THE RELATIONSHIP BETWEEN SELF-CONCEPT DIMENSIONS AND PROCRASTINATION TENDENCIES IN STUDENTS

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The Relationship Between Self-Concept Dimensions and Procrastination Tendencies in Students

Final Thesis

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Table of Contents

1. INTRODUCTION

1.1 Self-concept

An example of a seemingly minor behavioural problem is procrastination, which results from various psychological causes that greatly affect the subject's functioning. Self-concept is also plays a significant role among those factors, as it reflects how individuals perceive themselves and their potential to acquire these goals. It is important that the connection between procrastination and self-concept is highlighted, to develop effective strategies for addressing procrastination and its negative consequences. The aim of this study is to examine the relationship between procrastination and self-concept.

Self-concept, the dynamic and multifaceted representation of one's beliefs, perceptions and attitudes about the self, play a crucial role in shaping our actions and overall well-being (Marsh & Shavelson, 1985; Baumeister, 1999). Key components of the self-concept include self-esteem, self-perception and self-efficacy, which, combined, influence a person's thoughts, emotions and behavior across diverse life domains (Bandura, 1997; Rosenberg, 1979). From the cognitive standpoint, it serves as a foundational cognitive structure which provides an organizational framework for processing of our self-relevant information (Markus & Wurf, 1987). This framework helps an individual make decisions, determine their goals and behave accordingly. Studies also show that positive self-images correlate with individual's happiness and mental stability (Harter, 1999). From the perspective of social sociology, self-concept is based on the different roles that cultural contexts, interpersonal relationships, and internalization of social norms and expectations play in an individual's life. (Mead, 1934). The most reliable psychological construct for describing behavior and life-long well-being of an individual is self-concept. Having been studied for decades, it is a well-known phenomenon that affects many aspects of our lives

(Baumeister, 1999). The intricate mental construct is nothing more than a mélange of multiple facets related to human instincts, including how humans perceive themselves and how others perceive them (Markus & Nurius, 1986). Given that many of them are universal human emotions, these feelings, it turns out, influence the mind and behavior in almost all human social aspects (Rosenberg, 1979). The study of self-concept is specific, because it gives us access to the person's intimate involvement with other social aspects of the environment that are essential in our comprehension of the forces that maintain a person's emotional health, development, and adjustment (Harter, 1999). However, a vast number of self-perception studies helped us realize the complex and variable nature of self-concept (Marsh & Shavelson, 1985). This area, therefore, demands further research, particularly in the mechanisms through which self-concept affects appearance and well-being across different cultures and climates (Harter, 1999). Starting from childhood, the development process of self-concept is multidimensional and complex and is affiliated with different family, peer, and universal value systems. The self-perception of the individuals during early childhood is highly impacted by the influence of feedback, expected progress, and role modeling that they receive from the primary caregivers (Marsh & Shavelson, 1985). Childhood experiences, like relationships, academic achievement and participating in team activities constitute a base upon which the self- concept is developed (Marsh & Shavelson, 1985). What happens to self-concept is also a lifetime process because the content of the self-concept could be shaped or moulded by the person's significant life events, comparisons made with peers and the internalization of accepted social standards and norms (Markus, Wurf, 1987). Self-concept is generally regarded as a rather stable phenomenon, but, at the same time, it possesses some degree of malleability due to the active, continuous responsiveness of an individual to diverging life situations and developmental challenges (Bandura, 1997). The interactional nature of one's self-image and multiple sources of influence on it is a crucial factor in

developing a better understanding of the mechanisms that regulate human behavior, well-being and psychological adaptation. Fundamentally, self-concept is composed of several interrelated components, which include self-esteem (one's fundamental estimation of worth), self-efficacy (believing ones' abilities), and self-perception (how one evaluates himself and his own traits, abilities, and behavior) (Marsh & Shavelson, 1985). These elements work cooperatively to shape one's self-image and their thinking, feelings and behavior across a variety of life spheres (Bandura, 1997). Theoretical perspectives on the self-concept cover the cognitive, affective, and sociological viewpoints. The cognitive theoretical approach describes the role of self-knowledge, self-evaluation, and self-schemas in orientation of one's behavior (Markus & Wurf, 1987), the affective model describes emotional foundations of the notion of self, for instance self-worth and self-acceptance (Mead, 1934). All together, these theoretical foundations appear to depict the multidimensional character of the self-concept and its considerable influence efficiently and comprehensively on the thoughts, feelings and behaviors of the individual (Baumeister, 1999). On the other hand, there are also three prominent theoretical perspectives that explain the intricate relationship between self-concept and behavior: self-determination, self-efficacy theory, and symbolic interactionism. These frameworks create a balanced view and act as a strong foundation for grasping the versatile nature of self-concept and its implication for psychological functioning of individuals. Self-determination theory, proposed by Deci and Ryan in 1985, says that the three fundamental psychological needs of humans - autonomy, competence, and relatedness - must be met for the person to gain a positive and self-motivated self-concept. It has been pointed out how the social environment guides self-concept development and at the same time, it can be the root of either desirable or deviant behavior dependent on the needs that are fulfilled or hindered. Bandura's (1977) self-efficacy theory, however, focuses on the importance of someone's confidence in their skills, which influences one's motivation, efforts and dedication when the

challenges occur, it also plays a crucial role in shaping a person's overall self-esteem. People with a high level of self-efficacy would be more active and persistent when they aim at a specific goal which can contribute to the formation of a better perception of themselves and an enriched well-being (Bandura,1997). Lastly, symbolic interactionism emphasizes the social and the interconnected aspects of self-perception. According to this view, the self-concept of the person is constructed from internalizing other people's perceptions as well from their conception of the social interactions that lead to a multifaceted and dynamic self-concept. (Mead, 1934).

