

Effect of Procrastination on Emotional Health of Young Adults

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Abstract — Procrastination is an intended individual act of delaying stressful or unpleasant tasks and replacing them with less important ones. While procrastination is widely practiced by everyone occasionally, there is a fine line between casual procrastination and chronic procrastination, the latter of which can significantly harm the overall quality of life. Chronic procrastination affects the holistic aspects of young adults including social, physical, psychological and emotional wellbeing. The paper gives insight to various theories contributing to the cause of procrastination, types and stages of procrastination along with the emphasis on how procrastination affects behavioral, cognitive and physiological health of the young adults as a result of disruption in emotional health.

Keywords — *Procrastination, mental health, emotional health, young adult*

I. Introduction

Background of the study

Procrastination is an intended individual act of delaying stressful or unpleasant tasks and replacing them with less important ones. The word procrastination is derived from the Latin word *pro* (meaning “forwarding”) and *crastinus* (meaning “of tomorrow”) which means putting off the work to future time. The American Heritage Dictionary of the English Language (Fourth Edition) defines procrastination as “to put off doing something, especially out of habitual carelessness or laziness; to postpone or delay needlessly” (Foroux.D)

Although procrastination is considered as a common human tendency and people practice it on a regular basis, not all people can be considered as procrastinators. Joseph Ferrari, A psychology professor at DePaul University suggested with his studies, about 20 percent of people practice chronic procrastination. (Jaffe, 2013) (2018)

The practice of procrastination affects various dimensions of young adults i.e. physical and psychological health, social life, relationships, self-esteem and efficacy, productivity, work and achievements etc. Emotional health being one of the essential elements for determination of physical and mental health is impacted substantially. As emotional health consists of both emotional intelligence and emotion regulation, practice of procrastination can cause turbulence in these aspects impacting overall being. (M, 2023) (Johansson, 2023)

Young adults go through a variety of physical, social, psychological, and environmental changes as they transition from adolescence to adulthood. What they might not understand is how procrastination affects their ability to accomplish their developmental tasks. The study focuses on the effect of procrastination on various aspects of health, along with the various suggestive theories and types.

LITERATURE REVIEW

The word procrastination is derived from the Latin word *pro* (meaning “forwarding”) and *crastinus* (meaning “of tomorrow”) which means putting off the work to future time. The American Heritage Dictionary of the English Language (Fourth Edition) defines procrastination as “to put off doing something, especially out of habitual carelessness or laziness; to postpone or delay needlessly “Joseph Ferrari, A psychology professor at DePaul University suggested with his studies, about 20 percent of people practice chronic procrastination. (Dorn, 2018)

Similarly, a survey conducted by Darius Foroux among workforce and entrepreneurs showed the rate of procrastination to be 88% among workforce who practice procrastination for at least 1 hour. Furthermore, 80% of the salaried workers and 76% of entrepreneurs procrastinated between one to four hours a day which was considered casual procrastination. Besides, 8.7% salaried workers were hardcore procrastinators who wasted at least half of their workday and 9.7% of entrepreneurs are hardcore procrastinators wasting more than 4 hours of their workday resulting in low productivity, financial loss, lack of motivation to complete or start important tasks. (Foroux, 2019)

Procrastination health model as suggested by Sirois in his research involving adults in the community level revealed the similar pattern as claimed before. Procrastination was linked to higher stress, more acute health problems, and fewer wellness habits, as previous studies demonstrated. Procrastinators also reported less personal safety measures and fewer frequent dental and health screenings. (Sirois, 2007) Sirois further concludes on a recent study conducted during Covid19, suggesting for the contextual reference to associate delaying behavior with procrastination. Furthermore, claims that stressful situations degenerate the coping mechanism resulting in the practice of procrastination. (M., 2023)

Ferrari also emphasized the problem of procrastination as an extreme emotion management problem rather than time management problem and says, “It really has nothing to do with time-management,” he says. “As I tell people, to tell the chronic procrastinator to *just do it* would be like saying to a clinically depressed person, *cheer up.*” (Foroux, n.d.). Procrastination has an extensive spectrum of adverse effects on young adults, involving physical and psychological health, social life, relationships, self-esteem and efficacy, productivity, work and achievements, and so on. Procrastination has a major effect on emotional health, which is an important factor that determines the mental and physical health of the person. (Johansson, 2023) (Nayana Mohan, 2023)

