

Impact of Mindfulness and Self-compassion on Procrastination among University Students

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ABSTRACT

Aim of the Study: The purpose of this study was to find out the impact of mindfulness and self-compassion on reducing procrastination. Mindfulness-based interventions (MBI) and self-compassion have been increasingly recognized for their potential in addressing procrastination behaviors.

Methodology: The sample was taken from different universities. The total sample of the study was 300 (157 males and 143 females). The participants belong to different age groups, different qualification and different experience. Psychometric tools that were used for the assessment of participants included Mindful Attention Awareness Scale MASS-15 developed by (Brown and Ryan). Pure procrastination scale established by (Steel) and Self-Compassion Scale (SCS-SF) developed by Witte (Neff et al., 2011). SPSS-21 was used to establish and interpret statistical analysis on the gathered data.

Findings: The findings of this study indicated that mindfulness and self-compassion are positively correlated, whereas mindfulness and procrastination are negatively correlated. In addition, self-compassion and procrastination were also negatively correlated.

Conclusion: The research concluded that there was considerable positive relationship between mindfulness and self-compassion. However, mindfulness itself is negatively correlated with procrastination and also self-compassion is negatively correlated with procrastination.

Keywords: Mindfulness, Self-compassion, Procrastination, University Students.

1. INTRODUCTION

Procrastination is defined as the deliberate delay of necessary work or assignments, knowing the negative effects on both individuals and institutions (Lay, 1986; Steel, 2007; Klingsieck, 2013). The term "procrastination" itself is derived from Latin, where "pro-" means "forward" or "forth," and "crastinus" means "tomorrow." This concept is even expressed metaphorically in expressions like "Procrastination is the Time bandit" and "Procrastination is the Ability of maintaining with past day" (Ferrari, Johnson, & McCown, 1995).

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In recent years, mindfulness and self-compassion have emerged as effective strategies for addressing these emotional drivers. Mindfulness, which involves keeping a understanding awareness of the present moment, helps individuals recognize and manage the internal and external factors contributing to procrastination. By fostering greater focus and emotional regulation, mindfulness can mitigate the tendency to avoid tasks (Kabat-Zinn, 1990; Sirois & Tosti, 2012). Meanwhile, self-compassion concerns about dealing personal experiences with care and empathy in the time of shortcomings or struggles, which can counteract the self-criticism and guilt that often accompany procrastination (Neff, 2003). Together, these practices offer a holistic approach to reducing procrastination by addressing both the cognitive and emotional barriers that inhibit task completion. By cultivating both mindfulness and self-compassion, individuals can reduce procrastination tendencies, increase productivity, and develop healthier emotional responses to challenges. Together, these concepts interact in ways that can either exacerbate or alleviate procrastination. This research aims to investigate how mindfulness and self-compassion interact to alleviate procrastination and enhance overall productivity and well-being.

1.1 Procrastination

Procrastination can be considered as either a failure to act or a planned postponement of decisions. This behavior is connected to various negative outcomes, including ineffective time management, reduced performance, task avoidance, and emotional regulation difficulties (Ferrari & Díaz-Morales, 2014; Schubert & Stewart, 2000).

Balkis and Duru (2007) classified procrastination into five categories: (i) general procrastination (ii) purposeful procrastination, (iii) unstable procrastination, (iv) compulsive procrastination, and (v) academic procrastination. Different psychology schools have different theories about why people put things off. According to behaviorism, it's a learned habit motivated by a desire for instant gratification. Psychoanalytic ideas link early childhood experiences—like parental over-tolerance—to procrastination. Cognitive psychologists relate attribution styles and self-handicapping to procrastination.

Not all types of procrastination are harmful. Chu and Choi (2005) distinguish between those who procrastinate actively and passively. Passive procrastinators are immobilized by lack of resolution and frequently not finalized assignments on schedule, while active procrastinators purposefully prefer to delay tasks, often performing well under pressure and fulfill deadlines (Gafni & Ger, 2010).