1.2 The Multidimensional Nature of Self-Concept

Self-concept is a multidimensional and complex phenomenon, which represents a conglomerate of different facets of an individual's perception of himself or herself. It can be understood through a four-dimensional framework, with the physical self-concept as the core, which includes the perception of one's physical features, appearance, and bodily functions (Marsh & Shavelson, 1985). Also, the social self-concept comes next having to do with perception of an individual about his/her interpersonal skills, relationships, and social network. Thus, the academic self-construct is concerned with an individual's ideas regarding their intellectual capabilities and achievements in class contexts (Marsh & Shavelson 1985). Indeed, the emotional self-concept represents the individual's emotional perception of their emotional states, regulation and wellbeing. Such multidimensional nature of the self-concept leads to the overall self-perception of an individual that is composed of various thought, emotion and behavior domains. The self-perception is thus greatly influenced by the specific self-oriented characteristics. The intrinsic tie between self-concept and psychological well-being is one of the most significant research areas in psychology. How a person feels about himself and how he assesses himself, is the central component in the formation of the mental health and well-being of an individual. Research has shown a considerable amount of

evidence linking positive and constructive self-concept to various parameters of psychological well-being, including life satisfaction, self-esteem, and emotional regulation (Baumeister, 1999; Marsh and Craven 2006). In contrast, individuals with mental health disorders such as depression and anxiety tend to have distorted and negative self-concepts which inevitably contribute to and aggravate the continuation of their symptoms (Beck, 1967). The role of self-concept in people's existence has been realized and clinicians and researchers have created a range of interventions that are aimed at increasing the level of self-concept as a means of improving the mental outcomes of an individual. (Beck, 1967)

1.3 Procrastination

Procrastination involves delaying responsibilities, decisions, or tasks that need to be done. In addition to the delay inherent in this phenomenon, procrastination is accompanied by an internal, subjective discomfort usually thought to be anxiety (Rothblum, et al., 1986; Solomon & Rothblum, 1984). This discomfort differentiates procrastination from postponing a certain activity for a later time. Procrastination refers to an unnecessary and deliberate delay of tasks that a person intends to complete, regardless of their awareness of the potential negative consequences of such action. This delay of tasks often occurs due to a number of factors such as lack of motivation, inability to control one’s impulses or tendency to prioritize short-term pleasure over long-term goals that may add up to a lack of focus in achieving the tasks the person is expected to do (Steel, 2007). The study of procrastination among students is particularly important because this population often faces unique pressures related to academic performance and deadlines. Students frequently struggle with balancing their academic responsibilities with personal life, leading to heightened levels of stress and procrastination. Research has shown that procrastination negatively impacts academic success and is correlated with lower self-esteem, increased anxiety, and decreased motivation, all of which can exacerbate procrastination tendencies (Ferrari et al., 1995; Steel, 2007).

"A major difficulty in studying, understanding, and treating procrastination may involve variations in its subjective definitions" (Ferrari et al., 1995, p5). In other words, Ferrari and colleagues noted that procrastination does not have the same definition recognized by all; it includes several definitions, which may vary. Moreover, procrastination is the practice applied to comprehend various forms of detention. Some of the researchers have proposed that it only refers to the pathological form of delay (Steel, 2007), while the others have included the constructive forms of delay under this term (e.g., active procrastination; Chu & Choi, 2005). Therefore, there is little chance of establishing strong theory, sound assessment tools and efficient applications when people do not possess a defined notion of procrastination. This will provide a clear direction of whether procrastination has entirely negative effects or if it falls under the dysfunction as well as the functional type (Chu & Choi, 2005). Klingsieck (2013) used these seven aspects to form the basis for defining procrastination:

1. An overt or covert act is delayed (e.g., Ferrari, 1998).

2. The start or completion of this act is intended (e.g., Lay & Schouwenburg, 1993).

3. The act is necessary or of personal importance (e.g., Lay, 1986).

4. The delay is voluntary and not imposed by external factors (e.g., Milgram et al., 1998).

5. The delay is unnecessary or irrational (e.g., Lay, 1986; Steel, 2007, 2010).

6. The delay occurs despite awareness of its potential negative consequences (e.g., Steel, 2007).

7. The delay is accompanied by subjective discomfort (e.g., Ferrari, 1998; Solomon & Rothblum, 1984) or other negative outcomes (e.g., Simpson & Pychyl, 2009).

The first three aspects refer to a certain activity in question, while others relate to the nature of the delay. Both procrastination and strategic delay (i.e., a functional form of delay) have the common first four aspects. The first two aspects define delay which is present in both phenomena. For simple delay to be considered procrastination or strategic delay, the intended act must be necessary or personally important, and most importantly, the delay must be voluntary. The main difference between procrastination and strategic delay is the very nature of the delay that is being made. Procrastination entails delayed, pointless, or destructive action or behaviour. Despite the possibility of clearly perceiving the negative impacts of strategic delay, it's carried out with conviction that the positive effects can offset the impairments. However, here negative consequences are observed or there is a subjective feeling of discomfort linked to procrastination. This distinction adds clarity to the discussion of the functional or dysfunctional nature of procrastination (Chu & Choi, 2005; Pychyl, 2012). Studies that deal with functional aspects of procrastination (e.g., Chu & Choi, 2005; Schraw et al., 2007) actually refer to strategic delay. It is because procrastination is dysfunctional, it implies an unnecessary delay with negative consequences exceeding the positive consequences of the delay. With this in mind, there is no such thing as procrastination, in the functional sense of the word, but there is a functional form of delay. However, the appraisal as to whether delay is procrastination or not still depends on individual internal norms and attributions of delay (Milgram & Tenne, 2000; van Eerde, 2000). In support of the seven aspects of procrastination, research has shown that behavioral procrastination (overt acts) can be differentiated from decisional procrastination (covert acts; e.g., Milgram & Tenne, 2000), that the intention-action gap is the core of the procrastination phenomenon (Lay, 1986; Steel, 2007), that individuals feel they procrastinate if they delay necessary or important acts (e.g., Schraw et al., 2007), that the act of procrastination is deliberate (Ferrari, 2010), that the delay in procrastination is indeed irrational ([e]; e.g.,

Ferrari, Barnes, & Steel, 2009), that procrastinators are aware of the potential negative consequences of the delay (e.g., Wohl et al. 2010), and that procrastination is accompanied by negative consequences (e.g., Tice & Baumeister, 1997; van Eerde, 2003).