Rabin.L et.al conducted research exploring the relationship between academic procrastination with cognitive functions where disruptive executive domain due to procrastination was associated with the disease conditions like depression, OCD, anxiety, cardiovascular disease, diabetes, PCOS. He also inferred the low score on OCEAN model of personality linked with higher practice of procrastination. (Rabin LA, 2011)

Based on the psychosocial theory of Erikson, intimacy vs isolation is highly influenced by the behavioral traits of an individual. The theory puts its focus on the achievement of the milestones such as building intimate relationships, starting a family life, rearing children, progression on work along with establishment of the social life which is only possible if an adult has balanced emotional health. Moreover, the study conducted in Poland reveals the positive correlation between procrastination and the excessive use of social media like TIKTOK and depression. (Rogowska, 2024)

The practice of chronic procrastination results in innumerable harmful short-term consequences like stress, fatigue, low-productivity, bad mood, less recreational time and long-term consequences like chronic stress, physiological problems, easy distractibility including trouble in relationships. Additionally, Low morale and motivation, depression, anxiety, conflict and indecisiveness, emotion regulation and time management problems fuels up over time. (Christiane Steinert, 2021)

TYPES OF PROCRASTINATION:

Many studies reveal four different types of procrastination. (Decoded, 2023) Procrastination can occur in different ways depending upon the nature of the procrastinator and the purpose of the procrastination.

1. Anxious procrastination:

Many studies have claimed procrastination as a lifestyle problem rather than a time management problem however Fiore, author of 'now habit' suggested anxious procrastinators as being bad at prioritizing tasks and often over scheduling large amounts of tasks. The unrealistic expectation of the procrastinator causes more stress, anxiety and emotional disbalance in the long run.

2. Fun procrastination

Here the procrastinator indulges himself with things that bring instant gratification rather than working on long term.

3. Perfectionist procrastination

The delay of work happens because the procrastinator has to get things perfect. They often criticize their own work; with the need of getting more perfect work they become more overwhelmed, they don't start the work.

4. "Plenty of time" procrastination

The tendency to push important works because of a long impending due date. This procrastination is common among students who start work just before a few days of deadline.

5. Trait procrastination

The practice of procrastination gradually generates habitual activity labeled as trait procrastination. So, it becomes a tendency to postpone works that are important to achieve the goal. All above types of procrastination ultimately give rise to trait procrastination.

The question why an individual procrastinates and how the cycle of procrastination starts in an individual often takes the attention and curiosity. The low-self efficacy and low self-esteem, the perfectionist attitude, emotion regulation problems and lack of self-awareness can be few reasons for practicing chronic procrastination.

The stages of procrastination developed by Boston University and International education and research journal are mentioned below:

STAGES OF PROCRASTINATION

A study published in the International Education and Research Journal has divided procrastination into seven intricate stages for its better understanding. (Ms.Rajesh Devi, 2017)

Stage one: False security: Here, the procrastinator doesn't start the task with the feeling of starting it later. This can be due to reasons like feeling of incompetence, perfectionism, avoidant attitude, long submission date.

Stage two: Laziness: As the submission date reaches closer, the sense of starting a project or work hits, however the laziness to start it overrules the thought.

Stage three: Excuses: Here, the procrastinator thinks of excuses to let off the guilt and give logical excuses to justify their act of delaying the important tasks.

Stage four: Manipulation or denial: Here, the procrastinator is aware of the piling of his work but he denies the work to be done with things that feel more appealing and pleasurable. 'I will do it, I still have a few days left' describes the manipulation phase.

Stage five: Pressure/ Crisis: The procrastinator faces a panic situation as the work can no longer be delayed. Here, they realize the time they wasted and often feel bad for the delay they have caused.

Stage six: Bargaining: The procrastinator often needs to let go of other things to get the work done. Skipping sleep, class, breakfast, routine work to get things done.

Stage seven: Repeat: Although the task gets finished in some cases, some leave it mid-way or never start it. The quality of work often degrades. The cycle is often repeated next time when things need to be done.