1.2 Common Causes of Procrastination

As stated by Balkis and Duru (2007), Research has shown a number of possible explanations for procrastinating habits which comprise time mismanagement, feelings of overwhelm, unambitious, disorganized, distracted, worry associated with shortcomings, self-distrust, personal issues, irrational expectations, and perfectionism.

The result of procrastination project over the slow individual and harm those ones who rely on them (Steel & Ferrari, 2013). Furthermore, research indicates that neuroticism and conscientiousness are the primary traits responsible for most procrastination. According to Schouwenburg and Lay (1995), procrastination is strongly correlated with a deficiency in conscientiousness, which has six sides: competence, sequence, obedient, seek to accomplish, self-control, and thought. Meantime, instinctive (a component of neuroticism) has few links with procrastination, due to hereditary. (Gustavson, D. E., Miyake, A., Hewitt, J. K., & Friedman, 2014).

1.3 Procrastination in Different Life-Domains and Settings

Recent studies concentrated further on procrastination across various sample groups throughout a person's life. Procrastination is not only common among students but has also been recognized in other groups such as workers, instructors, and civilized. According to research, procrastination is common among college and university students in academic settings, also among learners of all races and personal identities (Klassen, Krawchuk, & Rajani, 2008; Klassen, 2010; Ozer & Ferrari, 2011).

Procrastination has been the subject of numerous cognitive and behavioral therapy (CBT) interventions (Schouwenburg, Lay, Pychyl, & Ferrari, 2004). These interventions mainly based on rational-emotive behavioral therapy and are also based on traditional CBT techniques such as goal-setting, time management, and cognitive restructuring (Ellis & Knaus, 2002). In recent times, there has been an increase in the popularity of "postindustrial society" CBT interventions, which involve acceptance and mindfulness techniques to encourage behavioral modification (Hayes, Villatte, Levin, & Hildebrandt, 2011). Acceptance and Commitment Therapy (ACT) is one of these that has attracted more attention. Procrastination, like other maladaptive behaviors, is a reflection of psychological inflexibility, or the incapacity to focus on now and modify behavior for the purpose to achieve important goals (Hayes, Strosahl, & Wilson, 2012 and Scent & Boes, 2014).

Procrastination comes in different forms. Arousal procrastination is the practice of delaying tasks for the sake of tension and excitement. Avoidant procrastination is the practice of delaying tasks out of fear or to protect oneself. On the other side, decisional procrastination entails delaying making decisions.

1.4 Academic Procrastination

Academic procrastination is associated with poor grade performance, failing grades, nervousness during tests, postponing self-paced exams, and failing to submit assignments on time (Balkis, 2011; Ferrari, Keane, Wolfe, & Beck, 1998; Hen & Goroshit, 2014). Other investigations have highlighted the detrimental impacts of procrastinating in educational context, involving social avoidance, suffering, worry, health decline, decreased wellbeing, and low academic performance (Kim & Seo, 2015; Krause & Freund, 2014; Sirois & Pychyl, 2013; Steel & Ferrari, 2013).

Similar to other avoidance behavior, procrastination gives short term ease from challenging and upsetting ideas related to a work (Tice et al., 2001). However, If the underlying problems with completing the task are not addressed, it can lead to more stress. This might start a vicious loop of anxiety, judgment, embarrassment, and self-criticism that would keep the procrastinating behavior going.

According to empirical research, approximately 70% of students regularly put off assignments (Ferrari, Callaghan, & Newbegin, 2005; Rabin, Fogel, & Nutter-Upham, 2011). University students often face frequent deadlines from teachers and administrators to complete tasks such as registering for courses, submitting assignments, and turning in term papers (Popoola, 2005). Students frequently procrastinate academically by waiting until the last minute to finish assignments or prepare for tests (Oweini & Haraty, 2005).

1.5 Mindfulness

The term "mindfulness" is derived from the Pali term "sati," which indicated consciousness, attentiveness, and memory. Pali is the language in which the teachings of the Buddha were initially developed. The term "mindfulness" was originally translated from sati into a dictionary in 1921 (Davids & Stede, 1921/2001).