Procrastination is a common and, at times, serious problem (Burka & Yuen, 1983), internal consequences may include irritation, regret, despair, and self-blame (Burka & Yuen, 1983). External consequences may be costly and can include impaired academic and work progress, lost opportunities, and strained relationships (Burka & Yuen, 1983). For example, researchers who have studied academic procrastination have found that as many as 50% of undergraduates report a tendency to procrastinate on assignments (Solomon & Rothblum, 1984). Furthermore, procrastination may be a significant negative predictor of college grade point average (Wesley, 1994). Doctoral student procrastination may result in failure to finish dissertations (Muszynski & Akamatsu, 1991). Procrastination with respect to scholarly writing may put new faculty members at risk of job loss (Boice, 1989). As a universal trait of humans and a timeless issue in multiple realms of our lives, chronic procrastination, as a pervasive phenomenon affecting individuals across diverse contexts, poses a significant challenge in contemporary society. Nowadays, there is no doubt that procrastination appears in our modern society in many aspects and influences people regardless of their age, origin, and class. Studies show that procrastination is widespread, with the figures varying from country to country, for instance, the arousal procrastination (delaying tasks to seek the thrill of finishing them under pressure) is 11.5% and avoidant procrastination (delaying tasks due to fear of failure or anxiety) 9.9% in Western countries (Ferrari, 2005). In academic settings, procrastination manifests as students defer studying for exams, struggle to complete assignments, or start up their own research projects (Ferrari et al, 1995). This tendency which may be cause by perfectionism or fear of not succeeding is so inhibiting that academic performance is jeopardized and one’s intellectual growth is impeded (Steel, 2007).

Psychological factors also play a pivotal role in shaping procrastination tendencies, with evaluation anxiety, task repulsiveness, and low self-efficacy emerging as key correlates of procrastination behavior (Abbasi, 2015). These factors intersect with individual discrepancies and environmental stressors in order to create a complex mix of procrastination dynamics, highlighting the multifaceted nature of this phenomenon. The impact of procrastination further extends beyond individual behaviors, exerting the influence on societal structures and interpersonal relationships. Research suggests that certain demographic factors, such as educational accomplishments and marital status, may be associated with an increase in procrastination levels, with individuals who are divorced, separated, or widowed, as well as those with lower levels of education, exhibiting higher levels of procrastination (Harriott & Ferrari, 1996). Procrastination, the failure, or delay, in approaching or performing certain activities that require completion, is a widely researched behavioral phenomenon. It entails the postponement of responsibilities, commitments or tasks and leads to the creation of large time gaps for all commitments and provokes internal tension experienced as anxiety (Rozental & Carlbing, 2014; Sirois, 2014). Procrastination differs from the mere act of delaying tasks as such a decision is accompanied by this sort of uneasiness. Other research indicates that procrastination remains a high occurrence, indicating a prevalence rate of 15-20% in the generalized population (Harriott & Ferrari, 1996; Steel, 2010). In academic contexts, the problem is especially acute; around 70% of university students admit to procrastination, 50% of them do it consistently and problematically (Hen & Goroshit, 2018; Kim & Seo, 2015). Wäschle et al. (2014) as well as Klingsieck (2013) have pointed out that procrastination is not limited to the academic context, and it is a severe phenomenon in the workplace that can lead to failed deadlines, reduction of productivity and, consequently, negative effects on one’s career. Procrastination is not limited to academic and work environments but rather seeps into the general life and interferes with goal completion, which

results to frustration, anxiety and low sense of accomplishment (Sirois, 2014; Steel & Klingsieck, 2016). Such behavior creates a cycle in which the distance between the goal and performance increases, impairing opportunities to have a purposeful and fulfilling life (van Eerde, 2015).

1.4 Multifaceted Approach to Procrastination

Procrastination should be considered far more than just deferring from something, because it not only includes the cognitive, emotional and social responses but also their interconnections. It is not limited to a plain postponement of actions which includes a wide range of behaviors such as coping, avoidance, decision-making that is irrational. This multifaceted phenomenon cannot be fully encompassed with a single conception, opening a door for the development of a multi-dimensional and interdisciplinary practice. In psychology, procrastination is studied through the lens of individual differences, motivational theories, and cognitive processes. Steel (2007) and research since, delve into the psychological basis of procrastination, unravelling its association with certain traits, such as impulsivity, perfectionism and self-regulation. This psychological lens illuminates the interplay of motivation, emotion and cognition in procrastination behavior. From the perspective of sociology, procrastination intertwines with cultural norms, social structures, and interpersonal dynamics to form an intricate pattern of conduct. Milgram and Tenne (2000) shed light on the social dimensions of procrastination, emphasizing its involvement with social comparison, peer pressure, and societal expectations. Withing this framework, procrastination emerges not merely as an individual idiosyncrasy but as a product of socialization processes and normative pressures. From an economic standpoint, procrastination challenges traditional models of rational decision-making, exposing the vulnerability of human self-control and temporal discounting. Ariely and Wertenbroh (2002) examine the economic implications that highlight the conflict between immediate satisfaction

and long-term objectives. When individuals give in to present bias, they unintentionally favor instant gratification over future goals, leading to a pattern of procrastination and less-than-ideal results. Procrastination remains a relatively poorly understood phenomenon, despite these negative effects. According to McCown (1986), behaviorists believe that procrastination is a learned habit developing from a human preference for pleasurable activities and short-term rewards. In contrast, the psychodynamic view of procrastination is defying against overly demanding parents, or as means of denying one's unconscious fear of death. Several cognitive variables have been proposed as predictors of procrastination, including irrational beliefs (Beswick et al., 1988; Solomon & Rothblum, 1984), attribution style (Rothblum et al., 1986), beliefs about time (Lay, 1988; Lay & Schouwenberg, 1993), self-esteem (Beswick et al., 1988), optimism (Lay, 1988), and self-handicapping strategies (Ferrari, 1992). This interdisciplinary exploration unveils procrastination as a multifaceted phenomenon that delves into everyday human life. By synthesizing insights from psychology, sociology and behavioral economics, we gain a nuanced understanding of procrastination's drivers, consequences, and societal implications. Such a comprehensive perspective paves the way for holistic interventions and strategies aimed unravelling the complexities of procrastination and fostering personal and collective well-being.

