

2.2 Participants

For this study purpose, the participants are students enrolled in online courses. All students were female Brazilians, having Portuguese as their mother tongue and using the same language in their studies in a 100% online learning environment. The participants interviewed have between 26 and 37 years old.

Regarding the level of students, the population was shared as following:

- student 1: Post-graduation course (specialization/ *latu sensu*);
- student 2: Bachelor's degree;
- student 3: Post-graduation course (specialization/ *latu sensu*);
- student 4: Post-graduation course (specialization/ *latu sensu*);
- student 5: Post-graduation course (specialization/ *latu sensu*);
- student 6: Post-graduation course (specialization/ *latu sensu*).

2.3 Procedure

A social media post in my personal network invited students of online modality to join an interview process related to my master's thesis project. The expectation was to receive spontaneous replies from the students, having as criteria only the wish to join this process. No information related to the theme was mentioned in the post and all the information was explained at the moment the students sent messages informing me they would like to participate.

Ethical aspects were followed from the beginning. All students were informed about the purpose of my study and its context, procedure, privacy and confidentiality, data collection, expected results, and publishing. The participants were informed before the interview about the purpose of the interview and the confidentiality of the information collected, ensuring anonymity and the use of information restricted to the present study. The participants were informed that the interview would be voice recorded to facilitate the data collection and minimum interruption by the interviewer to make notes during the process, giving space for the interviewees to elaborate and freely discuss the guide questions. It was reinforced to all participants that there was no right or wrong question, as the questions aimed to collect their own experience and perception related to the theme. And finally, it was informed to the participants that the data analysis would try to establish a pattern of self-regulated learning strategies and link their responses to previous theories or research related to the theme. The participants were informed that the result will be presented and published as the conclusion of my master's degree at the University of Lisbon, to which they could have free access. Each participant gave written consent and verbal confirmation of consent before the interview process.

The conduction of the interview followed some basic premises to guarantee the same parameters to all interviewees: all the blocks of the interview guide (Appendix 1) were covered during each interview, having a similar vocabulary and only one and same interviewer.

Having in mind the target group was familiar with technological resources as they are online students, the option of conducting online interviews seemed natural and occurred without difficulties at the platform Zoom. The interviews happened online and had the sound recorded to guarantee a trustworthy transcription and a consequent detailed analysis once the material allowed a deeper examination.

The students were volunteers that spontaneously replied to an internet post on a social media platform where I informed that I needed students of online modality to join an interview as part of a master's thesis project. The content of the post was: "I need to conduct interviews

with online students for my master's thesis project. If you are interested to help me with that, please send me a private message". The theme of the study was not informed at the post.

Six students spontaneously replied to the invitation and at this instant, they were informed about the context of my project and about the context, procedure, privacy and confidentiality, data collection, expected results, and publishing – information that is also part of the written consent term. All the interviews were scheduled in the day and time preferred by the participants and took place on the platform Zoom. Only the audio was recorded to guarantee privacy and anonymity and one sample interview transcribed can be found in Appendix 3.

The interview guide (Appendix 1) was used in all interviews to guarantee that all participants would answer similar questions, providing a detailed overview of the theme and achieving the blocks' purpose. The process was concluded after the eight blocks of questions with a formal thank to each participant for joining the interview process and providing relevant information for the present study.

All interviews were transcribed and synthesized following a content analysis procedure. One of the transcriptions is in appendix 3 as a sample. Each interview contains the speech of the participants and represents what Esteves (2006) defined as documental *corpus*: the object of analysis. Regarding the analysis, the principle of exhaustiveness was applied, meaning that all data collected compose the documental corpus and will be considered in this stage.

Esteves (2006), quoting Bardin (1998), highlighted that the principle of homogeneity is also important to data analysis (p. 113) and it was also respected in this study, once the interview guide was developed and applied to guarantee the same sort of questions and consequent answers that could be used for this purpose.

The analysis was conducted to try to identify patterns of self-regulated learning strategies and possible relations with previous theories, in particular to Zimmerman and Martinez-Pons' studies (1986) by finding strategy consistency as a determinant factor to high academic achievements. Through this analysis, it was possible to validate the pertinence of the questions that supported the interview processes, once they could generate relevant inputs about the theme. The way the content was categorized was also a positive validation because it was possible to explore in detail the main points related to academic procrastination and self-regulated learning strategies having the literature presented in chapter 1 as reference for the guide construction and its result analysis.

And finally, inferences were made from this analysis, interpreting the results, identifying possible causes of academic procrastination among the participants, patterns of

procrastination and self-regulation strategies, patterns of failure, and possible outcomes and further studies.

3 RESULTS

Remembering the purpose of this study, this qualitative research aims to identify from students' perspective how self-regulated learning strategies are presented and perceived on a daily basis, the character of these strategies, and the role of the institutions and teachers on that, making a correlation with previous studies. Additional to this qualitative analysis, this study aims to understand if it is possible to make a correlation to Zimmerman and Martinez-Pons' (1986) studies by finding strategy consistency as a determinant factor to high academic achievements. For this purpose, the data analysis will follow the questions blocks from the interview guide used in the process.

The participants of this study are university students that are enrolled in courses in the online modality. All students are Brazilian females with ages between 26 and 37 years old. From them, only one student is enrolled at a bachelor's degree course (although she has a previous bachelor's degree graduation and she is also completing a master's degree in parallel), while the other five students are in specialization (*latu sensu*) courses. Knowing their level of studies brings the perspective that all of them concluded in the past a bachelor's degree and therefore has parameters to compare their experiences in traditional (presential) and online modalities.

3.1 Synthesis of the interviews by dimensions

Six interviews were conducted having the interview guide (appendix 1) as support for the data collection. As mentioned before, the process was structured in blocks with a specific purpose, respecting the principles of homogeneity. It is also important to remember that the introduction block named "study purpose explanation and consent confirmation" belongs to the interview guide, but it will not be considered as part of the synthesis, because its purpose was to reinforce the ethical aspects of the study and would not generate any relevant input for the research purpose. All participants confirmed their consent and understanding of the purpose of the interview.

3.1.1 Student 1

Online learning modality

The interview started with questions to understand the reasons that lead the participant to choose online learning and her impressions about this modality. This participant informed that she is studying in the online modality because it brings advantages as she doesn't need to leave home and can attend a course in a good university.

She always had the online modality as the first option, but this is the first time attending a long-term course – before she had taken some quick online training. Comparing the short- and long-term courses, she reports noticing a huge difference relating to the support she currently has, with one focal point that helps with all doubts, mentors in each topic, and tools inside the learning environment platform.

She likes to study online because of the autonomy and the possibility of reviewing the materials and making real-time research while attending the classes. According to her, in a presential class, it would not be possible, and she would have difficulties following up once she considers the field of study very complex.

When comparing the online modality to the traditional one (presential) she highlights that organization and discipline are key for a student in an online environment. She exemplifies saying that if she doesn't attend a class on the correct day, she immediately reschedules an appointment in her calendar to do it not to accumulate topics to study.

Academic tasks

The block of questions that guided this session aimed to identify possible impacts of tasks on behavior and emotions. This participant stated that the only official task is an assessment at the end of each class. Depending on which professors are in class, sometimes there are practical exercises during the classes. When I asked about the feeling knowing that assessments are pre-scheduled at the beginning of each class, the participant informed me that she never thought about it. After reflecting on it, she informed that the assessments are a motivation for her to absorb more of the content.

Knowing that her unique task will be to complete the assessment, her first concern is to establish a relation between theory and practice. She explained that during the classes there are some exercises proposed by some teachers and she uses that moment to collect tips that can be useful for the assessments, and she thinks that some nice conclusions are only possible in that moments, because alone she doubts it would be able to reach.

The first action adopted by her is to try to understand the content and for that she shares the week in two moments, generally Thursday and Sunday, to attend to the recorded classes and to review the materials. She makes notes about the theory and the practical exercises on the first day booked and in the second one she reviews the materials and after that, she takes the assessment. The participant informed that because of that, her focus is to explore more the content until she feels confident to have the assessment.

She also informed that a strategy she developed is to study the behavior and methods of each teacher. She said that each teacher has its own dynamics in class and its own methodology. Sometimes she has no connection with the teacher and finds it not easy to deal with some of them and considers that it affects the academic performance, so this strategy helps her to prepare herself for each type of professor and absorb the maximum possible.

Academic procrastination

The questions made to the participant aimed to identify possible patterns of academic procrastination. When questioned about what type of tasks, this participant informed that she usually delays starting or delivering, she pointed to the schedule of the assessments. She tries not to have it in the last days before the deadline, but consciously delay this moment to have time to study more, clarify doubts, and practice.

Analyzing her own pattern of dealing with tasks, she informed that clearly, she delays more to conclude a task and she justifies it because of the complexity of the themes (subjects that are difficult to understand). She must feel confident and domain the content to be able to conclude a task.

Perception of academic procrastination

The main purposes of the questions made at this stage were to identify how the participant perceive the theme and incentive a self-reflection about its own actions related to academic procrastination. This participant defines procrastination as the decision of putting as a priority everything but not an important task. When asked if she considers herself a procrastinator, she said that in life aspects sometimes yes, but not with the studies, because to finish this course is something that she strongly wants, and if she does not focus on that she will not be able to finish. She completed mentioning that the few moments that she delays academic tasks are when the content is difficult or when there is a public holiday, and she takes some days off.

If she could put your procrastination in a percentual, she said she procrastinates around 10% of her academic tasks and that it is a conscious decision. When asked if she remembered the last time she procrastinated a task, she said it was in the last public holidays when there were no classes and she could have scheduled an assessment, but she preferred to study more.

The participant informed that every time she procrastinates, she feels anxious and afraid of accumulating too many tasks, especially when there is a short deadline. When asked about what type of activities she does instead of an academic task, she said that she rests, but stated:

“It is a programmed rest time”. She said that she procrastinates a task that should be done in the present, but already replace it in the calendar to do in a short period later.

Procrastination in online learning environment

The purpose of the questions made at that moment was to narrow the answers to specificities of academic procrastination in the online modality. This participant was invited to think about what can lead to procrastination in the online learning environment and told that the methodology chosen by the teachers can influence it. She considers the experience of the teacher in the classroom makes the difference because sometimes she has teachers that are experts in the labor market but can't teach well due to the lack of experience in academia. According to her, it makes the students feel lost. Another influence is personal life. She reported that colleagues with children very often need to put the academic tasks apart to dedicate time to them.

She felt affected by the didactic of some teachers, especially when they are not good at transferring the knowledge to the students. The feeling, in this case, is not knowing where to start and in her opinion, it led many times to her procrastination.

She thinks that students tend to procrastinate more in the online modality, because of a lack of management. According to her, the flexibility of the online system is positive, but a trap that can lead to procrastination.

She also said it is not possible for her to compare her performance in past presential classes and now in the online system because her maturity and mindset changed since then.

The participant considers time management and organization as principles that can help students to avoid procrastinating in online learning.

Self-regulation strategies

This block of questions aimed to identify which self-regulated learning strategies are part of the student routine, as well if there was the influence of external parts on that processes. This participant reported more difficulties in starting to execute a task. When she procrastinates, she looks for classmates' support, in special the ones that already work in the field she is studying, because with them she feels more motivated. She mentioned a sense of belonging and stated: “I feel as I am not alone on that”.

She said her main strategy to be able to perform and conclude a task is to make summaries about the content. If she does not do it, she related a sensation of incomprehension

of the content and consequently, she feels not ready for the assessments or practices. So, the lack of knowledge and confidence in her learning process leads her to procrastinate.

She also mentioned that this support she finds on classmates is not properly help with tasks, but a moral one. The participant informed that she generally does not ask for help with tasks, although she could do it, once her brother is very experienced in the same field. It seemed she never thought about it before. She quoted: “I am thinking here that I could have done it more, but I do not have this habit”

Regarding tools that help her on a daily basis, she mentioned a calendar with a classification of colors – an adaptation she made at Excel from a repetition calendar methodology learned on another online platform where she studied languages. She created a color classification to identify classes to be concluded, classes to attend, classes to review, and next classes. This calendar is printed and enables her to make eye contact with the paper and reminds her of the obligations.

I asked her if she worries about possible future procrastination, and she said no – her focus is on what is happening now.

Other relevant information

Before finishing the interview, a moment for additional input was opened. Here it was possible to include any notes or relevant information that the participant would like to share. This participant stated that the structure of the learning management system helps a lot because it has many functionalities and support. The university is concerned about fixing problems experienced by old classes. She concluded the interview by informing that she is very motivated because of the excellent reputation of the university, recognized in the market and which students are frequently approached by recruiters – what already happen to her.

3.1.2 Student 2

Online learning modality

This participant decides to study online to be able to conciliate work and study. To attend to this modality was always her first option and this is the second time she is attending a long-term course in the online environment. Compared to the presential modality, she thinks there are no changes related to content because the class she watches remotely is recorded at a presential class, but how the online students will experience that change according to each student. She highlighted that results are the responsibility of each student and reinforces the flexibility of the online modality is positive, allowing students to adapt the university schedule

to their personal ones, enable more people to study, group people from different places – what favors the exchange.

The participant considers that online education gives autonomy to students, but they need to create a routine to follow up everything that happens, follow a calendar, and organize the tasks. At the end of this block, the participant made a spontaneous comment considering that there are more interactions in presential classes or live classes in the online environment than when students only watch recorded ones.

Academic tasks

This participant stated that her course has different types of tasks, such as weekly multiple-choice questionnaires for each topic, projects in the group, individual projects, video recording, internships, and reports related to it. When asked about her feelings related to receiving tasks, she informed that she feels more comfortable with questionnaires because they are easily structured and fast to do but doesn't like projects in groups because she prefers to work alone and considers the online learning environment non-conducive for this type of activities.

Her first concern is to be able to deliver the tasks meeting the deadline. When the tasks must be done in a group, her first action is to contact the other people to divide the responsibilities. When it is an individual work, she starts creating a timeline planning based on the final deadline. The participant informed that questionnaires must be delivered promptly, so she schedules the time to start and finish the task on the same day, however knowing there is a longer deadline, she will start the task slowly making some notes along the time but will let the conclusion for the occasion of the official deadline.

Academic procrastination

This participant informed that all tasks where she must write about a theme are the ones she will delay. She said she has difficulties concentrating to write because it is a type of task that requires more research, concentration, and study. In this sense, she pointed her difficulty to start the task.

In contrast, questionnaires and summaries are the easiest tasks to deliver, because she finds them practical and does not require deep research.

Perception of academic procrastination

This participant defines procrastination as the action to delay starting something. She gave as an example the pre conclusion project of the course that should be delivered in September (the interview took place in October), and she procrastinated because she didn't will to write. She said that the deadline was over, and the teacher didn't ask about it, so she made no movements to conclude.