Mindfulness is stated to relieve stress and improve the quality of well-being of the people, which could be partially attributed to the fact that it involves a state of consciousness that is clear, non-judgmental and receptive to the current experiences, thoughts and feelings (Brown & Ryan, 2003; Brown et al., 2007). It entails the concept of paying, in a conscious manner, active or deliberate attention to one's current experience. In contrast, many aspects of our daily lives involve unintended mental wandering (Killingsworth & Gilbert, 2010).

The formal practice of mindfulness meditation is strongly associated with mindfulness, containing its roots in Eastern thoughtful traditions, it is actually known as the "heart" of Buddhist intervention (Kabat-Zinn, 2003; Thera, 1962). But mindfulness is more than just meditation, it is "genetically a state of awareness" that entails paying attention to one's Exposure in the time being (Brown & Ryan, 2003).

1.6 Mindfulness Practice

While observing how often we act mindlessly and lifespan we hope for can be disorganized, there is also exciting news: One is capable of practice mindfulness. We may cultivate mindfulness by intentional mental activities, to the same degree we can enhance our health and well-being with consistent physical activity. Mindfulness practices include some types of mediation which are given below.

1. **Meditation:** A key component of mindfulness, meditation can take many different forms. One such form is mindfulness meditation, in which individuals are attentive to their breathing and physical sensations.
2. **Walking Meditation:** This practice encourages mindfulness and relaxation while walking slowly and focusing on the environment and movement sensations.
3. **Body Scan Meditation** A practice where people mentally examine their bodies from head to toe, recognizing regions of tension and intentionally relaxing them.
4. **Breathwork:** Box breathing and diaphragmatic breathing are two examples of mindful breathing techniques that assist focus attention on the breath, encouraging clarity and calmness.
5. **Mindful Eating:** This practice encourages people to put all of their attention into the process of eating, enjoying every bite, and putting an end to outside distractions when they're eating.
6. **Mindful Movement:** Exercises that involve physical movement and awareness, like yoga, tai chi, and qigong, improve mental and physical health.
7. **Single-tasking:** Stress can be reduced and efficiency can be accomplished by focusing on one activity at a time as compared to multitasking.
8. **Gratitude Lists:** Making a gratitude journal every day can help people stay happy and positive.
9. **Mindful Listening:** Communication and Relationships are improved when participants give full attention to the speaker during a conversation.
10. **Mindful Gardening:** Gardening can be a relaxing way to connect with nature, increasing awareness of the surroundings and sensory experiences.

1.7 The Benefits of Mindfulness

Mindfulness is a exercise that entails paying attention to the time being with openness, curiosity, and without paying judgment. Evidence suggests that people who consistently engage in mindfulness give them variety of benefits like good mental and physical health.

1.7.1 Stress Reduction

Numerous researches prove that people who consistently engage in mindfulness have low stress level. A meta-analysis of 39 studies have examined the utilization of mindfulness-based stress depletion and mindfulness-based cognitive therapy. (Hoffman et al., 2010) The researchers concluded that mindfulness-based therapy might be helpful in changing the cognitive and affective mechanisms that underlie multiple clinical issues. In one investigation, participants who were arbitrary allocate to an eight-week awareness-based stress easing group were contrast with random sample on self-assessment of depression, worry and mental illness, and on neuronal activity as evaluated by Functional magnetic resonance imaging after seeing unhappy movies (Farb et al., 2010). The individuals who received mindfulness-based stress ease indicate significantly lower worry, despair, and pain, compare to the random sample.

1.7.2 Boosts to Short Term Memory

Research finds that boost to short term memory has seen to be one of the benefits of mindfulness. For instance, the advantages of mindfulness practice in a military group who take part in an eight-week

mindfulness initiative, a defense group that did not meditate, and a group of non-defenses that did not meditate (Jha et al., 2010). Before deployment, both non-defense groups were in a greatly stressful period. According to the investigators, the working memory capacity of the nonmeditating military group declined over time, but that of the nonmeditating civilian group was stable over time. However, meditation practice improved working memory capacity of the military group.