1.6 The Relationship Between Procrastination and Self-Concept

Procrastination is connected with one's self-narrative or self-identity, as the behaviour is capable of influencing an individual's perception of their self and their worth. The level of perceived control is a mediator of the association between self-concept and procrastination. Low self-esteem can lead to poor self-image which decreases perceived control, thereby making an individual feel helpless to perform certain tasks. This reduced level of control may lead to procrastination since an individual has no confidence in their ability to succeed in doing the task (Ferrari et al., 1995, Schraw Wadkins & Olafson 2007). This may be attributed

to fear of failure or the desire to avoid the demolishment of one's fragile ego in the event of executing a complex process (Burka & Yuen, 1983; Steel, 2007). On the other hand, those possessing more positive and open self-concept are better able to manage their tasks and responsibilities since procrastination has a lesser effect on them (Bandura, 1997). Procrastination and self-concept are thus reciprocal and interacting, meaning that while an individuals' self-view influences his/her ability to providentially and purposefully avert or delay pertinent tasks, their ability in turn, alters the self-view (Ferrari, 2010). Habits such as procrastination have previously been posited to carry a plethora of consequences concerning an individual's self-schema. From a psychological point of view procrastination is a profound cognitive phenomenon, which reflects a person's self-perception aspect of self-concept. Scientific evidence has however indicated that procrastination correlates with other aspects of self-concept such as self-esteem and self-efficacy (Ferrari at al., 1995; Steel, 2007). Awareness of these mutual interactions is a positive requirement, because it illustrates that it is not sufficient to target only such cognitive behavioral components of procrastination that comprise goal prioritization and time management skills in order to modify the person's self-organization scripts and enhance their quality of life. It has been established that there is a multifaceted relationship between an individual's self-views and the frequency of procrastination. On one hand, a negative self-attitude defined by low self-esteem and self-doubts, feelings of inadequacy and insignificance, thus can uphold procrastination as a protective strategy that helps avoid further harm to one's self-image (Ferrari et al., 1995; Steel, 2007). Those who hold an unstable negative outlook of oneself are likely to procrastinate because the feelings of failure due to not meeting a self or expected other's standard would be too overwhelming. On the other hand, procrastination also serves as a vice regarding the negative effects on time-related self- conceptual patterns, including shame, guilt and perceived self-efficacy; all resulting from pile up of uncompleted tasks and owing of

deadlines (Burka & Yuen, 1983; Tice & Baumeister, 1997). This means that the relationship between procrastination and self-concept creates a cycle that only produces more of it since the two are so strongly related which makes it hard to break.

1.7 Self-Concept, Self-Efficacy, and Academic Procrastination

Previous literature pointed out the concerns regarding the self-concept and self-efficacy of an individual that determine his/her inclinations towards academic procrastination. Previous research revealed that students with higher levels of academic self-concept (i.e. having more confidence and a positive perception of their own competence and academic abilities) and higher level of self-efficacy put lesser time in procrastination as they believe in abilities and relevance of tasks in question (Haycock et al. 1998; Milgram & Tenne, 2000). On the other hand, the students with low academic self- concept and self- efficacy tend to procrastinate more mainly because of fear of failure, anxiety or because they feel they are not capable of performing a task as expected (Haycock et al., 1998; Steel, 2007). That is why focusing on the increase in the level of students' self-concept and self-efficacy is proven to be efficient in decreasing the level of problematic procrastination by enabling students to be more confident and motivated concerning academic tasks (Rozental & Carlbring, 2014). With this, the student's sense of capability and competence is boosted and educators /counselors assist the student counter act procrastination and subsequently enhancing academic achievement. People with low self-esteem or a negative self-perception might easily delay tasks that they consider complicated or avoid important tasks for fear of displaying ineptitude. On the other hand, increasing the self-identification through positive self-esteem activities and the extent of self-efficiency-based measures has been reported to decrease procrastination behaviors (Sirois and Pychyl, 2013). The negative impacts of procrastination in the academic settings can be remedied if educators and academic advisors incorporate intervention strategies that have an aim of boosting the self- concept of a student, for instance

feedback giving and offering of opportunities to receive adequate mentorship. The focus should remain on strengthening student's sense of competence and self-regulation to try reducing their procrastination, and ultimately improve their academic performance.

In the present study, a relationship between procrastination and self-concept has been aimed to be investigated but with particular emphasis to the pathway that lower self-concept individuals are more likely to procrastinate. Since this research focuses on several dimensions of self-concept, this includes aspects like autonomy or emotional adjustment, it should be possible to find out which of these parts have the strongest associations with procrastination and thus help to extend the existing knowledge regarding the psychological processes defining such behaviors.

1.8 Aim, problems and hypothesis

Study aim: The primary aim of this study is to investigate the relationship between procrastination and self-concept, specifically focusing on whether individuals who exhibit higher levels of procrastination tend to have a lower self-concept.

Problem: To examine the correlation between procrastination and self-concept, specifically analyzing whether there is an association between high levels of procrastination and lower self-concept. Additionally, this study aims to investigate the various dimensions of self-concept (i.e. Self-fulfilment, Autonomy, Emotional Adjustment and Honesty) and determine whether certain aspects of the self-concept have a stronger correlation with procrastination than others.