PROCRASTINATION AND EMOTIONAL HEALTH

One out of every five people is obsessed with postponing activities and responsibilities as much as possible. The typical deception about procrastination is that it is caused by laziness, but in reality it is much more. A number of psychologists believe that procrastination is a coping strategy for avoiding uncomfortable emotions like self-doubt, regret and anxiety. (2019)(Boada, 2021)

Chronic procrastination affects overall components of emotional health of an individual. Emotional health on the other hand consists of amalgamation of emotional intelligence and emotion regulation. Emotional intelligence judges our ability to identify our emotions, express them and use them to promote personal growth while emotion regulation deals with the ability of an individual to take control of their emotions, in variant situations. These two components equally influence the ability of an individual to adapt to the physical and social environment, one's overall attitude towards life and the way one copes with stress. (Samuel Chavez-Fernandez, 2024)

Mostly emotional intelligence have been associated with the academic procrastination in five major branches like Intrapersonal, interpersonal, adaptation, coping with stress and general mood and individual reference to internal locus of control which is "the tendency of the individual to perceive events, good or bad, that affect him/her as the results of his/her own abilities, features, and behaviors, or the results of outer powers like fortune, fate, and the others" Deniz.M, Tras.Z., Aydogan.D conducted research on the effect of emotional intelligence on academic procrastination (n=435, f=273, m=162) revealed two subscale adaptation and coping with stress related to the procrastination and positive correlation was found between all five branches and determination of internal locus of control. (M. Engin DENİZ, 2009)

Procrastination and physiological effect:

Procrastination has long term effects over the physiological aspects of an individual. The study conducted among university students in Sweden reveals the effect of procrastination on the physical body resulting in reduced quality of sleep, weakened immune system, inactivity, and bodily pain ultimately affecting the quality of life. Besides, unhealthy lifestyle practices attributed

to procrastination also trigger cardiovascular diseases. Besides, the prefrontal cortex of the brain in an individual also weakens resulting in diminished self-control, executive functioning, logical reasoning and decision making. (Fox, 2023)

Procrastination and cognitive effect:

Recent research shows the metacognitive association of the brain with procrastination. The practice has been highly associated with altered cognitive functions such as reasoning, perception, curiosity and learning, diminished academic and work performance. Poor job performance, academic results, inability to fulfill tasks in time can lead to further increment of stress, worry, feeling of guilt, low self-esteem, low academic self-efficacy, fear of failure, distorted perception of available and required time to complete a task, non-competitiveness dysfunctional impulsivity. They have less ability to control social temptations, pleasurable activities and activities giving instant gratification. Furthermore, poor organization, impulse control, planning and goal setting, increased distractibility, reduced consistency at task completion and management. (Yağın, 2022) (Fernie, 2017)

Procrastination and behavioral effect:

Self-handicapping behavior: Self-handicapping is a strategy of intentionally creating obstacles to the performances. The major purpose of self-handicapping is to blame future anticipated failure to the obstacle rather than the act of procrastination and perfectionistic nature. Self-handicapping is a defense mechanism to protect self-esteem although long run practice acts as a self-destructing process because it results in a distorted sense of responsibilities and accountability. (Akça, 2012) (Evely Boruchovitch, 2022)

Low risk-taking behavior: Procrastinators, especially perfectionists feel it's better to do nothing than risk failure. Studies have shown perfectionist procrastination linked with conditions like phobia and anxiety to start any new task due to fear of not doing things in a perfect manner. (Evely Boruchovitch, 2022)(Boada, 2021)

Delayed health seeking behaviors: Most procrastinators often seek medical help late whereas some may completely avoid health seeking behaviors which leads to multiple haphazard consequences like increased treatment delay, greater distress and advancement of illness (Sirious.F, 2003) and Inadequate retirement savings for future. (Debsarma, 2022)

THEORETICAL PERSPECTIVES TO PROCRASTINATION

Several theories have been proposed and a few have been partially supported, however none of the existing theories have adequately explained the phenomenon of procrastination. To develop a fuller understanding of this phenomenon, the following sections will present selected theories of procrastination. Psychodynamic, cognitive, behavioral, trait and structural theories of procrastination. (Onipko, 2020)

Psychodynamic Theory: From a psychodynamic perspective, procrastination is believed to develop because of childrearing practices and unconscious motivation. Missildine (1964) believes that the "slow, daydreaming paralysis" that is manifest in the "procrastination syndrome" is caused by parents who over-stress achievement. This overemphasis on achievement sets up unrealistic goals for the child and links the attainment of these goals to parental approval and love. Studies claim that childrearing practices contribute to the development of procrastination. Parents who are too permissive with their child are likely to produce a "nervous underachiever" who is too anxious to meet future self-imposed deadlines. Conversely, parents who are too strict are liable to produce an angry underachiever who exhibits his/her independence from parental figures through a subconscious rebellion of authority, especially the authority of the clock. (Slowik, 1993)