1.7.3 Less Emotional Reactivity

According to research, meditation also lessens emotional sensitivity. There is an investigation in which participants ranged in duration from one month to 29 years. Researchers discovered that mindfulness meditation exercise guided participants to detach from distressing films and allowed them to concentrate on an intellectual task when contrasted to those who watch the films but did not meditate.

1.8 Other Advantages of Mindfulness

It has been demonstrated that mindfulness improves self-analysis, moral goodness, instinct, and overcoming fear; these all are associated to the frontal granular cortex region of the brain. Additionally, research indicates that mindfulness meditation has many health benefits, such as good health (Carmody & Baer, 2008), decreased suffering (Coffey & Hartman, 2008; Ostafin et al., 2006), and enhanced resilience (Davidson et al., 2003; see Grossman, Niemann, Schmidt, & Walach, 2004).

Additionally, practicing mindfulness meditation appears to reduce task duty and ideas which are irrelevant to the work at hand (Lutz et al., 2009), as well as improve reaction time (Moore & Malinowski, 2009).

1.8.1 Self-compassion

Self-compassion means affected and aware of one's pain, not looking to the other way. This leads to a desire to fix oneself with affection and to lessen one's own suffering. Self-compassion also entails providing unbiased sympathy to particular suffering, shortcomings, so that particular experience is seen as part of the greater individual circumstances.

Self-pity and self-compassion are very different (Goldstein & Kornfield, 1987). People who have a sense of belonging to others and understand that pain is reality that a majority of people go through, whereas those who have sympathy for another generally experience isolation and disengage from other people.

1.9 Three elements of Self-Compassion

When people experience pain or shortcomings, self-compassion is composed of three basic features: (1) self-kindness fostering compassion and knowing oneself instead of harshly judging and criticizing oneself, (2) common humanity recognizing one's events as a part of the larger individual understanding instead of perceiving as distinct and detached, and (c) mindfulness it involves avoiding over-identification and one should maintain a balanced consciousness of their unresolved thoughts and emotions.

1.9.1 Self-kindness

Being compassionate to others is highly valued in Western culture, but it is not as highly valued for ourselves. We frequently say severe, criticizing core language such as – “You’re so ridiculous and lazy, I’m guilty of you!” when we mess up things. Saying such words to a mate or to a person we don’t know, for that affair would be uncommon. At times when people were questioned directly, most people answer that they show more kindness to people than ourselves (Neff, 2003a), and this is not usual to be kind and show kindness to people who constantly defeat themselves up.

1.9.2 Common Humanity

The crucial component of self-compassion is accepting that everyone fails, makes mistakes occasionally. We frequently feel disappointed in ourselves or our life circumstances, and we don't always receive what we desire. This is a fundamental aspect of life that a primary element of life experiences the rest of the world. Each of us are flawed. Instead, we are conventional members of the human kind because of our

imperfections. However, when we think about our difficulties and failures, we frequently feel alone and disconnected from other people, wrongly believing that i am the only one going through a difficult time. This type of narrow-mindedness causes us to feel isolated, making our shortcoming more difficult (Neff, 2011).

1.9.3 Mindfulness

Self-compassion involves being mindful aware of our bad feelings and ideas so that we can deal with them calmly and balanced manner. Being mindful allows us to experience the time being in the absence of judgement, escape, or suppression (Bishop et al., 2004). There are several reasons mindfulness is considered as an important element of self-compassion? The very first is; to embrace ourselves with compassion, we should be ready to face or feel our sorrowful beliefs and feelings. Even while it may feel like our suffering is so obvious, many individuals are unaware that how much pain they are experiencing, particularly when that suffering is the result of internal self-criticism. Being conscious of our doubts and feelings avoid us from becoming "overidentified" (Neff, 2003b) with them and from being carried away by our unpleasant emotions (Bishop et al., 2004).