Hypothesis: There is a significant negative correlation between procrastination and self-concept.

2. METHODS

2.1 Participants

The research involved 156 undergraduate and graduate students in Croatia. The sample consisted of 49 men (31.4%), 106 women (67.9%) and 4 people not wanting to state their gender (2.6%). The age of the participants ranges from nineteen to twenty-nine years old (*M*= 21.6, *SD*=1.75). The students were recruited through a convenience sampling method, utilizing social media and email for sharing the questionnaire link. Further participants were recruited using the snowball method, or the initial participants sharing the survey with other students within their network.

2.3 Measures

2.3.1 General Procrastination Scale (Lay, 1986)

The General Procrastination Scale (Lay, 1986) is one of the most often utilized instruments measuring the level of procrastination in different spheres of life. The scale is comprised of 20 items that describe five different types of procrastination behaviours and attitudes. The items include statements such as "*Some of the tasks I do I have been planning to do for days*," "*I wait until the last minute when I have a deadline*". All the items are scored on a 5-point Likert scale with options ranging between completely disagree and completely agree. In order to obtain the total procrastination score, the results are added up with the positively framed items being inversely scored, thus, higher total scores indicate higher inclination towards procrastination. In the original study that used the scale, the reliability test was presented by internal consistency coefficient (Cronbach's alpha) with a value of . 82, indicating good reliability. The version used in this thesis was translated to Croatian and

reverse translated with the mentor in order to check for the quality of translation. Some examples of questions include:

7. “Čak i s poslovima koji zahtijevaju gotovo ništa više od sjedenja i obavljanja, primjećujem da često prođe nekoliko dana prije nego što ih obavim”, which translates to: “Even with jobs that require little else except sitting down and doing them, I find they seldom get done for days.”

14. “Obično započnem zadatak ubrzo nakon što mi je dodijeljen”, which translates to: “I usually start an assignment shortly after it is assigned”,

2.3.2 Personal Self-Concept Scale (Goñi et al., 2011)

The Personal Self-Concept Scale (PSCS, Goñi et al., 2011) is a questionnaire designed to measure an individual's level of self-concept. It includes 22 items which describe general self-concept dimension, self-concept in an academic setting, and in relation to peers, encompassing a way of thinking about oneself as being highly or favourably regarded by peers. It also encompasses an individual’s overall evaluation of existing family structure and a way of thinking about oneself in relation to handling different emotions. The questions are divided into four subscales, the first being self-fulfilment (SF), 6 items: how each person perceives themselves concerning the goals they have set themselves in their life, feeling fulfilled, meeting their targets, rising to challenges and achieving them, (e.g., “*I am satisfied with what I am achieving in my life*”). Honesty (HON), 5 items: how each person sees themselves in being honest, upright and trustworthy in their behavior. It includes elements such as being a valuable, honorable and consistent person who tries not to harm others; a man or woman of their word, (e.g., “I am a trustworthy person”). Autonomy (AU), 5 items: how each person sees themselves as an individual separate, but similar to others. This includes

aspects such as: the idea of perceiving one as capable and unique individual, special from others, not being dominated by others and the ability to operate independently without help, (e.g., "*I find it difficult to take decisions on my own*"). Emotional adjustment (ESC), 6 items: how each person sees themselves in the impulsive and reactive aspects of their personality. This includes the perception of emotional balance, sensitivity, recognition and control of one's emotions, (e.g., "*I know how to look after myself so as not to suffer*"). All the items are measured using a 5-point Likert-type scale ranging from 1- (*strongly disagree*) to 5- (*strongly agree*). Negatively stated items were reverse coded before the calculation of the total scores. Total scores were calculated separately for each subscale, as well as the total of all items, by summing the responses on all relevant items, with higher scores indicating a stronger and more positive self-concept in a specific domain. In the study conducted by Goñi et al. (2011) , the estimates of internal consistency were Cronbach's alpha coefficients for the subscales were . 85, demonstrating satisfactory reliability. Similar to the General Procrastination Scale, this was also translated to Croatian and reverse translated with the mentor in order to check for the quality of translation. Some examples of questions include:

7. "Smatram se vrlo napetom i razdražljivom osobom", which translates to: "I consider myself to be a very uptight and highly strung person."

"14. Prilikom donošenja odluke previše ovisim o tuđim mišljenjima.", which translates to: "When taking a decision, I depend too much on other people's opinions."

2.4 Procedure

All research procedures were approved by the Ethics committee of The Faculty of Humanities and Social Sciences in Split (approval number 2181-190-24-00019). Data were collected using an online survey constructed in the Google Forms application and links to the

survey were shared (over social media and email). The participants were informed about the purpose of the research, that the research was entirely anonymous and voluntary, with no risks involved. They could skip the questions and withdraw at any time without consequences. For further information and questions, contact details were provided, followed by a message stating that by clicking "NEXT", they confirmed they had read and understood the study details, and agreed to participate voluntarily. In the first part of the survey, participants stated their sociodemographic information (age and sex) and in the second part they filled out both the General Procrastination Scale (Lay, 1986) and the Personal Self-Concept Scale (Goñi et al., 2011). The questions from both surveys were translated from English to Croatian and reverse translated with a mentor in order to determine the quality of the translation. The beginning of the data collection procedure was on 3rd of May 2024, ending with 8th of July 2024. The data was then transferred from Google Forms to an Excel sheet, which was sent to Jamovi, the programme used to conduct the statistical analysis of the data.