Cognitive Theories: Cognitive theorists believe that procrastination is related to irrational fears and self-criticisms. Furthermore, personality characteristics such as fear of failure, low frustration tolerance for coping with unpleasant tasks, and a passive-aggressive orientation toward life's demands underlie the procrastinating behavior. In addition to these characteristics fear of success and success related consequences contribute to procrastination. Theorists agree that the procrastinators use their delaying tactics as a strategy to protect themselves from dealing with situations which may involve fear of failure, fear of success, fear of losing a battle, fear of separation, or fear of attachment. (Sohrab Abdi Zarrin, 2020) (Steel, 2007)

MAJOR ASSUMPTIONS:

1. Given the belief that one must do well, and that if they don't, they're no good, so it is better to procrastinate and do nothing than to risk the possibility of failure.
2. Given the belief that things ought to be easy and that you can't stand the fact that they are difficult, it is better to procrastinate than to suffer the short-term frustration necessary to reach long-term goals.
3. Given the belief that the world in general, and people in particular, ought to be fair and treat you well, then, if they don't, you won't try--you show them by procrastinating or doing badly.

Behavioral Theories:

Behavioral Theories believe the pattern of procrastination is developed because of environmental conditioning, when an aversive situation establishes an unpleasant response to a neutral stimulus associated in time and place with an originally aversive stimulus; thereafter, one continues to behave as if the aversive event would occur and will try to avoid them.

Behaviorists believe that there is a strong tendency for an individual to choose short-term (specious) reward over long-term good when the short-term goal is immediately pleasurable. The procrastinator creates a feedback loop in which immediately appealing conduct competes with

actions that promote self-esteem, such as accomplishing objectives. This persists a loop in which expanding stress contributes to a desire for speedy rewards, which increases anxiety significantly.

Trait Theories: Procrastination is an intricate phenomenon, and an array of individual traits and personality types have been suggested to play an integral part in the development and persistence of delaying behaviors. The possibility that there are numerous procrastination kinds causes it to be harder to develop an amalgamated representation of the procrastinating individual. Furthermore, the quest for procrastination traits is getting increasingly difficult due to the lack of a clear understanding of the issue. Procrastinators often display disorganization, a lack of self-control, a lack of energy, rebelliousness, anxiety, fear, perfectionism, and impulsivity. Anxiety is additionally one of the most frequently associated variables to procrastination. (Siaputra, 2010)he

II. Discussion

Procrastination is an instance of self-regulation failure characterized by the illogical delaying of tasks despite potential negative consequences. Previous research on procrastination was mainly conducted in academic settings, oftentimes combined with a focus on individual differences. Consequently, scholarly knowledge about how situational factors affect procrastination in other settings is still scarce. Although the debate of both pros and cons of procrastination have been proposed by much research in their articles, the often-misunderstood factor in understanding procrastination is to learn the difference between procrastination and laziness. Various studies have claimed procrastination of being beyond laziness and compared it with the analogy of depression and sadness leading to poor mental health. However, the level of stress resulting from procrastination varies upon the degree of stressor. (M, 2023)Ferrari in his study even claimed asking people to not procrastinate is like asking a depressed person to not be sad. (Akça, 2012)

Multiple studies have claimed procrastination as an emotion regulation problem and as a behavior that tremendously affects the various aspects of young adults however Baumeister and Tice in their study presented a neo-view of stress between procrastinators and non-procrastinators. They claimed Procrastinators suffer late whereas others suffer early and it could be even that procrastinators suffer less because they compress stress into shorter time. (Sirois F. &., 2013)

Procrastination has been linked to a variety of negative mental health variables Solomon and Rothblum (1984) found that procrastination was significantly correlated with depression, irrational beliefs, low self-esteem, anxiety, and poor study habits however no one theory appears to comprehensively describe the phenomenon of procrastination. Cognitive theories involving notions of fear of failure have received partial empirical support; however, it couldn't completely explain the pattern of procrastination. For example: A childhood experience and rearing could be important as it impacts on personality development, but it completely fails to account for the development of procrastination when similar child rearing practices are used on different

individuals. Trait theories give some possibilities; however, it is uncertain which combination of attributes most accurately reflects procrastinating behavior. (Steel, 2007)

Although most of the studies have claimed procrastination to be an extremely unproductive habit and emotion regulatory problem. Contrary to this, practice of procrastination in certain situations can rather be productive and more beneficial. e.g. for those who tend to work a lot may have to prioritize certain important tasks and intentionally procrastinate the other for some time. Moreover, procrastinating tasks for some time can allow a person to think and reflect upon tasks and prepare for the task which may foster more creativity and motivation by having increased pressure to complete the task. (Sirois F. &, 2013) (Sirois F. M., 2007)