When asked if she considers herself a procrastinator, she said that it depends on the moment, but that yes, she is. She stated: "I deliver things in the last moments". Putting her procrastination in percentage, she declared she procrastinates 80% of the tasks and delivers them closer to the deadlines. The participant informed that it is a conscious decision and that she has the impression that she works better under pressure.

I asked her if she remembered the last time she procrastinated and she talked again about the pre conclusion project and added a group task that should be delivered the next day from the interview. It came to her mind during the interview, and she demonstrated surprise when remembering this task. she quoted: "I totally forgot about it". The participant said that things happened in her personal life, and she lost focus on studying. She put the studies on standby.

She said that she feels very bad when she procrastinates on something. She quoted: "I saw that the 29th is today and tomorrow is the 30th and I need to deliver a task. This one I had really forgotten. I get a heavy conscience. I feel upset".

When asked about what type of tasks she does instead of performing an academic task, she replied that she does everything: goes out to have fun or relax, watches series. She stated that she does everything but not the task.

Procrastination in online learning environment

According to this participant, the flexibility of classes and the non-mandatory image/camera sharing are factors that can lead to academic procrastination in the online learning environment. She relates these two indicators to the fact that students feel less scolded. She believes that in the bachelor's degree she does not feel impacted by being reprovved in a topic, but the same doesn't happen in the master's degree she is concluding, because in the second one she knows everybody and has a closer relation to the teachers, and it makes her avoid any embarrassment with them. At the master's degree, she feels guilty if she procrastinates, but the same doesn't happen in the online bachelor's degree. She doesn't like to be questioned about

things to deliver, so it is a factor that influences or not her procrastination. Also, if she knows there is a large deadline ahead, she tends to delay starting the tasks.

She believes she procrastinates more in the online course in comparison to the presential one because she has no contact with other people, she doesn't see them and there is no obligation to access the platform every day. She quoted: "I access when I want, when it is possible, and it makes me miss the deadlines".

In her opinion, the online modality is not a fit for all students, but this perception, according to her, can be due to the methodology adopted in the university where she currently studies. She believes that if there are no strict criteria to be approved, the student will feel accommodated to deliver anything without caring about quality.

According to her, to avoid procrastinating, an online student must create its own organization method to deal with tasks and deadlines. It is also important to develop habits and establish a routine. Regarding the universities and teachers, the participant suggests more live classes where the attendance could be proved, because it would stimulate productivity and help the student to have a routine.

Self-regulation strategies

This participant declared she faces more difficulties to start performing a task, but when she does, it is possible to go further and conclude within the deadline. She finds it difficult to return to a task she postponed or stopped and the major stimulus to conclude them is fear. She quoted: "(fear of) not being able to do, not deliver, not finish". She said she wants to conclude it.

As a strategy, she books a complete day to conclude a task and her motivation comes from food incentives. She reported she buys a lot of junk food and candies for the day, and it makes her focused to conclude the task. Generally, her procrastination is related to the necessity of deeper studies about a theme. When it happens, she sometimes looks for other people's help, such as friends (classmates) or teachers. She said that classmates help to tell her what she must do for the topics.

To avoid procrastinating, the participant uses a checklist for the tasks to be done and a technique named Pomodoro, that promotes time management with breaks in between. I asked if the use of this technique was useful, and she said that it forced her to do it and it was better than not to do it.

When questioned if she worries about future procrastination, she said no but that knows it will happen again in the future. She quoted: “I do not worry because I know that in the end, everything will be fine”.

Other relevant information

This participant said that her supervisor (teacher) at the university shows availability to support her, but she feels afraid of scheduling time for a meeting with this person, because the teacher is, in her words, rude and give rude feedbacks, and are not helpful with information that could clear her doubts. According to her, the teacher justifies her own attitudes saying that she acts that way to help the students to learn, but the participant disagrees and considers that type of behavior a barrier. She also mentioned that this interview was good because made her feel a bad conscience about procrastinating.

3.1.3 Student 3

Online learning modality

This participant decided on an online modality because she prefers to work and study remotely. She stated that she loses less time in traffic because she doesn't need to leave home and that this type of course is generally cheaper than the presential ones.

She took singular online classes in the past, but this is the first time she is attending a long-term course on this modality. She said she like it very much and identify herself with the teachers and their methods. According to her, studying online is more objective, there are no unnecessary interventions of other students, the time is optimized, and she can review the topics when there are doubts.

Among characteristics of an online student, the participant considers that is essential to have a target and act to achieve that.

Academic tasks

This participant informed that besides a final assessment, the only tasks during the classes are discussion forums. When asked about how she feels about tasks, she said that she reacts better to activities related to topics that she has a connection with, identification.

Her first concern is the deadline, so the first measure is to insert the activity on her schedule. She uses to develop a scheme of how she will develop the task and along the time she feeds this structure every time she feels inspired. In the meanwhile, she keeps studying the content until she has enough information to perform and finalize the task. The participant

affirms that she starts this process early, but the conclusion of the tasks always happens very close to the deadlines.

Academic procrastination

This participant informed that she delays starting a task every time she does not consider that she will be benefited from that. If the task is not relevant or will not bring any added value, she does not start it immediately and let it for closer to the deadline. According to her, performing a task is related to her level of interest and level of difficulty of what is required.

She also noticed her tendency to be more motivated to start written tasks because she finds them easy to do. However, with tasks where she feels exposed like group tasks or dynamics, she finds it difficult to start and to commit as she defines herself as an introspective person.

Perception of academic procrastination

This participant defines procrastination as when you let something to do later when you should not delay any more. When asked if she considers herself a procrastinator, she told no. She declared that she learned to do tasks even when she hates them. She stated: “You don’t have to like a task; you need to do it. I don’t like to think about the reason that must perform a task”.

Putting in percentual the tasks she procrastinates, she informed it would correspond to 30% of the total. According to her, studying online gave her the perception that the results depend on her and there is no help. To procrastinate is an easy and conscious decision to her and that it happens more when the task or subject has less significance to her. She said she does not like to procrastinate because it impacts other aspects of life. Regarding activities performed instead of doing the academic tasks, she informed that most of the time she used to prioritize work.

Procrastination in online learning environment

This participant considers some aspects as an influence on procrastination in the online learning environment: loneliness, a lack of participation/ interaction with the teachers, a lack of supervision, and external distractions, as the Internet. She does not feel affected by these factors anymore because she now understands that she must do the tasks and based on that she assumes that in the presential system she used to procrastinate more. She also considers that

online students tend to be more focused once they chose this modality that requires more autonomy, but she said that this way of studying does not fit everybody.

To avoid procrastination, she said that online students should have to chance to be more in contact with the teachers and be able to clarify doubts in real-time. She considers it important to also avoid distractions.

Self-regulation strategies

This participant said that when she postpones a task is in its start and she only feels motivated to conclude when she knows enough for that.

Among possible strategies to conclude a task, she informed she uses an agenda and likes to make summaries of the content. She highlighted that she forced herself to understand that she does not need to like something but needs to do it.

When facing a procrastination moment, she tries to solve it alone. According to her, people around her would not have the time to help her.

I asked if uses any technological tools or resources to help to avoid procrastinating and she informed that she doesn't know any tool for that.

She said she does not worry about future procrastination but thinks that when you do not see the applicability of a task in real life there is a tendency to not focus and not prioritize.

Other relevant information

This participant stated that it is possible to learn a lot in an online learning environment because access to information is easy and large. She highlighted that it is important to optimize the time in our own favor.

3.1.4 Student 4

Online learning modality

This participant chose the online modality to be able to conciliate with her work and avoid commuting in traffic. First, she considered studying in a presential system, but because of the pandemic situation related to the Covid-19 the university changed the modality to 100% online and after starting the classes she realized that this modality would bring more advantages.

It is the first time she is attending an online course. She thinks it is not beneficial not to have contact with teachers and other students, but it is an advantage to have the recorded classes because she can review the materials and return them to clarify doubts.

Compared to the presential modality, the participant considers that an online student must have more discipline and make a separation of personal and professional life from studies to be able to find the time to study.

Academic tasks

This participant informed that group tasks, summaries, and assessments are part of the activities in her course. She feels comfortable receiving group tasks because she sees on that a chance to practice the theories. However, the same does not happen when she receives another type of task because she feels alone and cannot exchange knowledge or doubts with colleagues, which makes her experience a lack of confidence.

The first concern when receiving a task is the deadline. She said she immediately looks to a calendar to start organizing herself and understand when it will be possible to do it. Her first actions are to check the task content and its level of difficulty. According to her, it determines when she will start the task. The deadline is a parameter and knowing she has time to deliver the task she tends to do it slowly and only focus on finishing it close to the deadline.

Academic procrastination

This participant reacts better to tasks that have a relation with her professional life because she feels more confident and has the knowledge. When she finds the theme difficult or distant from her reality, she tends to delay starting doing the task and will deliver it closer to the deadline.

She also stated that depending on the methodology applied by the teachers she will find it easier to learn and it will have a direct impact on the delivery of tasks.

Perception of academic procrastination

This participant defines procrastination as letting something be solved in the last moments and putting excuses to do something later. When asked if she considers herself a procrastinator, she said that she does. Every time she realizes there is a large deadline, she always lets the activities for later. Putting her procrastination into a percentage, she declared it would correspond to 60% to 70% of the total tasks.

The participant said that her procrastination is conscious and very related to the deadline. The last time she remembered that she procrastinated was to schedule an assessment and she informed she preferred to prioritize doing other things, as having time to rest. She said that in the first moment she doesn't feel affected when procrastinating, but when the deadline

becomes closer, she feels guilty and regretful. She also stated that sometimes she feels bad knowing she must do something, but not having the will to do it.

Instead of performing academic tasks she usually takes time to rest or does leisure activities, as watching series.

Procrastination in online learning environment

According to this participant, external distractions, and the accommodation of having recorded classes are potential procrastination stimulus. In her case, knowing that the classes are recorded, she postpones watching them very often because feels tired and cannot focus on that.

She believes she procrastinates more now at the online system because in the past, in the presential modality, she had to make more effort to be there, had more contact with teachers and other students and it motivated her to produce once she was already in the university. In this sense, she thinks she procrastinates more in the online modality.

To avoid online students procrastinating, she suggests the universities should have a better design for the courses to attract more students, as well more recurrent tasks during the topics (and not only one unique assessment in the end).

Self-regulation strategies

This participant stated facing more difficulties to start performing a task because she needs to feel confident about how much she absorbed the content. When she procrastinates, the stimulus to return and conclude a task comes from the approximation of the deadline. She said it brings a desperate feeling to conclude the task and for that, she uses a schedule.

She does not ask for other people's help and tries to solve it alone. She quoted: "This is a nice point. I had never thought about it". And concluded: "We listen all the time that we must have organization, but it is not that simple".

She said she does not use any special technological tool or resources to avoid procrastinating – only calendar and reminder alerts.

The participant does not worry about future procrastination but stated that it can become an addiction, a mania. Because of that observation, she concluded: "I already start it in a wrong way" – referring to starting topics naturalizing the procrastination as part of the process.

Other relevant information

The participant did not want to make any additional comments.

3.1.5 Student 5

Online learning modality

This participant chose the online modality because she is living abroad, and she cannot speak the official language of the new country. She found this modality the alternative to keep studying and she enrolled in an online course in a Brazilian university. She didn't consider studying in another

It is the first time she is attending an online course, and she reported difficulties creating a routine and managing the time for the academic tasks. According to the participant, studying online requires more discipline, and it was very difficult for her to manage it. She quoted: "I used to leave everything for the last minute".

Regarding the characteristics of an online student, the participant considers it important to have discipline and book time to study. She said it is necessary to understand that you are responsible for your own learning process, and it requires maturity. The participant also highlighted that it is important to know the reason you are studying and have it clear in mind, because if not it is easy to give up.

Academic tasks

This participant informed that in her course she has practical exercises and a final assessment for each topic that includes theoretical and practical questions. She would like to have more tasks to do before the assessments. She made a comparison between the presential classes that originated the recorded classes that she watches because she knows in the presential system the students have much more tasks in class that the online students do not receive. According to her, the guideline received by online students is to perform the tasks if they want, but she finds the process to deliver these optional tasks very bureaucratic and with a lack of immediate feedback, which discourages her and other students to go for that.

She already knows the date for the assessment when she starts a new topic, so her first concern is with time management. Her first action is the book time on her schedule to be able to absorb the content and start the task before the deadline. She reports the delivery of tasks always close to deadlines and said it is recurrent – a fact that she also observes on the classmates.

Academic procrastination

This participant informed she delays scheduling the assessments because she always needs more time to organize the information and prepare herself to take it. She reviews all the content before scheduling the assessments. When she receives multiple-choice questionnaires, she finds it simpler and is able to start it immediately, but the necessity of feeling confident for a final delivery leads her to split the execution along the time available and she delivers it close to the deadline.

Perception of academic procrastination

This participant defines procrastination as when you know you have something important to do, but there is no impulse to do it. She quoted: “While you do not do it, it keeps haunting you. When there are no more options it must be done”.

When asked if she considers herself a procrastinator, she said that she is, but nowadays less than in the past. She informed that she makes effort to keep herself organized and if she proceeded differently, she would procrastinate more. Putting her procrastination into a percentage, she told that around 50% of her academic tasks are delayed.

The participant informed that procrastinating is a conscious decision, but at the same time, she thinks she self-sabotage because she reserves time for the tasks but knowing she has a long time until the deadline she delays starting the execution of the task.

When asked if she remembered the last time she procrastinated, the participant informed that it happened in the last module of classes. She said she took a while to start watching the classes because the theme was not interesting or motivating. Every time she procrastinates, she feels she is self-sabotaging and most of the time instead of executing the academic tasks she is working on.

Procrastination in online learning environment

This participant considers the lack of interaction between students and teachers as the main factor that leads to students’ procrastination in an online learning environment. She said she is affected by it and cannot, for example, clarify doubts in real-time. The participant also mentioned that interaction and the use of the platform-tools are not stimulated, and it helps for students’ lack of motivation.

She thinks she procrastinates more in the online modality exactly because of the distance. In the presential system, it was necessary to be in the university, and because of that many tasks could be immediately performed. However, she found it difficult to make this comparison, because currently, she studies a theme of interest, and it makes everything easier.

She noticed that procrastination is very present in her classmates' reality, especially due to personal reasons as family, or professional aspects – both require people to change priorities sometimes. She also thinks that online students have problems managing time and separating their studies from other aspects of life.

She considers live classes and live tasks as tools that could motivate online students not to procrastinate. At her university, there are teachers on duty to clarify doubts and know that she feels the motivation to study in advance to be able to use this mechanism offered.

Self-regulation strategies

This participant declared she faces more difficulties to start performing the tasks and it is related to how she perceives the complexity of the activity. When she procrastinates, a stimulus to conclude a task is the deadline, and to be able to finish it, she books an entire day for that. According to her, it works better in that way than sharing the time along the days. In that situation, she counts on other students' support, which whom she can talk about the classes, clarify doubts, and experience a sense of belonging.