3. RESULTS

The statistical analysis was done based on the data of the 156 participants which completed the questionnaire. The descriptive statistics for the main variables of interest, including the Total procrastination score (SUMPRO), Total self-concept score (SUMSC), and its subscales (Self-fulfilment (SF), Autonomy (AU), Emotional Adjustment (ESC), Honesty (HON)), are presented in Table 1. To ensure the assumptions for Pearson's correlation and Spearman's rho were met, homogeneity of variances was tested using Levene's test across the main variables of interest, including total procrastination scores (SUMPRO), total self-concept scores (SUMSC), and their respective subscales (SF, AU, ESC, HON). The results of these tests are summarized in Table 4. Levene's test results indicated that the assumption of homogeneity of variances was satisfied for total procrastination scores, Autonomy, and Honesty. Specifically, Levene's test for Total procrastination scores yielded a statistic of 0.999 ($p = 0.371$), suggesting that the variances were not significantly different. Similarly, for the AU (Autonomy) and HON (Honesty) subscales, Levene's test statistics were 2.934 ($p = 0.056$) and 2.018 ($p = 0.136$), respectively, further supporting the assumption of homogeneity. The Kolmogorov-Smirnov test was conducted to test normality for each variable. The results indicated that most variables followed a normal distribution, including total procrastination scores ($p=0.524$), total self-concept scores ($p= 0.746$), Autonomy ($p= 0.208$) and Emotional Adjustment ($p=0.310$), except for the Self-fulfilment ($p = 0.043$) and Honesty ($p = 0.003$) subscales, which were observed to deviate from normality. Given these results, Spearman's rho was employed to explore relationships between the variables, except for the correlation involving Autonomy (AU), where Pearson's correlation was used due to the variable meeting the criteria for correlation. Furthermore, the Spearman's rho was conducted (Table 5), which revealed significant negative relationships between procrastination and self-concept total score and subscales. There was a moderate negative correlation between Total procrastination

score and Total self-concept score (rho = -0.323, $p < 0.001$), indicating that higher procrastination is associated with lower self-concept, while also indicating that lower levels of self-concept have a relation with higher procrastination. A similar moderate negative correlation was observed between Total procrastination score and the Self-fulfilment subscale SF (rho = -0.374, $p < 0.001$). The Emotional Adjustment subscale (ESC) was negatively correlated with procrastination as well, but the relationship was weaker (rho = -0.185, $p = 0.010$), also a weak negative correlation between total Procrastination and Honesty (rho = -0.151, $p = 0.030$), suggesting that lower honesty-related self-concept is associated with higher procrastination tendencies. Furthermore, the Autonomy subscale (AU) also showed a weak negative correlation with procrastination, with Pearson's r for the same correlation being -0.208 ($p = 0.005$) confirming the negative association between procrastination and autonomy (Table 3) Overall, these results indicate that higher levels of procrastination are consistently associated with lower levels of self-concept across multiple dimensions, with the most substantial relationships observed in the Self-fulfilment and Autonomy subscales, conversely lower self-concept levels across these dimensions may also contribute to higher procrastination.

Table 1, Descriptive statistics for Age, Sex, Procrastination (SUMPRO), Self-concept (SUMSC), and its four subscales Self-fulfilment (SF), Autonomy (AU), Emotional Adjustment (ESC) and Honesty (HON)

	Age	Sex	SUMPRO	SUMSC	SF	AU	ESC	HON
N	156	156	156	156	156	156	156	156
Missing	0	0	0	0	0	0	0	0
Mean	21.6		58.3	81.3	22.2	18.0	19.4	21.6
Median	21.0		59.0	81.5	23.0	18.0	19.0	22.0
Standard deviation	1.75		13.8	12.1	4.74	4.17	4.56	2.73
Variance	3.05		190	146	22.5	17.4	20.8	7.43
IQR	1.00	.	17.0	16.3	6.00	5.00	6.00	4.00
Range	10		64.0	72.0	24.0	18.0	23.0	11.0
Minimum	19		23.0	36.0	6.00	7.00	7.00	14.0
Maximum	29		87.0	108	30.0	25.0	30.0	25.0
Skewness	1.13		-0.301	-0.479	-0.934	-0.378	0.111	-0.570
Std. error skewness	0.194		0.194	0.194	0.194	0.194	0.194	0.194

Table 2, Test of normality for Procrastination (SUMPRO), Self-concept (SUMSC), Self-fulfilment (SF), Autonomy (AU), Emotional Adjustment (ESC) and Honesty (HON)

		statistic	p
SUMPRO	Kolmogorov-Smirnov	0.0651	0.524
SUMSC	Kolmogorov-Smirnov	0.0544	0.746
SF	Kolmogorov-Smirnov	0.1109	0.043
AU	Kolmogorov-Smirnov	0.0852	0.208
ESC	Kolmogorov-Smirnov	0.0772	0.310
HON	Kolmogorov-Smirnov	0.1430	0.003

Table 3, Correlation between the results for Procrastination (SUMPRO) and Autonomy (AU) (Pearson's correlation)

		SUMPRO	
AU	Pearson's r	-0.208	**
	df	154	
	p-value	0.005	
	95% CI Upper	-0.078	
	95% CI Lower	-1.000	

Note. H_a is negative correlation

Note. * p < .05, ** p < .01, *** p < .001, one-tailed

Table 4, Homogeneity of Variances Test for Procrastination (SUMPRO), Self-concept (SUMSC), Self-fulfilment (SF), Autonomy (AU), Emotional Adjustment (ESC) and Honesty (HON) (Levene test)

		Statistic	df	df2	p
SUMPRO	Levene's	0.999	2	153	0.371
SUMSC	Levene's	11.454	2	153	< .001
SF	Levene's	3.370	2	153	0.037
AU	Levene's	2.934	2	153	0.056
ESC	Levene's	10.650	2	153	< .001
HON	Levene's	2.018	2	153	0.136

Table 5, Correlation Matrix between the Procrastination result (SUMPRO) and the results for Self-concept (SUMSC), Self-fulfilment (SF), Emotional Adjustment (ESC) and Honesty (HON) (Spearman's rho)

		SUMPRO	
SUMSC	Spearman's rho	-0.323	***
	df	154	
	p-value	< .001	
SF	Spearman's rho	-0.374	***
	df	154	
	p-value	< .001	
ESC	Spearman's rho	-0.185	*
	df	154	
	p-value	0.010	
HON	Spearman's rho	-0.151	*
	df	154	
	p-value	0.030	
AU	Spearman's rho	-0.243	**
	df	154	
	p-value	0.001	