Although research has long regarded procrastination as self-handicapping and dysfunctional behavior. However, Choi and Chu argued in their study that not all procrastinating activities are harmful or having undesirable consequences. They differentiated two types of procrastinators: passive procrastinators versus active procrastinators. Passive procrastinators are procrastinators in the traditional sense. They are plagued by their indecision to act and repeatedly fail in achieving plans on time. Active procrastinators, on the other hand, are classified as "positive" procrastinators. They prefer to work under pressure and make intentional choices to postpone. The most recent research revealed that, whilst active procrastinators procrastinate to the same how far as passive procrastinators, they are more identical to non-procrastinators than passive procrastinators in terms of intended time use, time control, self-efficacy belief, coping styles, and outcomes that include academic performance. (Choi.J, 2010) (Chu, 2005).

III. Conclusion

Procrastination is an intended individual act of delaying stressful or unpleasant tasks and replacing them with less important ones. The practice of chronic procrastination has direct correlation with the deterioration of mental health including the emotional health of young adults. The dysfunctionality in emotional health not only impacts the mental health but overrules and alters the way of life of an individual. Based on the psychosocial stages mentioned by Erik Erickson, the successful attainment of intimacy vs isolation, the effective completion of developmental tasks are at risks increasing the stress, impulsivity, problems in emotion regulation, decreased job satisfaction and life achievements placing the young adults at risk for depression, anxiety, OCD, various health conditions.

Emotional health on the other hand consists of amalgamation of emotional intelligence and emotion regulation. Emotional intelligence judges our ability to identify our emotions, express them and use them to promote personal growth while emotion regulation deals with the ability of an individual to take control of their emotions, in variant situations. These two components equally influence the ability of an individual to adapt to the physical, psychological, cultural and social environment, one's overall attitude towards life and the way one copes with stress. And so, the

problem of emotion regulation on procrastination has a profound impact on the quality of life of young adults.

There are various types of procrastinators' i.e. fun, anxious, perfectionist, plenty of time and traits along with various stages and reasons why young adults procrastinate. Various psychological theories have postulated their own assumptions and beliefs for the practice of procrastination. And while it's common behavior all young adults practice in their life but the frequency, compulsiveness and the intensity of the practice have been different in chronic procrastinators. Procrastination can have effect in all domains of emotional health i.e. emotion regulation, motivation, social-skills, self-awareness, empathy in young adults. Therefore, timely awareness of the habit and timely interventions can lead to improved quality of life.

REFERENCES

- [1] Sirois, F. M. (2007, January). "I'll look after my health, later": A replication and extension of the procrastination-health model with community-dwelling adults. *Personality and Individual Differences*, 43, 15-26.
- [2] M., S. F. (2023). Procrastination and Stress: A Conceptual Review of Why Context Matters. *International journal of environmental research and public health*.
- [3] Rogowska, A. M. (2024). Procrastination Mediates the Relationship between Problematic TikTok Use and Depression among Young Adults. *Journal of Clinical Medicine*.
- [4] Jaffe, E. (2013). Association for psychological science. From [psychologicalscience.org](https://www.psychologicalscience.org/observer/why-wait-the-science-behind-procrastination): <https://www.psychologicalscience.org/observer/why-wait-the-science-behind-procrastination>
- [5] Research: The more 'stuff' you have, the more likely you are to be a procrastinator. (2018). DePaul University.
- [6] M, S. F. (2023). Procrastination and Stress: A Conceptual Review of Why Context Matters. *International journal of environmental research and public health*.
- [7] Johansson, F. R. (2023). Associations Between Procrastination and Subsequent Health Outcomes Among University Students in Sweden. *JAMA network open*.
- [8] Dorn, R. (2018). UNDERSTANDING PROCRASTINATION WITH PSYCHOLOGY PROFESSOR JOSEPH FERRARI. From resources.depaul.edu: <https://resources.depaul.edu/newslines/sections/ask-an-expert/Pages/joseph-ferrari-2018.aspx>
- [9] Foroux, D. (2019, June 17). Procrastination Study: 88% Of The Workforce Procrastinates. From dariusforoux.com: <https://dariusforoux.com/procrastination-study/>
- [10] Foroux, D. (n.d.). How common is procrastination. From dariusforoux.com: <https://dariusforoux.com/wp-content/uploads/2019/06/How-Common-Is-Procrastination-A-Study-By-Darius-Foroux.pdf>
- [11] Johansson, F. R. (2023). Associations Between Procrastination and Subsequent Health Outcomes Among University Students in Sweden. *JAMA network open*.
- [12] Nayana Mohan, A. P. (2023). Procrastination, Time Management and Self Control Among Young Adults. *The International Journal of Indian Psychology*.
- [13] Rabin LA, F. J.-U. (2011). Academic procrastination in college students: the role of self-reported executive function. *J Clin Exp Neuropsychol*.
- [14] Christiane Steinert, N. H. (2021). Procrastination, Perfectionism, and Other Work-Related Mental Problems: Prevalence, Types, Assessment, and Treatment—A Scoping Review. From