She uses an agenda to manage this process. In the past, she used the Pomodoro technique through an app but reported that it did not help her on avoiding procrastinating. She also used a browser extension for time management that monitors the time spent on each task, but it also did not work with her because she frequently forgot to activate it before starting the execution of a task.

The participant informed she does not worry about future procrastination because she is focused on the present and not on the future.

Other relevant information

This participant stated that she cannot judge which modality is the best one (online or presential). According to her, the modalities will work better according to the living moment of each student.

3.1.6 Student 6

Online learning modality

This participant chose to study in an online modality because of work. She used to travel very often throughout the year, and it would not be possible to manage attending classes in a traditional system. Another factor that influenced her decision was her wish to study in a

known and well-ranked university. At the first moment, she considered studying in a presential modality but understood that it would not be possible to conciliate it with her job.

The participant attended language courses in the same modality, but this is the first time she is attending a long-term course online. She did not experience difficulties studying online and found the classes easy until now. She relates that to her large work experience because she can make associations between theory and practice, recognizing at the classes a lot of topics that are part of her daily routine at work. The participant also declared that she uses to skip the recorded classes because she doesn't find it relevant and only reading the theoretical materials is enough to attend have the assessments.

She considers discipline and organization as the main characteristics of an online student. Although she understands that both are also important in the presential modality, she thinks that a physical presence somehow forces a student to dedicate some time to study. In the online modality, according to her, the student needs to book time and organize himself/herself to perform tasks. She quoted: "It is not because it is online that you can do when and how you want. You must have a dedication time".

Academic tasks

This participant reported she has an assessment at the end of each class and no other type of activities. She feels bored facing the task. Although she sees it as an important tool for the university to guarantee students are attending the classes, she always has a negative feeling about taking these assessments because she finds them not interesting and boring.

She explained that when a topic is finished, she has a deadline of three weeks to schedule the assessment and her first concern is with the deadline. Her first actions are to download and read the materials to prepare herself for the assessment. She said that due to the fact she has many years of professional experience, she doesn't find the topics new and because of that, she doesn't reserve that to study once she already knows the content by the professional practice.

The participant informed that she always wants to save time and to avoid taking assessments every week, so she purposefully postpones the moment to schedule the assessments in a way to concentrate three assessments on the same day. In this sense, for example, she consciously delays the assessment of the first topic until very close to the deadline (three weeks), delays the assessment of the second topic in two weeks, and promptly takes the assessment of the third topic – all in the same day. She said she doesn't like the assessments

and much more the feeling of having it every week, so this was the way she found to, according to her, save time.

Academic procrastination

This participant informed that as the assessments are the only task at her course, she intentionally postpones scheduling them to save time and concentrate the highest number of assessments on the same day.

She also reported that themes that she does not know give her motivation to study and research. She quoted: “The novelty motivates me”.

Perception of academic procrastination

This participant defines procrastination as when you know you have an activity to execute but postpone and let it for the last instances. When asked if she considers herself a procrastinator, her answer was no. She said that procrastination irritates her, but during this course, she does procrastinate because there is no news. Putting it into a percentage, around 30% of the academic tasks are procrastinated, but she thinks that she can balance it well because at the same time she is procrastination on one topic she is speeding up the other two.

In her opinion, she procrastinates consciously. The last time she did it was with the assessment schedule because she was moving to another country and didn't have time to dedicate herself.

When asked about how she feels when procrastinating, she stated that she feels frustrated, but she clearly knows the reasons behind that. Instead of performing academic tasks, she used to dedicate time to work.

Procrastination in online learning environment

This participant thinks that the exposition to different stimulus can lead students in the online modality to procrastinate. She said being online you have access not only to the class screen but to other tabs, advertising, people can text you. She feels particularly affected by the mobile and smartwatch because she receives notifications all the time even reducing the number of apps that can send alerts. She thinks there is an impulse to immediately see a notification and it causes distractions that can lead to procrastination.

She believes she procrastinates more in the online modality because before in the traditional presential system it was mandatory to attend and she coursed a full-time (all day) course, where she found it impossible to procrastinate.

Although she stated she does not have so much contact with other students, when she follows up the chats, she notices they seem lost and with difficulties following up the classes and she believes that it is a factor for procrastinating.

To avoid students' procrastination, she suggests a better follow-up by the university to guarantee that the students are being able to assimilate the content. She believes that online courses do not require so many inputs from the students and this lack of interaction is not positive for the learning processes. And finally, she thinks it would be very beneficial if online students could have moments to clarify doubts and talk better with the teachers. In her course, she reported that she even does not know how to contact the teachers.

Self-regulation strategies

This participant stated she postpone tasks consciously and the delay to start a task is a decision made to optimize the time. She mentioned a sentence that she repeats all the time: "if it must be done, it must be done", and this is her stimulus to conclude postponed tasks.

She has some strategies to avoid procrastinating: putting the mobile on airplane modus, organizing the materials, time management, use of post-it as reminders, summaries of the content. Besides that, she uses a fixation technique through writing about the content and marking the important parts of a text. From technological tools and resources, she reported the use of mobile agenda, alarms and notifications, apps for daily targets, and a checklist of tasks. The participant declared she liked a lot the moment to make a conclusion check at a task.

When procrastinating, she always solves it alone. According to her, procrastination is her own problem, and she must solve it alone.

She said she worries about future procrastination because it is something that she does not like to happen.

Other relevant information

This participant said that online education works very well if the person can understand that it means a commitment.

3.2 Integrated analysis and interpretation

The present analysis aimed to identify patterns of self-regulated learning strategies and possible relations with previous theories by compiling and integrating the six interviews conducted for this study purpose and synthesized before. Special attention was given to Zimmerman and Martinez-Pons' studies (1986) under two aspects: first, classifying the

participants of this study in the fourteen categories defined by them for self-regulated learning strategies (table 1), and second, identifying if it was also possible to consider strategy consistency as a determinant factor to high academic achievements.

For this purpose, the same categories of the interview guide were utilized, and the integrated analysis works as a validation of the categorizing method. The interpretation of these results evidences the relation of the interviews with the previous studies about procrastination and self-regulated learning strategies presented in chapter 1.

3.2.1 Online learning modality

It was important to understand since the beginning what led the participants to choose an online learning modality and collect their impressions about it because the reasons for each choice and their impacts and first impressions could be determinant for the relation of the participants with the learning environment.

Five students experienced by the first time a long-term course in online modality, although three of them mentioned they attended short-term training courses or sporadic university topics in an online environment before. The student that had previously studied a long-term course in an online modality did not present information that could indicate an advantage on that compared to the other students, meaning that although she had previous experience in this modality, she presented difficulties in her self-regulation learning strategies in the current one.

All participants declared that the choice to study in the online modality was made to combine studying with other aspects of life, as per example work and family. Four students mentioned this combination immediately after being questioned. Among the advantages, they included the benefit of not commuting in traffic to go to the university, being able to optimize the time to do other private things, the chance to study in universities with a good reputation independent of the locations, and the cheaper cost.

Klingsieck et al. (2012) stated the same when mentioning that students at distance universities used to perform their studies in addition to regular work and life family. However, for Klingsieck et al. (2012), this choice should be linked with an own perception of one's high level of self-regulation skills, which did not appear in the participants' speech. None of the students chose the modality because of a clear perception of their metacognitive skills, but because of how it could fit their other compromises in life. The fact that students choose and start an online modality, that itself requires higher levels of self-regulation, without perceiving their own skills and levels in this sense, makes an immediate alert about the negative

consequences on the learning processes. The lack of self-regulated learning abilities leads to low performance and, in the last instance, to higher dropout rates, according to Lee and Choi (2011, in Cho and Shen, 2013).

In the past, it was also usual that online students were older and more motivated than presential students, but this is changing over time and could be verified in this sample, where young students are also choosing for the online modality. Regarding motivation, it could be noticed that it is not related to the modality itself, but to how the studies fit their personal interests and future expectations.

All students agree that studying online requires the adoption of measurements. It was unanimous among the participants that organization and discipline are key skills for this modality. Zimmerman and Martinez-Pons (1986) considered organization and planning as two important self-regulated learning strategies that reinforce habits that will be important for consistency. What was clear in this part of the interviews was the self-development and adoption of strategies on the ongoing process, meaning that first the students experienced different situations and feelings and tried to establish an order to be able to move on. Veiga Simão and Frison (2013) mentioned that the self-regulation principle states that regulation is possible when personal factors allow students to plan, organize, control, and assess. In this population, it was possible to identify the students moving in this direction, but most of them are still stuck on the first steps of planning and organizing processes, showing a gap on the other ones (control and assess) and on deeper instances as achievements and context. Part of this problem can be related to a lack of development of metacognitive skills during academic life.

Azevedo et al. (2009a, in Yen, 2020) mentioned that students did not develop strategies for online learning because they are used to traditional presential modalities and Kauffman (2004, in Yen, 2020) reinforced that students will not develop these skills if they are not stimulated to do that. Both views could be identified in the information reported by the participants, when declared, in different perspectives, having difficulties adapting to the online modality. None of them received guidance from the university or teachers about self-regulation. In their speeches, the actions were centered on the individual, as each one of them was the only one responsible for the bad or good results in the process. 03 students clearly stated that online students must understand that they are responsible for their own learning achievements, although all of them indirectly posited the same by saying that students must have a calendar/ schedule to organize the studies, create the habit to follow up what happens related to the topic, do not mix personal and professional life with the studies, and have

maturity. This centralization only on the individual efforts called my attention. Different authors included in their theories also external stakeholders, and it is simply disregarded by all participants when talking about responsibilities in the learning progress. Schraw et al. (2007), for example, defined self, teacher, and task as sources of academic procrastination, Azevedo et al. (2009a) reinforce the necessity of external stimulation for the development of metacognitive skills, and Zimmerman and Martinez-Pons (1986) included seeking for external assistance as an important self-regulatory category.

Two students mentioned that it is important for each one to understand why they are studying, linking that to a goal. This is an interesting perspective that represents the importance of goal setting as a regulatory learning strategy, as stated by Zimmerman and Martinez-Pons (1986). In this case, the students not only found it important to set immediate goals related to tasks but to bring up a major goal to be achieved in the future as a motivation to perform tasks and move on.

When questioned about how is to study online, three students highlighted only positive aspects, two students highlighted negative aspects and one student pointed both negative and positive aspects.

Among the participants that mentioned only positive aspects, autonomy was the most important factor for them, and the students relate it to the possibility of reviewing the content as the classes are recorded and materials are online available. It makes sense by simply analyzing the bibliography related to the theme, where most relevant aspects have a “self” as a prefix. Here appears again the organization as a self-regulated learning strategy and the reviewing, considered by Zimmerman and Martinez-Pons (1986) another important category. One of the students of this group also mentioned that she likes and has identification with professors and their methods. It was interesting that this same participant likes the lack of contact with other students because considers students frequently making unnecessary interventions in class. It was possible to identify later that this participant is very focused on a future goal and tries to eliminate any variant that can take out her focus, being the relationship with the teachers the only seemed as beneficial (add value to her goal). In the opposite way, one student of this group considers the online learning environment a chance for people from anywhere to attend classes and exchange information. We can consider this exchange a type of feedback that can improve one’s performance, as posited by Delaval et. al (2017) and Cho and Shen (2013).

Among the participants that brought up only negative aspects, one student mentioned the difficulty of adapting to this modality, facing problems to set up a routine, and managing

the time. Clearly, these points are strong contributors to procrastination and low performance. The other one criticized the content of the course, classified by her as too easy and not adding any value once her long professional experience already gave her the knowledge that is being taught at the course. From the negative factors described it is possible to identify points that can lead to low performance and procrastination if the students do not have self-regulated learning strategies well developed: lack of organization and planning, as well the lack of interest in a topic or the perception of no value-added. Regarding this last, the TMT approach in its formulations states that one will act according to the level of utility of the task. Steel (2007) identified the nature of the task as a possible cause of procrastination, due to timing of reward and punishment, and aversiveness, and Ferrari (2000) related boredom to procrastination.

And finally, the student that brought up both positive and negative aspects reinforced the aspects mentioned by the other related to the possibility of content review and criticized the lack of contact and interaction with teachers and other students.

3.2.2 Academic tasks

During the interviews, it was possible to identify boredom in the way all the participants deal with the academic tasks. It was also strong the fact that many courses do not provide a variety of tasks during the topics or courses. Two participants informed they have only one weekly assessment per class, representing on this population the ones with fewer activities provided by the university. The target of these assessments, according to the students, is to verify if they studied the content. Two students revealed they have one task and an assessment test at the end of each topic. One student has two types of tasks and an assessment test at the end of each topic. And finally, one student showed being the one with the major variety of tasks, being able to quote five types.

It is known that practical exercises can help students to assimilate better the content and it is clearly not a priority of most universities. Even between the students that stated joining other types of tasks different from the assessment, the characteristics of the tasks reveal they require more automatic responses as copying and memorizing, than the application of high-level cognitive skills that could lead them to develop the metacognitive ones. None of the students mentioned accurate feedback that could improve any skills – they only deliver tasks to meet a deadline and wait to know if they will receive a positive mark. Veiga Simão and Frison (2013) stated that teachers should create space for the students to expose ideas, plan, interact, exchange, make decisions, to stimulate the high-performance. Cho and Shen (2013)

posited similar ideas, demonstrating that the focus should be on developing intrinsic goal orientation to positively influence self-regulation skills – possible with more teachers' presence, online discussions, challenges, and feedback. These important aspects are not part of most of the students in this sample.

When questioned about how they feel when receiving a task, the participants took a few seconds where they had to think about it and one student verbalized that she never had thought about it before. Once more the automatic response of students was evident by mechanically receiving tasks without thinking about it or analyzing their impacts or added value. One student sees the tasks as positive, feeling motivated to assimilate more content. One student reported feeling bored and one feels worried about time management.

Two students associated their feelings when receiving a task with their self-efficacy – one feels more confident performing tasks alone and the other feels good with group tasks. In this way, if they receive tasks aligned to their preferences, the reception will be good, as well the performance to conclude it. Following a similar line of thought, one student mentioned she feels good with tasks coming from topics she identifies with.

Once more the TMT principles can be used to explain the relation of interest and short-term reward to procrastination and low performance. What is not interesting or can add value makes the commitment to tasks weak. Added to that, the fact students are still in the process of developing self-regulated learning strategies and the lack of interactions and task proposals that could contribute to the development of metacognitive skills make this combination undermine a high-performance result.

The first worry of the students when receiving a task is to meet the deadline. Five of the students mentioned this concern and this is an important fact that tells a lot about the pedagogical structure of the courses. Students are led to worry about a deadline but not to think about their learning processes or make any self-judgment about it. One student informed that her first thought when receiving a task is how she will correlate it with the theoretical content received, showing an analytical perspective and intention to think about the application of content.