Note. H_a is negative correlation

Note. * p < .05, ** p < .01, *** p < .001, one-tailed

4. DISCUSSION

4.1 Discussion of the results

The results of the present research offer important information on the correlation between procrastination and self-concept, proving the existence of a negative connection between higher procrastination scores and diminished self-concept on all the measured aspects. The high negative correlations obtained between the total procrastination sum and the total self-concept sum as well as its subscales indicate that students who procrastinate more tend to have lower self-esteem and self-concept across different areas of their life. The biggest correlation was with Self-fulfilment subscale, being negative and having a large strength. This finding suggest that a higher frequency of procrastination behavior is associated with lower levels of self-fulfilment, potentially due to perceived lack of progress or accomplishment in personal and professional aspects of life. Likewise, the large negative association of procrastination with the Autonomy subscale provide evidence of the effects of procrastination on perceived autonomy. This implies that the higher the level of procrastination, the subjects may feel less masterful about their lives, and less able to self-manage or self-act, which in turn may lead to higher levels of procrastination- related behaviors. The confidence interval for this relation further increases the reliability of this discovery implying the negative relationship between procrastination and autonomy. The findings regarding the negative correlations with Emotional Adjustment subscale, as well as Honesty subscale imply in fact that procrastination is associated with problems in emotional regulation and a lower level of honesty/integrity. For instance, Van Eerde (2003) in his study established that due to chronic procrastination, students suffer from guilt, anxiety and stress which infringe upon their self-concept. In the process of developing procrastination as a behavioral pattern, people might start perceiving themselves as helpless or undeserving of better things which in turn cements such behaviours and self-images into place. When people

delay working, they end up working so hard close to submission time and this results to poor work quality and declined self-esteem levels. This pressure can also worsen feelings of self-criticism as procrastinators feel that they are not meeting own or others' expectations, which lead to reduced self-perception. From the theoretical stance, these findings enrich the knowledge of the motivational and self-regulative nature of the procrastination by highlighting its connection to self-concept and motivation, suggesting that lower self-concept correlates with reduced self-regulation and motivation, which could lead to an increase in procrastination. Dykman (1998) does not only define procrastination as the absence of a plan and decision making but also as a set of behaviors the main feature of which is the deliberate conscious act of delay. The negative relationship with self-concept indicates that procrastination can greatly affect persons and their ideas about themselves. This goes well with the argument that procrastination is not just a time management problem, but a psychological one that affects the perception that people have over themselves. In particular, the study by Rozental and Carlbring (2014), investigates the possibility of solving the problem of procrastination through the use of cognitive-behavioural therapy. The CBT is implemented by identifying modifying automatic thoughts that are irrational or negative and behavior patterns that are unhealthy. Enhancing standard CBT approaches with elements that address self-concept directly, like self-compassion training, as well as cultivation of a growth mindset, could strengthen these programs. This way, with a better personal image, one might not have to worry about procrastination as it might improve their resilience to it. Furthermore, Sirois and Kitner (2015) showed that restructuring treatment can help decrease procrastination which in turn originates from restructuring treatments that contain changes of the thoughts and organization of the time. These interventions could benefit from the inclusion of factors that encourages assertive and optimism and these include affirmations, goal setting, and positive visualizations. An important thing to note is that this research is

correlational in nature, while it identifies relationships between procrastination and self-concept, it does not establish the causality between the two. The associations in this study are interpreted through theoretical frameworks that often suggest cause-and-effect dynamics. However, it is important to acknowledge that other theories might propose different explanations or directions of these relationships, which may also hold validity. Although this study has similar findings to the established literature, it has several limitations which should be considered. Using self-report questionnaires to measure procrastination and self-concept makes the potential of response bias and individual interpretation producers of invalidity. Immersive, real-world future research using collection methods might incorporate behavioural observation; or diary studies; or longitudinal data collections paradigms instead to elucidate these constructs. Consequently, longitudinal research could map the changes in procrastination and self-concept processes concurrently and in context, and map how the two variables interact with temporary states, including stress or motivation, and stable states, such as anxiety or depression. Thus, observing individuals in various stages of development, it would be possible to identify whether this kind of relationship can be supported, developed or weakened by life phases, or certain important events. Despite the benefits of having a narrow target population, the study's participants, predominantly students from Croatian universities, may reduce the extent to which the results can be generalized. It is imperative that the population is better represented in future studies to determine whether these patterns also exist in other segments of the population. It is very important to study the temporal relations between the variables under consideration, namely, procrastination and self-concept (Ferrari, 2010). This way, researchers can establish the dynamics of these two constructs, show how one causes or affects the other and over what time period it occurs. A longitudinal design, therefore, would make it possible to establish the causal relationship between the two variables, i.e. does procrastination cause self-concept to change, or does self-concept cause

procrastination to change. It could also show how life development or some other key transitional phases like when one starts a career or takes up new responsibilities enhances or minimizes procrastination and its impact on the individuals' self-concept. In the context of understanding how change management processes are carried out to the optimum, such research studies would prove to be most beneficial and helpful in formulating better programmes. Finally, the analysis of any other variable that may be either a mediator or a moderator between procrastination and self-concept would prove to provide a more comprehensive understanding of the relationship between the two (Haycock et al. 1998; Milgram & Tenne, 2000; Steel, 2007). For instance, variables such as stress, time management skills or fear of failure could potentially serve as mediators, with their respective negative aspects having an effect on a person's level of procrastination. On the other hand, social support, personality traits (e.g. high conscientiousness) or perfectionism could act as moderator variables, influencing the strength or the direction of the relationship between procrastination and self-concept. Together, these directions for future research aim at enhancing the theoretical and practical understanding of the subject.