1.10 Rationale

The goal of this study was to study the impact of mindfulness and self-compassion on reducing procrastination. The variables haven't been studied on this sample yet. The main reason was to study the how mindfulness and self-compassion are effective in addressing the underlying emotional triggers of procrastination. Procrastination, a pervasive issue affecting individuals across various contexts such as academic, professional, and personal has been shown to have a significant negative impact on productivity, mental health, and overall well-being. Traditional models of procrastination often focus on cognitive factors such as time management or task aversion, but there is growing interest in exploring how emotional regulation, mindfulness, and self-compassion may offer more holistic solutions to this issue. In addition to the emotional benefits, self-compassion and mindfulness practices have been shown to enhance motivation, increase focus, and promote goal-directed behavior—factors that are crucial for overcoming procrastination. These practices allow individuals to break tasks down into smaller, more manageable parts, reducing feelings of overwhelm and promoting consistent progress. The study also aims to inquire how mindfulness, the practice of being present and aware without judgment, helps individuals recognize the thoughts and feelings that drive procrastination, allowing them to respond in a more balanced and intentional manner.

1.11 Study Objectives

1. To study how individuals' levels of self-compassion impact their tendency to procrastinate.
2. To study how mindfulness practices, help individuals manage procrastination tendencies.
3. To study the level of procrastination on different age groups.
4. To study whether combining self-compassion and mindfulness has an effect on reducing procrastination compared to each factor alone.

1.12 Hypotheses

- H1.** There is significant positive relationship between mindfulness and self-compassion
- H2.** There is significant negative relationship between mindfulness and procrastination.
- H3.** There is significant negative association between self-compassion and procrastination.
- H4.** There is significant level of differences on procrastination among male and female.

2. LITERATURE REVIEW

Procrastination tendencies decreased among those who engaged in mindfulness meditation because they were better able to regulate their emotions and manage stress. People who received mindfulness training were able to maintain greater present-focused attention instead of overwhelmed by anxiety or other negative emotions that control them and cause them to procrastinate (Enright & Mills 2008). Highly mindful people might be more conscious of their procrastinating tendencies, but they might also choose to accept these behaviors as a natural part of their present-moment experience. This may lead to mindful procrastination, in which the person notices and accepts their avoidance without necessarily changing it (Kabat-Zinn, 1990).

Procrastination and mindfulness may be related, with a more level of being aware may be being related to a lower level of procrastination. Understanding consciousness and taking of events are components of mindfulness (Kabat-Zinn 2005; Shapiro et al. 2006). As stated by Self-Regulation Theory, nonjudgmental consciousness lowers the possibility that disagreement would result in procrastination (Baumeister et al. 1994). A conceptual framework for comprehending procrastination is given by self-regulation theory. According to this theory, delaying tasks resulted from a motivational conflict caused by a discrepancy allying internal norms and the attention on instant pleasant events or components of dislikes (Baumeister et al., 1994).

Many of the researchers have found link between higher mindfulness and lower procrastination (Cheung and Ng 2019; Glick et al. 2014; Sirois and Tosti 2012). The central aspects of mindfulness are attention and awareness. Signs and symptoms of lack of concentration are feature of attention-deficit hyperactivity disorder (ADHD) (American Psychiatric Association 2013). People who are involve in Mindfulness programs has shown less symptoms of lack of concentration related to ADHD (Househam and Solanto 2016; Hoxhaj et al. 2018) indicating that being aware to the moment may enhance awareness among those who show imperfection in this state. In a similar manner, a way between higher mindfulness and lower procrastination could be the capability to maintain awareness enabled by being aware of the situation. Being Mindful is a different term from the viewpoint of task avoidance, distraction and self-regulation that have been linked to procrastination (Steel 2007); still, some aspects of mindfulness may seem to be that the people who are high in mindfulness will see assignments to be unpleasant, be diverted, or not good at self-restraint. According to the Self-Regulation Theory, which underlies procrastination, mindfulness may be seen as that awareness is separate or either desire to turn away from internal norms is conclude severely by the one-self.