All students revealed the adoption of measurements to be able to perform and conclude a task. In all cases, it is related to booking time on their schedule to study the content, as well to establish a first idea of when they wish to conclude the tasks. It was also unanimous that these movements occur very early in a timeframe, but they start performing the tasks there is a delay. None of the participants start the tasks immediately focusing on an early delivery but avoiding it for different reasons and performing it closer to a deadline.

3.2.3 Academic procrastination

The first pattern identified was that all students delay starting the tasks. Another pattern is related to its reason: Five students revealed that they postpone starting a task because of low self-efficacy and self-esteem. They feel they are not well prepared due to the lack of knowledge or complexity of the content and postpone the activities until they feel it is not an issue anymore. Ellis and Knaus (1977, in Beswick, Rothblum & Mann, 1988) stated exactly that when defined procrastination as an emotional disturbance directly related to self-esteem where the failure contributes to this lack and leads to demotivation. Burka and Yen (1983, in Beswick, Rothblum & Mann, 1988) also made contributions to this sense, defining procrastination as a self-defense mechanism to protect one's self-esteem. The participants' speech attested to these past theories when revealed the students wish to delay acquiring more confidence to perform. Wouters (2016) associated academic procrastination with self-efficacy and work avoidance goal orientation, stating that the faith in their own abilities to accomplish a task will guide the level of effort for that.

One student reported a conscious decision of postponing the start for better use of her time. This student could be classified as an active procrastinator, as detailed by Schraw et al. (2007), Chu and Choi (2005), and Cao (2012). These approaches considered a positive perspective of procrastination, where it is used to improve the performance by concentrating effort and focus during a specific timeframe normally closer to the deadline but being successfully managed to be delivered on time and with positive outcomes. This student declared she feels bored with classes and assessments and postpones it to concentrate all possible activities on the same day not to feel a prisoner of the university schedule and uses her time to do other things that she appreciates more. Steel (2007) defined individual differences as one of the possible causes of procrastination. The analysis was made considering the Big Five Personality Factors (Traits) model, considered the most influential theory applied to studies related to procrastination. Steel (2007), on analyzing the factor agreeableness, identified that individuals with this trait of personality tend to feel disturbed by imposed schedules, and to avoid it they purposefully delay tasks, finding motivation by performing with autonomy by their own schedule.

3.2.4 Perception of academic procrastination

The participants defined procrastination as:

- the decision of putting as priority everything but not an important task;

- the action to delay starting something;
- when you let something to do later when you should not delay anymore;
- letting something be solved in the last moments and put excuses to do something later;
- when you know you have something important to do, but there is no impulse to do it;
- when you know you have an activity to execute but postpone and let it for the last instances.

All definitions included the conscious aspect, meaning that for the participants the delay is not unknown but a clear decision, although the reasons can differ as previously mentioned. It was also possible to identify that on the definitions are included their own patterns of procrastination, stating delays on starting a task by prioritizing other activities and the action for accomplishing it always close to the deadlines. The explanations also carried a bit of guilty and negative perception of procrastination, following most of the studies since the Industrial Revolution.

When questioned if they consider themselves procrastinators, this negative connotation of the theme was clear. The participants had difficulties assuming it loudly, although they talked about their own difficulties with the process in a natural way in the previous blocks of questions. All assumed they procrastinate in academic tasks, but at different levels. Three participants estimated they delay between 10% and 30% of tasks and the others estimated a percentage between 50% and 80% of the academic tasks. Among the students with the lower percentage, it could be noticed during the interview process that they presented more aspects in the direction of self-regulated learning strategies, while the ones with the higher percentage indicated more difficulties in managing the learning processes in the online modality. These data also reinforce all theories related to academic procrastination, where it is associated with most of the students and some of them chronically. It was also clear for all participants and easy to remember the last time they procrastinated, and their answers confirmed the procrastination patterns already mentioned.

The action of procrastinating causes negative feelings to all participants. They reported feeling anxiety, bad conscience, guilt, regret, self-handicapping, and frustration. Although they consciously make decisions to procrastinate by aiming for immediate satisfaction on avoiding the task or suffering from its impacts, they presented difficulties in dealing with the consequences of the procrastination. Steel (2007) defined procrastination as a voluntary delay of action despite expecting worse consequences. Steel and Klingsieck (2016) brought up ideas

from the TMT showing that people procrastinate unpleasant tasks in the present every time there is no immediate reward. However, as stated by San, Roslan, and Sabouripour (2016), it tends to change when there is less time to accomplish the task and it can justify all the negative feelings described by the participants.

Immediate rewards are preferred by students instead of boring and unpleasant tasks. It was explained by Steel (2007) when analyzing possible causes of procrastination. Three of these causes can be identified in the participants' statements: procrastination due to the nature of the task, individual differences (especially the extraversion, that leads people to procrastinate because of highly affection by momentaneous desire, boredom, seek of excitement, and pursue of immediate gratification) and possible outcomes (with a decrease of mood and motivation if the reward takes too much time). Related to extraversion, three students related that prefer to work when they procrastinate academic tasks, two reported they choose to rest and one reported that she does everything that can lead to leisure.

3.2.5 Procrastination in online learning environment

The purpose of the questions made at that moment was to narrow the answers to specificities of academic procrastination in the online modality and to establish self-regulation failure patterns. The participants reported what, in their opinion, can lead students to procrastinate in online learning. The answers were:

- methodology applied by the teachers (quoted once);
- flexibility of the classes, where the awareness of having recorded classes leads to a negative accommodation (quoted twice);
- lack of supervision/ control (quoted twice);
- distractions, especially with internet and smartphones (quoted three times);
- lack of interaction with other students and with teachers (quoted once);
- lack or no knowledge and use of the LMS functionalities (quoted once);
- family issues, especially among students with children (quoted once).

Besides family issues, which are non-predictable factors, the participants brought interesting points to be considered and related to previous theories about procrastination and self-regulation. At this point of the interview was the first time when the students named more external factors that affect the learning processes and strategies instead of pointing to self-culpability.

The factor more mentioned was the distraction. The internet and the variety of applications available on smartphones were considered a cause of procrastination. It can be explained by the extraversion trait mentioned by Steel (2007), where people present more impulsiveness and feel attracted by momentaneous desire and immediate gratification. It was also explained by the TMT, which stated that delays are caused by social activities that look like a better option than an academic task.

Two participants reported the lack of supervision and control as a possible cause of procrastination. Here appears a contradiction about the common understanding of self-regulated students, also known as mastery students. The self-regulation principle states autonomy, proactively learning, application of cognitive and metacognitive strategies. The factor pointed by the participants goes in the opposite direction because of the sense of control implied, as students would only be able to perform if someone impose it on them. It can be assumed that in traditional modalities these students had more teachers' presence and automatically a strict follow up, which led them to consider it a kind of control. The experience reported by them in the online modality shows the lack of this presence and, when there is also a gap in the development of metacognitive skills, the students feel lonelier in the process and unable to reach good results. Cho and Shen (2013) pointed that teachers and instructors should stimulate students by monitoring their activities, and Hays and Handler (2020) posited the importance of teachers' presence. Another point described was the lack of interactions, especially with the teachers, reinforcing the little importance given to helping students in developing learning skills.

The methodology also appeared as a possible cause of procrastination. One of the students detailed how a good or bad methodology can affect students' performance. By the data collected it is possible to identify a gap that field by teachers and university, once most of the courses follow the same poor structure based on video classes, some written material, and a final assessment. As result, the students do not feel interesting to attend classes and concentrate their efforts on delivering the task or scheduling an assessment to get rid of the obligation. In that period, the procrastination processes were described. Hays and Handler (2020) reinforced the importance of developing a learning management system able to engage students in multiple ways.

But is also important to be concerned with the quality and usability of the learning management system, as stated by Delen and Liew (2016). According to the authors, the self-regulatory strategies at online environments should recognize and meet the self-regulation levels of different students, as well stimulate the development of high skills, and provide

awareness about the learning management system functionalities. Only one student reported a better use of the learning management system, and the importance of the support offered inside the platform, but the other students do not experience the same, using the basic functionalities without knowing if the platforms could offer more and, in the worst case, even the procedure to directly communicate with the teachers is unknown.

And finally, it was indicated that the awareness of having recorded classes makes the students feel comfortable on procrastinating, which would have worse consequences in a presential modality because the students would miss the classes. Five students declared they procrastinate more in the online modality than in the presential one and believe that other students do the same exactly because of the flexibility offered and external factors as family issues or other distractions.

When questioned about what could be done to avoid procrastination in online learning, the participants postulated that:

- students should work on organization and deadlines (quoted twice);
- students should establish a routine and create habits;
- universities and teachers should offer more live activities and classes to motivate the students to join in real-time (quoted four times);
- students should avoid distractions;
- universities should care about developing more attractive courses to engage students;
- universities and teachers should provide more tasks during the topics' duration and not only a final assessment;
- teachers should follow up students' performance closely;
- courses should stimulate students' inputs because it is important for the learning progress.

All suggestions converge with previous theories that served as the basis for this study and were quoted during this analysis. It is interesting to notice that although experiencing something different from what was suggested, the participants can critically analyze the online learning environment, processes, and the participation of the stakeholders. However, in practical terms, none of them tried to make any movement in the direction of change, maybe because their focus is still very stuck on receiving a certificate in the end and not properly in experience deeply the learning process and developing metacognitive skills that would be useful in other fields of life.

3.2.6 *Self-regulation strategies*

The participants declared during the interview their difficulties to start performing a task and the usual decision to do it closer to deadlines. When questioned what motivates them to return to it and conclude, their answers were:

- the proximity of the deadline (quoted three times);
- the feeling that there is no other choice than do it;
- the feeling of knowing enough to conclude it;
- the fear of failure;
- the support of other students because of the sense of belonging.

It can be verified that what motivates the student are generally negative aspects and during the interviews, they also expressed additional feelings that come along with the processes of performing a task until the end, like anxiety, despair, fear, and loneliness.

Only one student answered that question including the experience acquired in the learning process (the knowledge acquired, and somehow a short self-evaluation for that). In general terms, the students reinforced previous answers by assuming being guided by deadlines and the simple wish to deliver the tasks and not exactly to develop themselves and improve knowledge and skills.

Finally, the students were invited to share their own self-regulation strategies applied to accomplish a task. Their answers could be resume as follows:

- student 1: write rehearsals related to the content, printed study schedule/calendar with classifications according to actions needed, forecast next classes to be superficially prepared for it, repetition technique to assimilate the content, moving on only when all doubts are clarified;
- student 2: book a period to only dedicate to studying and use of compensations to minimize the discomfort, checklist of tasks, and use of Pomodoro technique to manage time and establish small targets during a period;
- student 3: use of an agenda, write rehearsals related to the content, and work the mindset to understand things must be done even when she doesn't like it
- student 4: use of a study schedule and reminders;
- student 5: book a period to only dedicate to studying, use of an agenda, used the Pomodoro technique without success, use of browser extension for time management

and measurement of time spent on tasks, support of other students to clarify doubts and have the sense of belonging;

- student 6: put the mobile on airplane mode to avoid distraction, write rehearsals related to the content, use of post-it and mobile alarms as a reminder, use of fixation methods to assimilate the content, organize the materials and time, highlight the important parts of a text, use of app for daily targets, and checklist of tasks.

Having in mind the statements given by the participants during the interview processes, it is also possible to include on the list as general strategies:

- watch video classes/ recorded classes and review the content in different moments to clarify the doubts.

3.2.7 Other relevant information

Only one student informed there was no complementary information to add. The other participants highlighted:

- how positive is the learning management system and its tools in the university she is enrolled (student 1);
- the negative impact of a non-supporter teacher (student 2);
- the numerous possibilities online learning provides in terms of knowledge and the importance of optimizing the time (student 3);
- that online learning to be successful will depend on the life's moment of each student (student 5);
- the importance of commitment to obtain success in the online modality (student 6).

In general terms, this session did not bring a different content from the ones presented by students during the interview processes, however, the ones who decide to conclude demonstrated satisfaction in being able to collaborate with this study. One student during the interview also mentioned the impact of the interview on her conscience, because talking about the theme made her feel guilty about her procrastination.

3.3 Inferences regarding the research question

In chapter 1 was presented the study of Zimmerman and Martinez-Pons (1986) that investigated the use of 14 categories of self-regulated learning strategies (Table 1) in non-class

and classroom contexts through a qualitative method of interviews. Although their study was not directed to online learning environments specifically, the same categories were used in the present study as a guide for a comparison to the participants' self-regulated learning strategies posited during the interview blocks, in special at block 7. This comparison is demonstrated at Table 2 by identifying if students make use of the same self-regulated learning strategies.

Table 2

Comparison between this study's participants and Zimmerman and Martinez-Pons' study.

CATEGORY	SHORT DESCRIPTION	STUDENTS
(1) Self-evaluation	Students evaluate the quality or progress of their work	Student 3
(2) Organizing and transforming	Students rearrange instructional materials to improve learning	Students 1, 3, 6
(3) Goal-setting and planning	Students set educational goals and plan actions to accomplish them	Students 1, 2, 3, 4, 5 and 6
(4) Seeking information	Students' effort to search for additional information	Student 1
(5) Keeping records and monitoring	Students' effort to record events or results (notes, lists, and others)	Students 1, 3, 6
(6) Environmental structuring	Students arrange the physical environment to make learning easier	Student 6
(7) Self-consequences	Students' arrangements (real or imaginary) of reward or punishment for success or failure	-
(8) Rehearsing and memorizing	Students' effort to memorize materials by repetition	Student 1, 6
(9) Seeking social assistance – Peers	Students ask for help from peers	Student 5
(10) Seeking social assistance – Teachers	Students ask for help from teachers	-

(11) Seeking social assistance – Adults	Students ask for help from adults	-
(12) Reviewing records – Tests	Students review previous/ old tests to prepare for classes or assessments	-
(13) Reviewing records – Notes	Students review previous/ old notes to prepare for classes or assessments	Students 1, 2, 3, 4, 5 and 6
(14) Reviewing records – Textbooks	Students review textbooks to prepare for classes or assessments	Students 1, 2, 3, 4, 5 and 6
Other	Any behavior that indicates actions inducted by others, any unclear responses, or any response that could not be classified above	Students 2, 3, 5 and 6

In the category “other”, additional information could be collected regarding the students’ self-regulated learning strategies. Student 2 informed that she uses compensations to minimize the discomfort of performing the tasks with junk food. According to Steel (2007), task aversiveness can be reduced by a principle called “impulse pairing”, when an unpleasant situation can be neutralized by putting together another more interesting. In the case of student 2, the pleasure of eating junk food minimizes any uncomfortable feeling of performing tasks and she strategically associates both to be able to accomplish the tasks and meet the deadline.

Student 3 declared a self-convincement process to change her mindset to understand that tasks should be done even when she does not like them.