- frontiersin.org:
<https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsyt.2021.736776/full>
- [15] Decoded, B. (2023). 4 Types of Procrastination and How to Beat Them. From [alphaefficiency.com](https://alphaefficiency.com/4-types-procrastination-beat): <https://alphaefficiency.com/4-types-procrastination-beat>
- [16] Why You Procrastinate (It Has Nothing to Do With Self-Control). (2019, March 19). From The New York Times: <https://www.nytimes.com/2019/03/25/smarter-living/why-you-procrastinate-it-has-nothing-to-do-with-self-control.html>
- [17] M. Engin DENİZ, Z. T. (2009). An Investigation of Academic Procrastination, Locus of Control, and Emotional Intelligence. *Educational Sciences: Theory & Practice*.
- [18] Samuel Chavez-Fernandez, Y. M.-R.-C.-R. (2024). Emotional intelligence and academic procrastination in university students in Peru. *Ciencias Psicológicas*.
- [19] Fox, K. R. (2023). Difficulties With Executive Function Are Associated With Risky Health Behaviors Among Young Adult Congenital Heart Defect Survivors. *The Journal of cardiovascular nursing*, 60-69.
- [20] Yağan, S. A. (2022). The Relationship Between Metacognitive Awareness and Academic Procrastination Behavior: The Moderator Role of Gender and Grade Level. *International Journal Of Contemporary Educational Research*.
- [21] Fernie, B. &. (2017). A metacognitive model of procrastination. . *Journal of Affective Disorders*.
- [22] Akça, F. (2012). An Investigation into the Self-handicapping Behaviors of Undergraduates in Terms of Academic Procrastination, the Locus of Control and Academic Success. *Journal of Education and Learning*.
- [23] Evely Boruchovitch, S. E. (2022). Self-handicapping strategies in educational context: construction and validation of the Brazilian Self-Handicapping Strategies Scale (EEAPREJ). *Psicol. Refl. Crít.*
- [24] Debsarma, D. S. (2022). Factors associated with delay in treatment-seeking behaviour for fever cases among caregivers of under-five children in India: Evidence from the National Family Health Survey-4,. *PloS one*.
- [25] Onipko, Z. (2020). Phenomenon of Procrastination in Modern Psychology: Theoretical Fundamentals of the Research. *Bulletin of Taras Shevchenko National University of Kyiv Series. Psycholog.*
- [26] Siaputra, I. B. (2010). Temporal Motivation Theory: Best Theory (yet) to Explain Procrastination. *Anima Indonesian Psychological Journal*.
- [27] Slowik, A. (1993). Procrastination : a review of the literature from 1974-1991. From [academia.edu](https://www.academia.edu/101524841/Procrastination_a_review_of_the_literature_from_1974_1991?uc-g-sw=13041377): https://www.academia.edu/101524841/Procrastination_a_review_of_the_literature_from_1974_1991?uc-g-sw=13041377
- [28] Sohrab Abdi Zarrin, E. G. (2020). Prediction of Academic Procrastination by Fear of Failure and Self-Regulation. *EDUCATIONAL SCIENCES: THEORY & PRACTICE*.
- [29] Steel, P. (2007). The nature of procrastination: a meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological bulletin*, 65-94.
- [30] Sirois, F. &. (2013). Procrastination and the Priority of Short-Term Mood Regulation: Consequences for Future Self. . *Social and Personality Psychology Compass*, 115-127.
- [31] Chu, A. &. (2005). Rethinking Procrastination: Positive Effects of "Active" Procrastination Behavior on Attitudes and Performance. *The Journal of social psychology*.