The findings of this study suggest that interventions which focus on improving academic self-concept, i.e. personalized feedback, structured goal setting, could be effective in mitigating procrastination. In educational settings, where procrastination is prevalent among students, interventions could focus on fostering a growth mindset and promoting self-efficacy beliefs (Sirois & Pychyl, 2013). Emphasizing the importance of early task initiation and providing structured support for goal setting and monitoring could help mitigate procrastination tendencies and enhance students' self-concept. Implementing regular feedback and encouragement, setting realistic and achievable goals and fostering a supportive learning environment can significantly enhance students' self-concept. Educators hold a critical role in addressing the endemic issue of procrastination by fostering positive self-concept among

their students. Interventions that aim to boost self-efficacy, self-worth, and self-confidence can be instrumental in mitigating the debilitating effects of procrastination. For instance, providing regular feedback and encouragement, setting achievable goals, and creating supportive learning or work environments can empower individuals to overcome their tendencies to delay important tasks. Nurturing a sense of competence and mastery not only enhances academic and professional performance, but also equips people with the motivation and resilience to pursue their long-term objectives. Increasing people's healthy self-concept is important within education and business because by helping people build up a healthy self-concept for themselves, they are helping those people become the best that they can be, and therefore in turn increasing the chances of success within their life. As it has been stated before, one of the most crucial factors determining efficient adjustment in one's work and life is the self-concept; hence, it is essential to predict and prevent things that influence the positive self-image negatively, such as procrastination. Because the connection between procrastination and self-concept has been discovered to be tremendously well developed, it becomes increasingly important to look for effective ways of dealing with this issue. When it comes to changing the thinking processes, they could avoid negative thoughts and, therefore, the development of positive self-images which is effective for combating procrastination (Rozental & Carlbing, 2014). It is also possible to use mindfulness-based tools because they stimulate the client's current focus and do not allow them shift to such strategies as procrastinating, which helps to further regulate and control oneself (Sirois & Tosti, 2012). Furthermore, by incorporating time management training into development programs, the students can be provided with essential skills to organize their work and manage their schedule more effectively. (Grunschel et al., 2013). In school and work environments it is essential to understand this association and use it to develop specific interventions and policies. Teaching practices can be adopted that increase students' self-confidence of their

abilities, help embracing challenges, and guide on study and work habits. Through the management of the relationship between the two concepts, these comprehensive interventions can help transform people's lives, and let them achieve their goals on their own.

5. CONCLUSION

In conclusion, this study highlights a significant negative correlation between procrastination and self-concept, indicating that students with lower self-concept are more likely to engage in procrastination. This suggests that procrastination is not just a result of inefficient time utilization but has a potential link to an individual's self-concept. The results show the importance of making interventions designed to decrease procrastination behaviors while improving the self-concept. Conversely, interventions that focus on enhancing self-concept may also be effective in reducing procrastination. Effective interventions might comprise of cognitive-behavioral methods, reflective practices, and informative sessions which embrace self- competence and growth mindset. Lastly, by dealing with the question of procrastination through the scope of self-concept, it is possible to make people become better selves, to provide them with better sense of self-worth, and to contribute to the their academic performance and overall well-being.

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6. ABSTRACT

6.1 Abstract in English

The aim of this study was to investigate the relationship between procrastination and self-concept, specifically focusing on whether individuals who exhibit higher levels of procrastination tend to have a lower self-concept. A total of 156 participants, comprising undergraduate and graduate students, completed the General Procrastination Scale and the Personal Self-Concept Scale. The findings revealed a significant inverse relationship between procrastination and self-concept, indicating that students who procrastinate more tend to report lower overall self-concept. The strongest negative correlation emerged between procrastination and self-fulfillment, suggesting that frequent procrastination is associated with diminished feelings of personal achievement and fulfillment. Furthermore, procrastination was negatively correlated with autonomy, emotional adjustment, and honesty, implying that students who procrastinate also experience reduced autonomy, emotional regulation, and integrity in self-perception. These results underscore the multifaceted impact of procrastination, suggesting it influences not only task management but also fundamental aspects of one's self-image. While the study offers valuable insights into the psychological dimensions of procrastination, its findings are limited by the sample's demographic homogeneity, pointing to the need for future studies with more varied populations.

Key words: procrastination, self-concept, self-fulfillment, autonomy, emotional adjustment, integrity, academic procrastination, psychological well-being

6.2 Sažetak na hrvatskom

Cilj ove studije bio je istražiti odnos između odgađanja i samopoimanja, s posebnim naglaskom na to hoće li pojedinci koji pokazuju više razine odgađanja imati niže samopoimanje. Ukupno 156 sudionika, koji su uključivali preddiplomske i diplomske studente, ispunilo je Skalu općeg odgađanja i Skalu osobnog samopoimanja. Nalazi su otkrili značajnu obrnuto proporcionalnu povezanost između odgađanja i samopouzdanja, što ukazuje na to da studenti koji češće odgađaju izvještavaju o nižem ukupnom samopoimanju. Najjača negativna korelacija uočena je između odgađanja i samostvarivanja, što sugerira da je česta praksa odgađanja povezana s smanjenim osjećajem osobnog postignuća i ispunjenja. Nadalje, odgađanje je negativno korelirano s autonomijom, emocionalnim prilagođavanjem i iskrenošću, što implicira da studenti koji odgađaju također doživljavaju smanjenu

autonomiju, regulaciju emocija i integritet u percepciji sebe. Ovi rezultati naglašavaju višestruki utjecaj odgađanja, sugerirajući da ono utječe ne samo na upravljanje zadacima, već i na temeljne aspekte slike o sebi. Iako studija pruža vrijedne uvide u psihološke dimenzije odgađanja, njeni nalazi su ograničeni demografskom homogenosti uzorka, što upućuje na potrebu za budućim istraživanjima s raznovrsnijim populacijama.

Ključne riječi: odgađanje, samopoimanje, samostvarenje, autonomija, emocionalno prilagođavanje, integritet, akademsko odgađanje, psihološka dobrobit

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