Students 5 and 6 reported the use of applications (apps) and browser extensions to manage the time and effort directed to accomplish tasks. Although part of it can also be classified in the category “goal-setting and planning”, I found it important to also include this in this additional category because it represents the use of other technical resources that were not available in the time of Zimmerman and Martinez-Pons’ study (1986).

There was no indication of students making arrangements (real or imaginary) of reward or punishment for success or failure, and because of that the category “self-consequences” stayed empty. Although the participants care about success and failure and will to accomplish

tasks, they do not create any type of association that indicates reward or punishment if one of the possibilities happens.

The same could be observed in the categories “social seeking – Teachers”, “social seeking – Adults”, and “reviewing records – Tests”. Regarding social seeking, the participants stated in different blocks of the interview that there is a lack of interaction and relationship with teachers in the online modality. It was also confirmed when they were asked exactly about seeking for external help. Most of the students informed they do not rely on other people’s help and only one student mentioned that ask for other students’ help when facing procrastination problems.

As mentioned previously in this analysis, students 1, 3, and 6 are the ones who presented more self-regulated learning strategies being applied. The way they deal with the daily routine in the online learning environment is different from the other students because they show a better overview of the process and can focus on the achievements. Zimmerman and Martinez-Pons (1986) conclude in their study that the students made good use of 13 of the 14 categories, failing on self-evaluation. Compared to the present study, although one student was classified as adopting a self-evaluating strategy, it can be related to cognitive strategies and not the metacognitive ones, because she can rehearse, elaborate and plan actions to execute the task, self-evaluate her learning progress for that, but fail on doing the same in a metacognitive way and considering the global learning path. In this sense, it is fair to say that the population of this study also failed in the same point – an argument that can be reinforced by the lack of worries about the learning processes and overall accomplishments, but only in delivering the tasks inside the deadline.

It was also possible to infer that in the current study the students made use of only 10 of the 14 categories. From the 10 categories identified, only 06 were more explored by the students, representing a lower range than Zimmerman and Martinez-Pons’ studies (1986). The authors also conclude that students were correctly classified into high- or low-level achievements according to their self-regulated strategies. The same principle could be noticed in the current study and although the structure of the interview did not intend to make any classification, the data collected reported that students 1, 3, and 6 are the ones using more self-regulated learning strategies and the ones that reported higher achievements.

Zimmerman and Martinez-Pons (1986) also verified that strategy consistency is more related to high achievement students, and it is possible to conclude that when the participants of this study realized in their learning path that strategies were needed and if they repeat them strategically, the results would become better, the principle of consistency applies. In their

speech the term “discipline” appeared in many situations, demonstrating that it is key and known by them. What is important to say is that the awareness of the consistency and discipline need does not make the accomplishment a high-level performance. It was possible to verify the effort of all students in performing better, but the concept of mastery requires high-level skills related to metacognition and none of the students demonstrated reached it yet.

Most of the students demonstrated they are incorporating procrastination as a common part of the learning process instead of developing skills to eliminate or mitigate it. Only one student declared she worries about procrastinating again in the future because this type of situation disturbs her a lot, but the rest of them said they only live the present and part of them verbalized knowing they will procrastinate again.

The data collected in these interviews confirmed what previous authors stated about procrastination and self-regulated learning strategies. It could be observed by the report of practical experiences that procrastination is indeed a failure in self-regulation strategies. The students have this perception even without studying the theories but declaring in different ways that something was missing to ability them to accomplish tasks more assertively.

3.4 Assumptions and possible outcomes

By analyzing and interpreting the data collected in the interviews it was possible to make inferences in order to identify possible causes of academic procrastination among the participants, patterns of procrastination and self-regulation strategies, patterns of failure, and possible outcomes and further studies.

The choice for an online modality by the participants was not completely conscious once not all aspects of this decision-making were considered. The students had in mind the immediate benefits provided by the modality that could fit their interest, as to keep working or time management, but did not reflect about its implications and about their abilities to manage the learning process on that modality. Their experiences reported along the interview showed an underestimation about what really means to study online, and it is especially aggravated by the fact the high-level skills into metacognition are not completely developed and part of the students’ profile.

The participants had difficulties dealing with the dichotomy “better x worse” related to the comparison between presential and online modalities. Although most of the students assumed procrastinating more in the online learning environment, they found it complicated to establish a ranking once the experiences in each modality are also very attached to the individual life moment, including motivation and expectations. It was also possible to identify

that the way each student feels about the topics (and its components, as teacher, methodology, and tasks, for example) influences the perception of the level of satisfaction with the course. In the same course, the students experience different feelings because of these variants.

All students in this sample were very concerned about deadlines and it is the major point that guides their actions in the online learning environment. It was also identified that students are motivated mostly by negative factors, as the proximity of the deadline, fear of failure, and lack of choice in performing a task. Added to that, additional feelings as anxiety, despair, fear, and loneliness were observed in their speech. The learning process itself seems to assume a place of less importance, reinforcing the lack of deeper self-evaluation on a more complex level. The students can apply better cognitive skills, in the sense of elaboration and planning, but struggle to achieve a high-level performance due to the lack of metacognitive skills development. The concept of metacognition can be considered an essential one when talking about self-regulated learning strategies. The literature suggests metacognition as the higher level of performance, combining not only organization, planning, and the ability to execute and deliver a task, but essentially going beyond and being also able to monitor, analyze and adjust the learning processes.

At Zimmerman and Martinez-Pons' study (1986) was not identified self-evaluation as an applied self-regulated learning strategy by students and, in the current study, the same could be observed. Students do not have the habit of analyzing critically their own performance to make improvements and, in the current study, it was noticed that there is also no external stimulus to that. The ways the programs are built do not take the importance of interaction and development into consideration.

Organization, discipline, and planning are examples of self-regulated learning strategies pointed by students as key for an online student, having these assumptions more related to their immediate tasks. It could not be observed any conscious movement having a long-term perspective in mind in the direction of high-level performance. In the same direction, the difficulties in dealing with these initial steps in the direction of trying to self-regulate cause a lot of stress, anxiety, and fear. There is an internalized consensus among the students that they are the only ones responsible for their learning progress and success. Most of them do not include the role of external stakeholders in this process, ignoring the responsibilities of the university and teachers, for example. One question to be asked is from where this idea comes from and if somehow this type of view has been spread by universities, teachers, or even society in a way to blame the students for everything that can go wrong.

Pintrich (2000) said that self-regulated students can proactively learn, set their own goals, and plan learning strategies. It was possible to identify students trying set goals and plan strategies for specific tasks assigned, but not in an overall learning concept. As well, I could not affirm that the students in this study are learning proactively because by their speech the impression is that they try to memorize the content that they can apply in tasks or assessments, but there is no self-evaluation about the learning progress and the official assessments from the university also cannot measure it qualitatively. It could be resumed on a mechanical process performed by both sides. This led me to question the concept of learning and it has been applied in our society. The way the tasks and assessments are built conditions the students to copy, memorize and meet deadlines, but this cannot be considered learning from a metacognitive perspective.

Previous experiences in online learning did not bring advantages to the students. Most of the group had prior experience and short-term courses and one student had experience in a long-term course in online modality, but it did not avoid them to experience difficulties to self-regulate as the new students on this modality. An immediate conclusion is that the educational system, in general, is not preparing students for a metacognitive perspective. The students coming from the presential modality do not have enough skills to self-regulate as well the ones with previous experience (short- or long-term) in online learning environments. There is no background built during the educational years before.

It was also verified that universities and teachers do not offer a diversity of tasks that could engage the students and develop high-performance skills. Students face boredom dealing with non-attractive tasks that they also cannot find added value. The tasks and evaluations are standardized and awaken on students only the wish to do or not, the worry about meeting or not the deadline, but not the engagement with the learning progress. The assessment and tasks solutions are literally inside the materials, making the students focus on finding them fast and copying to conclude. In this sense, there is no incentive to contributions and no challenges that can help them to improve their skills. This fact can be considered one of the main responsible for academic procrastination, where students try to avoid this discomfort by postponing and replacing tasks with other events that they consider more beneficial.

Another point observed was the few offers of activities before the final assessments. In many cases, there are no tasks, and it shows how the universities and teachers are not concerned with the learning progress of students. Added to that, the inputs and interactions are not stimulated what brings to students the feeling of loneliness in the process. The activities do not provide inputs for the development and there is no other type of feedback during the classes.

Most of the students attend to recorded classes, where there is no real contact with teachers and other students and where there is no chance of clarifying doubts or being somehow monitored in their development. The relations are artificial and distant, which also contributes to the difficulty of managing or developing learning strategies. It is important to have in mind at this stage that although it is not clear for the students that institutions and teachers have an important role in their development, the literature and practice show the opposite. The lack of investments in high-performance tasks shows a failure on the pedagogic structure of courses and it reveals a bigger contradiction when thinking about all needs students in online modalities may have by the only fact that they cannot count on the same type of support as the presential students. Universities are resorting to basic resources, possibly to fulfill only the mandatory requirements for the course to legally exist, but there are no concerns about promoting better practices that lead students to be classified as masteries – the ones with high-level of metacognitive skills.

From the sample, only one student (participant 6) could be identified as an active procrastinator, having in mind the positive perspective of the theme. She reported feeling better working on short deadlines and managing well tasks purposefully delayed optimizing her time. The same student presented the highest level of self-regulated learning strategies. However, it was not possible to infer in which level of metacognitive development that this participant could be classified, because of the gap in evaluations mechanisms provide in her course. The student herself had many criticisms about the course content, finding it too easy and with no added value, so it can also be that the active behavior in procrastination could not be sustained in a more challenging environment. In an opposite direction, the other students face difficulties, and the principle of immediate rewards applies to all of them. They avoid tasks that cannot provide an immediate benefit or good feeling, motivating themselves only with the proximity of the deadline and the wish of accomplishing the task – not because of the mastery feeling, but to get rid of it and, in the end, be able to receive their certificates of conclusion.

Additional emotions are experienced by students several times during their courses because after the relief and satisfaction of procrastinating a task, they realize they need to perform the task anyway in a shorter period. It causes stress and other bad feelings, including guilt, even knowing that the decision of procrastinating was personal. There is no emotional support coming from the university or teachers, contributing to the self-regulation failure. It was also possible to verify the lack of supervision from teachers related to the students' progress. The participants used the word "control" to express what they were missing or as suggestions of actions that could avoid procrastinating, and regarding that, I must point that high-performance students do not need control, but monitoring. The feeling of some students

about the necessity of control shows the failure on the follow up from teachers and on their self-regulated learning strategies. Without both, a student can't achieve greater levels of performance.

Another point that could be verified is the lack of knowledge about the functionalities of the LMS implemented in their courses. Some students even do not know how to contact the teachers. The platforms are being sub used and their importance underrated. The trends in Informatics Systems show the emergence of data analytics and all improvements it can bring to different fields, but neither universities, teachers nor students in this sample are making use of these mechanisms as an instrument of improvement.

Regarding the reflections made by the students during the interview process, it was interesting to perceive that they can define the ideal online learning environment, but do not fight for it in real life. They accept the impositions from the universities and courses structure, as well the weak relationships, lack of information and knowledge exchange, and unfamiliarity with learning strategies. It may be linked to their academic mindsets, built along the years in the presential modality with no indication of preparation for high-performance challenges and having a type o support that led to a dependence of having someone telling what and how to do things to conclude each school year. The freedom when they reached the university level, meaning the absence of this direct guidance, can of course culminate in strong difficulties in self-regulating. The proper use of some concepts as mastery and metacognition are not dominated by the students, and their definitions are misunderstood. Students understand as mastering a task by delivering it when the concept is much more complex and involves the metacognitive skills that they also do not have well developed. This gap makes the student not able to think critically against the educational system that they are inserted, and the universities benefit from that, making a profit with low investment in technologies, methodologies, and data analysis, for example, that could empower the students in their academic paths.

In comparison to Zimmerman and Martinez-Pons' analysis (1986) about the use of self-regulated learning strategies by students, the current study found similarity in concluding that students that are able to apply more categories are the ones that reach the higher levels of performance. Although Zimmerman and Martinez-Pons' studies (1986) were not focused on online education, the results led to the fair conclusion that the gap related to the development of metacognitive skills is present in both modalities but more intense in the online one. The number of categories applied by the population of this study was less than the students that joined Zimmerman and Martinez-Pons' research (1986). The literature reinforces that online education requires from students more regulation and it was possible to conclude in this study

that exists a gap in this process that leads to procrastination and self-regulation failure and all their consequences. It is also a fact that this failure does not come only from the students, but from a weak pedagogical structure that must be rethought urgently to be able to provide a path to the metacognitive and mastery's perspective.

Regarding the strategy consistency as a determinant factor to high academic achievements, as posited by Zimmerman and Martinez-Pons (1986), the current study could confirm this assumption by identifying that students that apply a larger number of self-regulated learning strategies considering frequency and quality of these strategies. High-performance students definitely use more self-regulated learning strategies, and it could be verified in this population, where students 1, 3, and 6 could be differentiated from the others by dealing better with the management of variants in online learning. Students 2, 4, and 5 could also reach results, but applying more effort and facing more negative emotions, like stress, anxiety, and frustration. With the correct support in a metacognitive perspective program, the results of all of them could be better, as their feelings along the process.

As further studies, it would be interesting to analyze the theme under the teacher and universities' perspective to verify their perception about the theme and how their implications are perceived as important stakeholders in the learning process. A comparison between presential and online modalities can be important to confirm if the failure on developing metacognitive and mastery students is indeed part of both systems as assumed in this current study. Rethinking the pedagogical structure is extremely important to build programs that can engage students in different ways, support their emotions and learning progress and stimulate the development of high-level performance skills.

CONCLUSION

This study aimed to collect and analyze qualitative data regarding procrastination and self-regulated learning strategies through the perspective of university students enrolled in online learning courses. Through a semi-structured interview, students were invited to think about the online modality, the impact of tasks in their behavior and emotions, academic procrastination, and self-regulated learning strategies. Their experiences and opinions were classified to compose the documental *corpus* that sustained this study and were analyzed to identify the participants' perception about procrastination and self-regulated learning strategies, determine patterns of behavior regarding procrastination, and how they develop strategies to self-regulate, as proposed by the research question. A secondary analysis aimed to confirm the possibility of relating this study analysis with Zimmerman and Martinez-Pons's studies (1986) by identifying the use of the fourteen self-regulated learning strategies proposed by the authors and by verifying if the current study would also show the strategy consistency as a determinant factor to high academic achievements.

Procrastination is indeed a situation that affects most students, and the participants demonstrated that they are naturalizing it as a normal part of the academic process. Most of them assume to procrastinate, although to express that loudly caused discomfort on all participants. It was demonstrated that all participants procrastinate at the start of a task and that the deadlines are the key factor to lead them to perform and conclude what is required. Most of the students procrastinate because they don't feel confident with their knowledge or because the tasks or topics are not interesting or do not add any important value in their lives. Instead of performing the tasks, the students postpone their start as maximum as possible to study more or to do more momentaneous beneficial activities. They assumed this is a conscious movement, however, they are not ready to deal with its consequences and when the deadlines are closer, different negative feelings emerge, like fear, despair, and guilt. Once more, the focus turns into the date to accomplish, and quality and learning are not prioritized.

The comprehension of a learning path and task mastering is a gap identified in all the interviews. There is a misunderstood mixed with a sense of urgency of getting rid of tasks that makes students believe that accomplishing activities inside a deadline makes them good students. Although the conclusion of a task determines a target being reached, when thinking in a complex perspective of metacognition, this fact represents only a small part of a bigger process related to learning. Students are not aware of this complexity and are focusing only on reaching the deadlines as it could be a synonym of high performance – when the literature

presented suggested the opposite. Students, to be classified in high-achievement levels should be able not only to execute a task, but also to plan, monitor, analyze and adjust the learning processes, as stated by Cho and Shen (2013) and Howell et al. (2006), for example, but the participants did not demonstrate that level of skills.

Regarding the self-regulated learning strategies, it demonstrated that students do not have these skills well developed and the conclusion is that this failure comes from previous stages of the academic path, when the participants were still in the presential modality, and that is reproduced also in the online one. The participants enrolled in online learning courses without understanding their own abilities to manage this type of study system. As the literature already assumes that a high level of self-regulation is required in online modality due to its particularities and lack of support that is generally offered in the presential ones, the students started the classes not prepared for the level of autonomy required. It creates immediate difficulties in managing the learning processes and leads to procrastination by representing a clear failure on self-regulated learning strategies. One relevant aspect of this finding is the lack of comprehension about the overall processes and stakeholders implied, turning the learning process in an online environment a lonely path where students have as truth that they are the only ones responsible for the academic failure or success. One question that remains and that can be further analyzed is at which moment students were led to believe that this gap is their own fault. It was observed the absence or lack of metacognitive skills clearly not acquired in previous stages of the academic life and this gap is highlighted in the online modality, where these skills are most required.

The self-regulated learning strategies developed and/or applied by the participants represent, in most of the cases in this study, very basic when considering the perspective of the metacognitive skills. These strategies are closer to cognitive aspects of organization and planning, but important skills related to metacognition, as analysis, monitoring, and adjustments, could not be observed. This route taken by the participants demonstrates that they are able and open to try to develop themselves, but face limits because the learning process is not an isolated process. The analysis of this study could identify a movement of spontaneous experiments performed by the participants on trying to develop self-regulated learning strategies by themselves, representing a type of trial-and-error process, and when succeeded, the strategies are assumed in future situations in a constant way. This assumption could reaffirm the findings from Zimmerman and Martinez-Pons's studies (1986) that showed strategy consistency as a determinant factor to high academic achievements because it was identified that the tentative of succeeding leads the participants to improve their self-regulated learnings

strategies even knowing they are very basic. It is possible to assume that with the correct attention and priority in developing high-level pedagogical programs it would be possible for the students to perform better and reach the metacognitive levels.

Comparing this study results to Zimmerman and Martinez-Pons's strategies categories (1986), it was identified a downgrade. While in the previous study the authors could identify the use of thirteen of fourteen possible strategies by students, the participants of the current one use only ten of them, having only six well explored. These numbers confirm the failure of self-regulated learning strategies and the constant incidents of procrastination. It was also possible to conclude that students that apply more self-regulated learning strategies with constancy perform the tasks in a more assertive way and with less negative emotional impacts. It was possible to reach this conclusion by identifying among the students the ones with more control of the learning process and with some indication of a progression from only cognitive skills to a beginning of the development of the metacognitive ones.

And finally, this study points to the urgency of rethinking the pedagogical structure, as well as the necessity of implying the other stakeholders in this process. Especially the institutions and teachers have an important role in creating study programs able to engage students and help in the development of their metacognitive skills, and it has been neglected on the daily basis. It was verified that the students start studying having this gap unsolved and try alone to mitigate the impacts and developing by attempting their own self-regulated learning strategies until they find one or more that fits them and help on managing the tasks. For many of them, this is a very difficult and exhausting process and none of them could count on emotional support during this path. It is fair to say that this is a very lonely journey for all of them, although they could not name it or even recognize that they are not the only ones responsible for the academic- and self-regulation failure. It was also possible to identify abstention of teachers and institutions on providing the minimum conditions to develop and improve metacognitive skills, and the superficial use of the learning management systems functionalities and data.

Procrastination and failure on self-regulated learning strategies are aspects presented in online learning, recognized by students, but underestimated by all stakeholders involved, especially the institutions, teachers, and students. The lack of knowledge of what are metacognitive skills and the absence of a coordinated action to develop them are leading to a normalization of procrastination and to a self-guilty assumed by students, when they recognize the gaps but exclude third parts from this process as active players. Metacognitive skills are the key factor of success in a learning path, and it was demonstrated that students in an online

learning environment not only do not have them developed but that this failure comes from weak pedagogical structures in the presential modality that are also not fixed in the online one. There is no effort of teachers and institutions to promote a supportive environment and to use diverse resources to develop the students' skills. To forecast high-level academic achievements, it is mandatory to look carefully at the pedagogical basis and develop a structure where all stakeholders understand their role in the process and where the metacognition concept is comprehended, endorsed, and developed.

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APPENDICES

Appendix 1

Interview guide

Blocks	Purpose	Topics and questions
Purpose explanation and consent confirmation	To explain to participants the reason of the interview, ethics assumptions, expected results and publication	<ul style="list-style-type: none"> • Context where the interview is located • Purpose of the interview and procedure • Ethics: confidentiality, anonymity, and access to results • Expected results • Publication
	To receive a verbal consent from each participant of the understanding of the purpose of the interview and data use	<ul style="list-style-type: none"> • After receiving the explanation about the interview purpose, procedure, and data collection, do you consent the record and use of the information from the interview for this study under confidentiality and anonymity?
Online learning modality	To identify what led them to online learning and collect some related information that can provide additional inference during the data analysis in comparison with previous theories	<ul style="list-style-type: none"> • Why are you studying in online modality? • Did you consider choosing another type of learning modality? • How is to study online? • Did you study online before that? • Comparing the presential and online education, what characteristics do you consider essential for a online student?

Academic tasks	To identify how students receive academic tasks and its impact on emotions and behavior	<ul style="list-style-type: none"> • What are the types of tasks that you must execute in your course? • When you receive an academic task, how do you feel? • What is your first concern when you receive an academic task? • What are your first measures when you receive an academic task? • How do you plan to finish the given task? • Knowing the receiving date and the deadline, when, in a timeline, do you start the execution of the task?
Academic Procrastination	To identify patterns of academic procrastination	<ul style="list-style-type: none"> • From the type of tasks, which one(s) you delay more to start executing or to conclude? • Why do you think you delay them? • Can you identify if you delay more to start or to conclude a task? • What type of tasks do you find easy and fast to start and conclude? Do you know why?

Perception of academic procrastination	To identify how students perceive the theme of academic procrastination and collect data that can be compared with previous theories about chronic procrastination and patterns of procrastination	<ul style="list-style-type: none"> • In your opinion, what is procrastination? • Would you define yourself as a procrastinator? • If you could define a percentage of academic tasks that you procrastinate, what would be the number? • Do you deliberately choose to procrastinate? Is it something that you consciously do or not? When do you realize that you are procrastinating? • When was the last time that you procrastinate an academic task? • Could you name the reasons that led you to procrastinate? • How do you feel when procrastinating? • What type of activities you do instead of working on academic tasks given?
Procrastination in online learning environment	To identify how students perceive procrastination in online learning environment, as well establish the patterns of self-regulation failures	<ul style="list-style-type: none"> • What happens in the learning environment that can lead students to procrastinate? • From the item described in the previous questions, which ones apply to you? • Do you procrastinate more in online learning environments in comparison to traditional models? • Do other students procrastinate follow this same tendency? • What can be done to avoid students' procrastination in online learning environment?

Self-regulation strategies	To identify the patterns of self-regulation strategies and the influence of external parts on that processes	<ul style="list-style-type: none"> • When you delayed a task, what stimulates you to return to action in direction of a conclusion? • What are the strategies used by you to conclude academic tasks that you previously delayed? • Do you involve other people on this process? Who and how? • Do you use any technological tool or resource to avoid procrastinating or to self-regulate to be able to start and conclude a given academic task? • Do you worry about delaying again in the future? Do you have any strategies to avoid it?
Other relevant information	To conclude the interview and give space to participants to include any information they consider relevant and was not questioned and thanks to the participation	<ul style="list-style-type: none"> • Is there any other information that came to your mind while we were talking about this theme? What? • Is there anything that you want to add? What? • Thank you for joining the interview and helping me with relevant information regarding your experience in online learning environment.

Appendix 2

Purpose explanation

The following text is included in the written consent and was read to all participants before the interview to obtain a confirmation of this consent.

“Thank you for your time. I would like to inform that this introduction is being recorded.

This interview is part of my master's thesis project in Education – E-learning and Distance Learning at the University of Lisbon. The theme of my dissertation is “How do students perceive and develop self-regulated learning strategies in online learning? A qualitative analysis about academic procrastination and self-regulation”, or in Portuguese, “Como os estudantes percebem e desenvolvem estratégias de autorregulação do aprendizado no ensino online? Uma análise qualitativa sobre procrastinação académica e autorregulação”.

The objective of this interview is to collect qualitative information from your perception of self-regulation and development of strategies, considering your experiences as a student in the online learning modality.

It is important to emphasize that this interview will need to be recorded so that the data can be reliably transcribed and analyzed. The entire interview will be confidential, being transcribed in a way to keep you anonymous and the information will only be used for the purposes of the master's thesis. There are no right or wrong answers, nor the need for prior knowledge on the topic for this interview, as I am looking forward to receiving detailed information about your experience in online education with a focus on self-regulation strategies. The recording will be made without image and only the sound will be extracted to highlight the content. The data from this interview will be analyzed together with other interviews carried out with the same purpose and the expectation is to be able to trace a pattern of self-regulation strategies and identify possible relationships with previous theories. The result will be explained in the final dissertation document to be delivered at the University of Lisbon, to which you will have free access.

Do you have any questions about this explanation?”

Appendix 3

Transcript of records – Interview with the Student 2

... – pausa, interrupção do discurso ou mudança de tópico

[...] – palavra/trecho incompreensível

(hipótese) – hipótese da palavra/trecho ouvido

[comentário] – comentários do transcritor

ENTREVISTADOR: Ok, vamos começar. De novo, obrigado pelo seu tempo, eu vou reforçar aqui essa introdução, ela está sendo gravada, esta entrevista é parte do meu projeto de dissertação do mestrado em educação, [...] formação à distância na Universidade de Lisboa. O tema da minha dissertação é “how the students perceive and self-regulating learning strategies in online learning. Qualitative analyses about academic procrastination and self reclusion”. Ou, em português, como os estudantes percebem e desenvolvem estratégias de autorregulação em aprendizagem no ensino online, uma análise qualitativa sobre procrastinação académica e autorregulação.

O objetivo dessa entrevista é recolher informações qualitativas oriundas da sua percepção sobre autorregulação e desenvolvimento de estratégias, levando em consideração as suas vivências na modalidade de ensino online. Importante ressaltar que essa entrevista precisará ser gravada para que os dados possam ser transcritos e analisados de forma fidedigna. Toda entrevista terá um caráter confidencial, sendo transcrita de modo a manter sigilo sobre a sua pessoa, e as informações serão usadas apenas para os fins da dissertação de mestrado, não existem respostas certas ou erradas, nenhuma necessidade de conhecimento prévio sobre o tema para esta entrevista. O que anseio é receber informações detalhadas sobre a sua experiência no ensino à distância, com foco nas estratégias de autorregulação. A gravação será sem imagem e terá extraído apenas o som que deve evidenciar o conteúdo. Os dados dessa entrevista serão analisados em conjunto com outras entrevistas realizadas com o mesmo propósito, a expectativa é poder traçar um padrão de estratégias de autorregulação e identificar possíveis relações com as teorias prévias. O resultado será explicitado em um documento final de dissertação a ser entregue na Universidade de Lisboa, ao qual você terá livre acesso.

Você tem alguma dúvida sobre essa explicação que eu lhe dei?

ESTUDANTE 2: Não.

ENTREVISTADOR: Ok. E após receber essas informações sobre o propósito da entrevista, procedimento, coleta de dados, você consente a gravação e o uso das informações para esse estudo, sobre [falas simultâneas] confidencialidade e anonimato?

ESTUDANTE 2: Sim.

ENTREVISTADOR: Ok, obrigada. Vamos começar então com a pergunta. Então primeiro eu quero só fazer algumas perguntas básicas só para fazer a caracterização. Qual é a sua nacionalidade?

ESTUDANTE 2: Brasileira.

ENTREVISTADOR: A língua nativa?

ESTUDANTE 2: Português.

ENTREVISTADOR: Quantos anos você tem?

ESTUDANTE 2: 26.

ENTREVISTADOR: Qual é o gênero, seu gênero?

ESTUDANTE 2: Feminino.

ENTREVISTADOR: Qual é o seu nível de estudos atual?

ESTUDANTE 2: Eu tenho... já sou formada, em letras, agora faço pedagogia, e estou fazendo mestrado.

ENTREVISTADOR: Ok. Qual é a modalidade de ensino, modalidade de estudos, você estuda totalmente online?

ESTUDANTE 2: Eu faço a formação em pedagogia totalmente online. E o meu mestrado também acabou sendo totalmente online por causa da pandemia.

ENTREVISTADOR: Qual é o idioma que você usa oficial na faculdade?

ESTUDANTE 2: Português.

ENTREVISTADOR: Ok. E por que você escolheu essa modalidade, por que você está estudando na modalidade online?

ESTUDANTE 2: Por conta que quando eu estava no Brasil eu trabalhava já, né? Então ficava um pouco difícil para mim, e também porque essa universidade, ela era gratuita, né? A primeira universidade EAD que era gratuita no Brasil, então aí ficava ideal para mim, né? Que eu não tinha que pagar e ainda conseguia conciliar com trabalho.

ENTREVISTADOR: Você na ocasião, você considerou escolher outro tipo de modalidade de ensino, ao invés de online presencial, ou essa sempre foi a sua primeira opção?

ESTUDANTE 2: Não, essa sempre foi a primeira opção por conta do trabalho também.

ENTREVISTADOR: Ok, e você já tinha estudado online antes?

ESTUDANTE 2: Já, eu fiz uma pós online, totalmente online também.

ENTREVISTADOR: Como que é estudar online?

ESTUDANTE 2: Ah, eu acredito que assim, em questão de conteúdo seja a mesma coisa que no presencial, né? Depende bastante do aluno, e o que eu acho vantajoso é que muitas vezes a gente consegue adequar na nossa possibilidade de horários, então por exemplo, na UNIVESP, que é onde eu faço faculdade, a única coisa que eu tenho horário fixo são as provas. Agora, de conteúdo eu posso ir acessando e estudando quando eu tenho horário, entendeu? As aulas são gravadas. E eu acho que isso ajuda bastante, porque em momentos bem conturbados, como agora minha mudança para cá, tudo mais, e aí eu consigo ir adequando isso, sei quando dá para separar um tempo de estudar, possibilita muito, e outras coisas que eu percebi também no mestrado que eu tenho feito que ficou online por conta da pandemia, é que favoreceu assim a uma maior quantidade de pessoas a participar do mestrado, ficou uma coisa eu acho que bem mais interessante, por exemplo, meu mestrado é do Brasil, mas eu tenho muitas pessoas da Angola, que assistem a mesma aula que eu, porque tem uma professora que ela vai, ela tem uma parceria com a universidade de lá, e ela vai várias vezes para lá, então aí como agora ficou no online ela colocou todo mundo para assistir a aula, e aí eu achei muito mais enriquecedor os comentários, também saber como funciona no país, como que é essa questão do ensino lá, ainda mais que eu estudo voltado para educação, né? Então achei muito interessante essa experiência.

ENTREVISTADOR: Legal. E se você pudesse comparar, comparando o ensino presencial e à distância, quais são as características que você considera essenciais para um aluno ter no ensino à distância?

ESTUDANTE 2: No ensino à distância, por mais que eu goste dessa questão de aula gravada para estudar, igual tem na UNIVESP, eu gosto dela por questão da viabilidade dos horários, mas sinceramente, quando a aula é assim, todo mundo no mesmo horário e está tendo aquela aula, né? Como se fosse ao vivo, eu acho mais vantajoso, né? Porque aí tem a interação mesmo dos alunos com os professores, né? E eu acho que isso é melhor para você poder tirar dúvida, eu acho mais acessível. E que... aí essa prática eu acredito que se aproxima mais do que aconteceria no presencial.

ENTREVISTADOR: E assim, o que você... que características que você tem hoje de comportamento, as habilidades, o que um aluno que estuda online precisa ter diferente de um aluno que estuda no presencial?

ESTUDANTE 2: Eu acho que precisa ter mais autonomia, para estudar, né? É uma questão assim de você começar a se acostumar, porque por exemplo, se for nessa questão de que não tem um horário, como é na minha faculdade, às vezes você vai deixando, deixando, e aí quando

you've already got the proof, sometimes you also lose the date of the proof, it can happen that you lose the dates of work delivery, so you need to create a habit of always accompanying everything that is happening, the dates, everything certain, and this question of having autonomy to study, to know how to organize more, right? Better. Everything like that.

ENTREVISTADOR: E quais são os tipos de atividades que você precisa executar no curso que você faz? Assim, trabalho, apresentação, enfim, que tipos de atividades.

ESTUDANTE 2: Não entendi.

ENTREVISTADOR: Os tipos de atividade assim que os professores passam para você, executar, durante o curso assim. Tem apresentar trabalhos, entregar resumos, o que tem de tarefa?

ESTUDANTE 2: Na faculdade, é mais... costumava ter um questionário, né? De alternativas, mais ou menos uma vez por semana em cada matéria, além disso a gente tinha uma outra matéria que chamava, por exemplo, projeto integrador, e aí nesse era um trabalho em conjunto que a gente tinha que escrever, por exemplo, se a gente tivesse tendo aula de gestão, a gente tinha que fazer alguma coisa, algum trabalho relacionado a gestão e montar aquilo para ter uma aplicabilidade na escola, né? E dissertar sobre aquilo. No trabalho. Era um trabalho em grupo. O que mais de trabalho? Ah, também tinha que ter a gravação de um vídeo, a gravação de um vídeo. Bom, também tem o estágio, né? Os estágios, aí tem que fazer os relatórios de estágio.

ENTREVISTADOR: Ok, e vamos pegar assim, entender alguns exemplos, assim, quando você recebe uma tarefa desse tipo, que você relatou, então por exemplo, né? Uma apresentação, ou entrega de um relatório, trabalho escrito, como que você se sente, assim, em termos de humor, emoção, quando você recebe esse tipo de tarefa?

ESTUDANTE 2: Se for aquela de... de assinalar, tudo bem, o humor continua o mesmo, mas sinceramente quando é essas assim de escrever em grupo, eu já não gosto muito não, essas coisas assim muito compartilhadas, escrever em grupo, fazer as coisas em grupo, que acaba não dando muito certo na minha opinião, porque já é à distância, né? Por mais que tenham os encontros, assim, eu acho que essa questão de escrita, vamos supor, um vai escrever introdução, o outro vai escrever desenvolvimento, o outro vai escrever conclusão, fica muito discrepante a escrita, eu acho.

ENTREVISTADOR: Ok. Quando você recebe a tarefa, assim que você recebe a tarefa, assim, qual é a sua primeira preocupação?

ESTUDANTE 2: É entregar, sinceramente. Conseguir entregar.

ENTREVISTADOR: E quais são as primeiras ações que você tem quando você recebe a tarefa? O que você faz primeiro?

ESTUDANTE 2: Bom, quando ela é em grupo eu tento primeiro entrar em contato com o meu grupo para a gente fazer a divisão da tarefa, agora quando sou só eu, né? Eu já tento me organizar para quando eu vou fazer aquilo, quando eu vou responder.

ENTREVISTADOR: E como é que você planeja isso para conseguir terminar a tarefa? Como que é o seu planejamento, em geral.

ESTUDANTE 2: Ah, eu vejo a data, né? De entrega, e vejo até aquela data quando eu vou conseguir executar a tarefa.

ENTREVISTADOR: E você sabendo a data, né? Enfim, vamos supor, você recebeu a tarefa, então você sabe a data, né? Que a tarefa chegou e você sabe a data que você precisa entregar. Em qual momento você inicia a execução dessa atividade, assim, inicia de forma imediata, você sabendo que seu prazo, você espera um pouco e inicia depois, você começa bem perto do prazo final?

ESTUDANTE 2: É que por exemplo, quando é um questionário, aí eu tenho que começar e terminar no mesmo... assim, não tenho como começar, parar e outro dia pegar para fazer, entendeu? Eu tenho que fazer de uma vez, então já reservo um momento para fazer aquilo, aquele questionário. Agora, quando é em grupo, aí a gente já começa antes, né? A gente começa a se organizar quando o horário de todo mundo bate para a gente às vezes fazer uma reunião no meet, separar as tarefas, aí cada um vai fazendo uma parte, vai enviando no Whats o arquivo, aí o outro, né? Vai continuando a partir dali, e no final a gente faz uma revisão, né? E a formatação final, envia no grupo de novo, e aí a gente encaminha para a faculdade.

ENTREVISTADOR: E quando você faz sozinha, quando é um trabalho assim de escrita, quando você faz sozinha, quando você inicia de forma imediata, ou mais para perto do prazo final?

ESTUDANTE 2: Então, é que de escrita sozinha na faculdade eu ainda não tive. Eu vou ter o TCC, né? Que vai começar. Não, eu tive o relatório de estágio, aí o relatório de estágio primeiro eu cumpri, né? O estágio, e durante o estágio eu fui fazendo anotações, né? Que é uma ficha que você anota data e descreve rapidamente o que você fez naquele dia, e aí depois daquilo eu... é, assim, durante o estágio também eu já fui colocando as características da escola, onde ela se localizava, e já fui desenvolvendo isso, no final eu deixei mais assim a conclusão do trabalho, algumas coisas que eu acho que poderia ser diferentes na escola, esse tipo de coisa.

ENTREVISTADOR: Entendi. E dos tipos de tarefas que você recebe para fazer, quais são os tipos que te fazem atrasar mais ou demorar para começar?

ESTUDANTE 2: Atrasar mais?

ENTREVISTADOR: É, ou concluir.

ESTUDANTE 2: Quando tem que escrever, nossa. Por exemplo, se tem que escrever projeto, no caso mestrado, tese, essas coisas, eu sempre enrolo mais, eu sinto uma dificuldade maior de sentar, começar a escrever, eu acho mais fácil assim quando é o questionário, quando é uma outra atividade de resenha, né? No caso do mestrado.

ENTREVISTADOR: E por que você acha que você adia esse início?

ESTUDANTE 2: Eu acho que é porque eu considero mais difícil, eu considero assim uma coisa que demanda mais pesquisa, mais estudo, mais cuidado, né? Mais... mais concentração. Eu acho que em relação ao questionário eu acho uma coisa bem mais tranquila, né? Uma coisa bem mais prática, agora se for pensar em relação também ao que aprende mais, com certeza seria essa questão da escrita, né? Porque aí me faz pesquisar mais, me faz concentrar mais, ficar lendo várias coisas para ver se tem alguma coisa que se encaixa ali, alguma coisa que faz sentido. Agora o questionário já não, o questionário já é uma coisa mais prática, mas ao mesmo tempo eu sinto que aprendo menos.

ENTREVISTADOR: E você consegue dizer se você adia mais o início ou a conclusão de uma atividade, se você demora mais para começar, mas depois que você começa você engata e termina, ou você começa rápido, mas tem uma dificuldade para concluir?

ESTUDANTE 2: Eu acho que eu tenho mais dificuldade para começar.

ENTREVISTADOR: Ok. E você, em relação assim, às tarefas que são mais fáceis para você iniciar e concluir, você falou do questionário e da resenha, né? Aí qual a sua... explicação, a esse tipo de tarefa, para você mais fácil.

ESTUDANTE 2: Qual a minha o quê?

ENTREVISTADOR: A sua explicação, a sua opinião. Por que você acha que é mais fácil para você trabalhar.

ESTUDANTE 2: Ah, eu acho que é uma coisa que eu preciso pesquisar menos, assim. É uma coisa mais metódica. Por exemplo, fazer a resenha de um texto, né? Vou fazer com os dados que já estão ali, não vou precisar muitas vezes recorrer a um outro material, procurar alguma outra informação, o questionário na maioria das vezes também é em relação ao conteúdo que a gente já teve, né? Então é só voltar, buscar naquilo lá, agora quando eu vou escrever, aí tem que, né? Pesquisar naqueles sites de busca, citação, ver qual teoria se encaixa naquilo que estou pensando em fazer, o que serviria de análise, eu acho bem mais complexo, bem mais complicado.

ENTREVISTADOR: Ok. E na sua opinião, o que é procrastinação? Quando você ouve falar assim, procrastinação. O que vem na sua cabeça?

ESTUDANTE 2: Ah, é quando eu demoro muito para fazer uma coisa. No caso, como estou tentando escrever, né? Eu estou escrevendo como se fosse um pré-projeto, né? Que eu dei uma adequada no projeto que eu escrevi para entrar no mestrado, e aí eu tinha na verdade para entregar até setembro, ela tinha me pedido para entregar até setembro, mas aí eu casei nesse tempo, mudei para cá e fui procrastinando, procrastinando, e ainda não entreguei, e não consigo ter vontade de sentar para escrever. Então assim, aí eu fico... eu me sinto assim que eu estou procrastinando isso, né? Eu tenho medo desse resultado.

ENTREVISTADOR: E você... essa vontade, assim. Como você disse, eu não sinto vontade de sentar para escrever. Você tende a iniciar esse movimento, você... por exemplo, você senta e você não consegue ou você não realmente nem para para fazer a tentativa?

ESTUDANTE 2: Nem paro para fazer a tentativa.

ENTREVISTADOR: Por que você ao invés de fazer isso, assim, que tipo de atividades você... que você executa no lugar? Assim, o que você faz ao invés de estar escrevendo o projeto, o que você faz em geral?

ESTUDANTE 2: Nossa, eu faço tudo. Eu passeio, eu assisto série, qualquer coisa, menos isso.

ENTREVISTADOR: Mas você se definiria como uma pessoa procrastinadora, assim, de modo geral, ou é algo mais específico?

ESTUDANTE 2: Não sei, eu acho que depende o momento também. Eu acho o que esse momento, esse ano ficou bem conturbado as coisas, mas eu também acho que eu sou sim de às vezes entregar na última hora. Em relação a entregar na última hora sim, eu sou.

ENTREVISTADOR: E em relação às tarefas, se você [...] de todas as tarefas acadêmicas que você recebe, né? Para poder fazer. Se você pudesse definir um percentual de procrastinação, né? Quantos por cento das tarefas geralmente eu procrastino, demoro para começar, demoro para concluir, qual seria esse percentual?

ESTUDANTE 2: Mas procrastinar seria entregar em cima da hora?

ENTREVISTADOR: Pode ser, assim, entregar em cima da hora pode ser assim, ter demorado para começar, e aí entregar bem perto do prazo, assim.

ESTUDANTE 2: Bom. Uns 75%, uns 80%.

ENTREVISTADOR: E essa escolha de entregar perto do prazo, de procrastinar algo, ela é assim, ela é feita de propósito, assim, é consciente, você tem consciência de que você está fazendo isso, ou é algo que quando você vê já aconteceu?

ESTUDANTE 2: Não, eu acho que eu tenho consciência sim. Eu tenho. Às vezes ainda falo assim, nossa, eu acho que eu funciono mais parece que sob pressão, né? Porque por exemplo, tinha aquele prazo de setembro para entregar esse pré-projeto, mas o prazo passou, a professora

não cobrou mais, e aí eu vim para cá, e eu falo com ela, e ela ainda não cobrou, então fica aquela coisa, né?

ENTREVISTADOR: E essa é a... esse projeto que você tá relatando, esse é, assim, é a tarefa mais recente que você procrastinou?

ESTUDANTE 2: Que eu procrastinei, sim, mas eu tenho outras que eu estou procrastinando.

ENTREVISTADOR: Também outras? Que tipo de atividades?

ESTUDANTE 2: Ah, eu tenho uma recentemente que é da faculdade mesmo, que é em grupo, que eu acho que é para ser entregue dia 30, amanhã. E eu ainda não fiz.

ENTREVISTADOR: E assim, em relação a motivo. Tem algum motivo que para você seja assim bem claro, bem aparente?

ESTUDANTE 2: Então, ultimamente é mesmo assim, como eu me mudei para cá, aconteceu muita coisa recentemente, parece que eu perdi um pouco o foco disso, sabe? Parece que outras coisas vem primeiro, por exemplo, aqui conseguir uma casa, agora conseguir os móveis, né? Colocar os móveis na casa, e aí isso acabou ficando. Até assim, em relação a tipo, a conhecer a cidade, né? Ir nos lugares, isso acabou ficando um pouco, né? Stand by.

ENTREVISTADOR: E hoje assim, se você pudesse dizer como você se sente em relação a isso. Então assim, você relatando que você tem a consciência de que você tá procrastinando as tarefas, por conta do momento e de ter outras prioridades, e como você se sente em relação a isso?

ESTUDANTE 2: Ah, eu me sinto meio mal. A minha consciência pesa, igual agora que eu olhei no computador, vi que era dia 29, tinha que entregar dia 30 e eu tinha esquecido, esse eu tinha esquecido mesmo, aí minha consciência pesa. Eu fico meio chateada.

ENTREVISTADOR: Em relação às atividades você já... seria uma outra pergunta, né? Que tipo de atividades você faz no lugar de executar a tarefa, já respondendo antes, né? Você disse que você faz tudo, e você deu os exemplos, né? De sair, de assistir série, ok. Quando a gente... assim, se você parar para pensar no ensino à distância, o que você acha que pode levar à procrastinação? O que leva os estudantes de modo geral, a sua percepção realmente. O que pode levar os estudantes a procrastinarem? Que tipo... o que acontece, né?

ESTUDANTE 2: Olha, não deveria ser por isso, mas eu acho que também porque às vezes, pelo menos a minha, né? Como não tem esse negócio do horário da aula em si, e ter as câmeras e tudo mais, no caso da faculdade, eu acho que aí você se sente menos também repreendido pelo professor, menos repreendido pelas pessoas, né? O que vai acontecer no máximo é você talvez reprovar ali, né? E tal. A minha como não é paga, não vou pagar mais por isso, agora, por exemplo, já na questão do mestrado, que tem as câmeras, eu também conheço os

professores, que é o mesmo lugar que eu fiz a minha primeira graduação, aí eu acho que já é um pouco mais... uma cobrança um pouco maior, né? Parece que assim, tem uma coisa assim de decepcionar, né? Então ah, aquela pessoa vai vir te falar que você fala, nossa, não fiz, não entreguei. Não sei, imagino isso. Não deveria ser isso, né? Mas eu acredito que isso pese também, essa questão de às vezes você ser repreendido, de alguém te chamar a atenção.

ENTREVISTADOR: Ok. E você acha que isso se aplica a você? Você acha que... como que eu posso te explicar, assim, você acaba procrastinando também por conta disso, dependendo da forma, a relação que você tem com os professores, ou da forma de cobrança, você... procrastina ou não?

ESTUDANTE 2: Sim, sim, eu acho que sim. Por exemplo, esse do projeto que eu tenho que entregar, na verdade assim, se ela me cobrar agora assim, eu vou ficar bastante chateada, né? É uma pessoa que eu conheço, eu fiz a graduação, conheci pessoalmente, também tenho reuniões online com ela. Só que assim, eu também tenho consciência de que o ano que vem eu não vou ter a matéria, então vou ter o ano todo só para fazer isso. Aí eu vejo como se ainda tivesse bastante tempo, na minha visão, mesmo que ela tenha pedido para entregar em setembro. Agora, em relação à UNIVESP, eu vejo muito mais assim, ah, se não entregar, tipo, posso talvez reprovar, vamos supor, naquela matéria, mas não vai ter alguém que vai vir falar. No caso, por exemplo, se for em grupo, ainda assim, né? Ainda tem o grupo, que aí a gente fica nossa, né? a gente precisa fazer e tal, vai prejudicar os outros.

ENTREVISTADOR: Entendi. E se você comparasse as vezes que você estudou de forma presencial, com a modalidade online, você acha que você procrastina mais no presencial ou no online?

ESTUDANTE 2: Olha, eu acredito que eu procrastine mais no online, por conta de não ver as pessoas também, né? Eu acredito que também estando no presencial às vezes a gente é obrigado a ir todos os dias, né? E dependendo do online, se for um online como a minha faculdade, eu não sou obrigada a acessar todos os dias, né? Eu acesso quando eu quero, quando dá, e aí acontece de às vezes perder data, não estar atento mais a tantas coisas assim, né? Não ter aquele hábito de pegar todos os dias, né?

ENTREVISTADOR: Ok. E você acha que os alunos de modo geral seguem esse tipo de tendência também? De procrastinar mais no online do que no presencial? Você tem relatos assim dos seus colegas? Como que funciona?

ESTUDANTE 2: Isso vale apenas para o ensino superior ou de modo geral?

ENTREVISTADOR: Não, de modo geral, no online, no...

ESTUDANTE 2: Olha, o que eu senti, por exemplo, eu estava dando aula no Brasil no ensino médio e fundamental, antes de vir para cá, é que assim, para a faixa etária do ensino médio e do fundamental parecia assim que não funcionava bem, entendeu? Mas talvez também seja pelo sistema que a escola adotou, porque no final, né? Com a pandemia e tudo mais, o que eles adotaram é assim, se o aluno entregou qualquer coisa que seja uma atividade no ano inteiro, a gente era obrigado a aprovar esse aluno. Então o aluno ficava muito confortável, a maior parte deles, para tipo assim, não fazer nada, e chega no final, entrega qualquer coisinha, mesmo que seja de uma matéria só, e vai ser aprovado.

ENTREVISTADOR: E pensando na... assim, no ensino superior, né? No teu mestrado, na [...] que você tá fazendo, o que você acha que pode evitar que um estudante procrastine? Que medidas podem existir, enfim, independente de qual parte, né? Mas o que pode acontecer para que isso possa ser evitado?

ESTUDANTE 2: Por parte do estudante, eu acho que pode haver uma... por exemplo, eu poderia me organizar melhor, antes eu tinha o hábito de ter um caderninho que eu anotava tudo que eu tinha que fazer e ia riscando, mas aqui não criei esse hábito. Eu acho que por parte do estudante ele pode se organizar melhor com os prazos, com as coisas que tem que entregar, e organizar um horário para ir fazendo aquilo todo dia, né? E criar esse hábito, uma rotina, não sinto que aqui eu ainda tenho uma rotina. E por parte dos professores, e da instituição, eu acredito que se tivesse essa coisa de tipo, por exemplo, na UNIVESP tem as matérias por semana, mas a gente não é obrigado a acessar. A gente pode acessar só perto da prova, por exemplo, se bem que tem um questionário para entregar toda semana, muitas vezes, tipo, ah, deixa para última hora e faz correndo, né? Então eu acho que se tivesse um horário, por exemplo, não, vai ter essa aula aqui ao vivo e vale presença, né? E aí você ter que entrar naquela hora lá com a aula, né? Como no mestrado acontece isso. Eu vejo como mais produtivo, né? Porque aí nossa, um comenta, gente, a gente tem que entregar isso, tem que entregar aquilo, e aquela coisa de todo dia já ajuda o aluno também a criar aquela rotina. Na minha opinião.

ENTREVISTADOR: E dessas opções, assim, de... você acha que isso se aplicaria a você também, assim, funcionaria para você também?

ESTUDANTE 2: Funcionaria, funcionaria, mas ao mesmo tempo também precisaria de um pouco mais da minha parte de criar esse hábito, de também me empenhar mais, de anotar tudo que tem que fazer, e cumprir as coisas, aliás foi muito bom a gente ter feito isso, me deu um peso na consciência muito [...], para começar a fazer as coisas.

ENTREVISTADOR: Vou te dar duas opções aqui agora, você já respondeu, mas eu preciso fazer a pergunta. Qual das duas opções que se aplica melhor a você. Para você é fácil começar

uma tarefa, mas tem dificuldades em terminá-la, ou você tem dificuldade para iniciar uma tarefa, mas depois que inicia tem facilidade para terminar.

ESTUDANTE 2: Eu tenho dificuldade... dependendo da tarefa, na maioria, eu demoro para iniciar. Eu demoro para iniciar, na maioria. Agora, também tem uma grande parte dela que eu consigo. Apesar de demoro para iniciar, mas depois que eu início, aí rapidinho eu faço. Que é, por exemplo, algumas coisas associadas à faculdade, por exemplo, esse trabalho que eu tenho para entregar amanhã, mas eu sei que quando eu iniciar ele hoje, eu vou conseguir terminar ele ainda hoje, mas agora tem coisas, por exemplo, esse de escrita, eu demoro para iniciar, mas por exemplo, ele, eu iniciei ele antes de vir para cá, mas assim, eu demorei muito para iniciar, aí quando eu iniciei eu escrevi um pouco, e tipo, depois eu nunca mais peguei, e demorei para voltar também. E agora não sei se quando eu voltar vou conseguir terminar logo ele.

ENTREVISTADOR: E como você...

ESTUDANTE 2: Acho que assim, eu acho que é mais esse começar mesmo que é difícil, e depois, tipo, que você ficou muito tempo sem mexer naquilo ter que retomar aquilo também, eu acho que depois que você começou, aí vai.

ENTREVISTADOR: E você... quando você... rompe o processo, né? Você demora para começar uma atividade, ou você interrompe, o que te estimula a retomar e concluir?

ESTUDANTE 2: O medo de não conseguir fazer. O medo de não conseguir fazer, o medo de não conseguir entregar, o pensar, nossa, eu comecei esse curso e não vou terminar ele, né? Porque eu tenho isso, de começar e terminar as coisas, mas, é, eu acho que é isso, sabe? Querer concluir.

ENTREVISTADOR: Que tipo de estratégia que você... você usa para, enfim, buscar concluir uma atividade? Assim, estratégia mesmo, o que você faz para conseguir chegar até o final e entregar.

ESTUDANTE 2: Por exemplo, esse que eu tenho que escrever e eu estou enrolando muito, eu fico pensando assim, nossa, nem sei se tem a ver, mas por exemplo, eu penso, ah, vou pegar um dia inteiro, que me ajuda mais quando eu pego um dia inteiro só para fazer isso. E aí, por exemplo, vou comprar um monte de comida e vou ficar o dia inteiro comendo e fazendo isso. Para mim é um estímulo. Pensar, ah, vou comprar um monte de porcaria e vou ficar fazendo isso o dia inteiro.

ENTREVISTADOR: E, quais são... não, espera aí. Quando você tá nessa situação de procrastinação, você envolve outras pessoas na busca por soluções? Você, enfim, você procrastina, é algo que fica com você, e você mesma tenta resolver a situação para concluir a tarefa em algum momento, você pede ajuda, pede auxílio, envolve outras pessoas?

ESTUDANTE 2: Olha, quando eu procrastino muito, como no caso, por exemplo, essa por exemplo que eu procrastinei hoje, tem um assim que eu resolvo, mas quando é uma coisa que eu demoro muito, como a escrita desse projeto, aí às vezes eu acabo buscando alguém. Por exemplo, eu tinha uma coorientadora, mas que ela aparecia bem de vez em quando, aí tipo, eu percebi que eu estava procrastinando muito também, porque eu estava com dificuldade de continuar a escrever, de ideia e tudo mais, aí eu fui mandar mensagem para ela, mas ela tá de licença e tal, então não vai ajudar. Mas é, às vezes sim. Eu recorro sim. A amigos também.

ENTREVISTADOR: De que forma você conta com os seus amigos para isso?

ESTUDANTE 2: Pelo WhatsApp, por exemplo, não especificamente nesse projeto, mas eu sempre estou assim, ah, o que tem que entregar, tem alguma coisa para essa semana, tem não sei o que.

ENTREVISTADOR: Entendi. E você usa algum recurso, ou ferramenta tecnológica para te auxiliar nesse processo de [...] procrastinar?

ESTUDANTE 2: Não. Eu já, eu como eu disse, eu costumava ter um caderninho que eu anotava tudo, né? Isso me ajudava muito, eu preciso voltar a criar esse hábito, porque aí eu adorava assim colocar ok no que eu já tinha feito, era o meu objetivo, mas outra coisa assim que também me ajudou numa época que eu também estava assim bem desmotivada, aquele aplicativo pomodoro lá, da técnica pomodoro, não sei se você já ouviu falar.

ENTREVISTADOR: Sim.

ESTUDANTE 2: Então, quando eu estava assim no último, sem vontade, aí eu aplicava aquilo lá, que aí eu me obrigava a fazer pelo menos por aqueles vinte minutinhos, descansava, vinte minutinhos.

ENTREVISTADOR: Você acha que funcionava de alguma forma?

ESTUDANTE 2: Ah, pelo menos eu me obrigava. Era melhor do que não fazer.

ENTREVISTADOR: Entendi. E você quando você... por exemplo, hoje, você tá relatando duas situações, né? Você focou mais agora no final, né? Enfim, do projeto que você tem que entregar, do trabalho que você tem que entregar, mas você... projeta assim, ah, se preocupa com possíveis procrastinações no futuro ou você tá focada naquilo que você precisa entregar.

ESTUDANTE 2: Não entendi.

ENTREVISTADOR: Se você se preocupa se você vai procrastinar de novo no futuro, se isso é uma preocupação para você ou não, se você sabe que você tá procrastinando hoje, se acontecer de novo no futuro pode ser, ou se algo que te preocupa. [...] de novo.

ESTUDANTE 2: Não, eu sei que eu vou fazer de novo, eu tenho essa consciência de que eu vou fazer de novo, mas não me preocupa, porque eu sempre consigo, no final sempre dá certo, né? Nunca aconteceu de ir ao extremo, não, foi, reprovou, e... né? Graças a Deus.

ENTREVISTADOR: Tem alguma coisa que eu não tenho te perguntado que você acha que seja importante pontuar ou enfim, algo que você queira falar sobre isso.

ESTUDANTE 2: Olha, eu acho que seria interessante, por exemplo, esse projeto que eu demoro muito para escrever e tal, tipo assim, a minha orientadora até se mostra acessível, né? A professora se mostra acessível, ela fala que a gente pode marcar reunião e tudo, né? Que ela tira dúvida, né? Ajuda e tal, mas por exemplo, eu tenho um receio enorme de marcar, porque eu gosto muito dela e tal, mas ela é muito... ela é muito, assim, grossa, sabe? Ela é muito de, aí, você não fez isso, e não sei o que, e como você não sabe fazer isso, como. Né? Tipo, às vezes eu pergunto alguma coisa, por exemplo, estava fazendo estágio com ela, e aí eu perguntei tipo, ah, Marinalva, pessoa, né? Quando... ah, tá escrito aqui que a aula vai ser sobre o texto x e o texto x tá no drive, mas eu já olhei meu drive e não estava. Tipo assim, se por acaso isso estava em algum outro lugar que eu deveria saber, mas eu não olhei, tipo, eu olhei se estava no meu drive, eu não sabia. Ela tipo, me ignora e responde sobre outra coisa. E ela fala, ela fala assim, ah, eu faço isso com eles para eles aprenderem, eu falo assim com os alunos para eles aprenderem, mas eu não acho que isso serve para a gente aprender, eu acho que isso cria uma barreira, sabe? Na minha opinião.

ENTREVISTADOR: Mais algum ponto que você acha que é importante ou... que tenha vindo à mente enquanto eu estava te perguntando as coisas?

ESTUDANTE 2: Não, é só isso.

ENTREVISTADOR: Ok. Então muito obrigada por ter participado da entrevista, e ter dado a sua perspectiva sobre o tema.