According to Kervin and Barrett (2018), students who appraise themselves may experience negative emotions as a result of this, which they may cope through procrastination that result in negative evaluations of themselves. They proposed that by increasing mindfulness, students should be able to overcome their procrastination tendencies by being more self-aware and less judgmental of themselves, which would reduce their tendency to procrastinate. At least two research shows that procrastination is positively correlated with focuses on living in the present and present-fatalistic focused and negatively correlated with future (Ferrari & Díaz-Morales, 2007; Jackson, Fritch & Nagasaka, 2003).

Even though procrastinators have a present-focused temporal attention, this focus does not seem to include being fully "present" to the moment, and as a result, it might differ qualitatively from other kinds of present-focused awareness, like mindfulness. The authors assumed that when faced with a challenging task, judgmental thoughts may arise, which can cause anger, remorse, and spontaneous task neglect. On the other hand, mindfulness encourages embracing of these judgmental thoughts, which enables person to overcome discouragement and continue with the work (Terry and Leary, 2011).

Many of the Theories and research entail that mindfulness is an essential type of present related consciousness for accepting how procrastination is linked to factors like suffering and wellbeing. However, procrastination is linked with a present focused, it also has a connection with problem solving styles which concentrate on avoiding uncomfortable beliefs and emotions and the exclusivity of instincts

to cope with force to self-respect (Sirois, 2004; Tice et al., 2001), instead of being fully attentive. Procrastination is linked with one's own self-awareness (Ferrari, 1992), it is a type that is thought to be clear if not negatively linked with mindfulness (Brown et al., 2007). Many researches too support the perception that those who procrastinate are likely to perceive themselves unfavorable (Flett et al., 1995). Collectively these findings suggest that the trait of procrastination is linked to mindfulness scores, and if a person has low levels of mindfulness, then it describes that it has increasing stress linked to the procrastination.

Observational studies have examined the theoretical structure of Acceptance and commitment therapy in connection to procrastination have found confirmation that procrastination is linked to lower levels of understanding (Glick et al., 2014). In addition, mindfulness was found to mediate the relationship between procrastination and perceived stress (Sirois, & Tosti, 2012). Mindfulness has positive health impacts because it promotes effective control of self by tolerating unwanted ideas, boosting task work, and lowering worry because of procrastination (Brown et al., 2007). Self-compassion defines as a characteristic that can give more understanding to the pressure linked with quality procrastination and also desirable ways to decrease procrastination-related stress and possibly even procrastination ways. According to one study of undergraduates, students' medium to low levels of self-compassion, had the greatest procrastination points (Williams et al., 2008).

Contrary to self-criticism and negative thinking, self-compassion is treating oneself with kindness, compassion, and acceptance when suffering is caused by circumstances beyond of one's control or by personal failings (Neff, 2003b). But even after controlling for self-doubting, being kind to personal experiences has been shown to foresee anxiety and depression, so it's not only the inverse of self-criticism (Neff, 2003a). From a behavioral point of view, hurrying at the end moment to finish crucial and compulsory assignments could be demanding or not reaching on target time. So far, here is known finding that the stress linked with procrastination may also emerge from the one's own self which is associated to the poor self-concept that those who procrastinate cause upon oneself when running with struggling tasks also when they have done the postponement (Flett, Stainton, Hewitt, Sherry, & Lay, 2012; Sirois & Stout, 2011; Sirois & Tosti, 2012).

Self-compassion means accepting an affectionate belief with regard to personal events in case of suffering or shortcomings instead of severely doubting yourself (Neff, 2003b) is resilience that may encourage productive control of self, destress linked with remorse, and give a guard against adverse response to significance outcomes (Leary, Tate, Adams, Allen, & Hancock, 2007). A few studies findings display the form of the negative thinking a procrastinator is involved with and how these may relate to stress.

In the following experiment conducted under the guidance of McCown and colleagues (McCown, Blake, & Keiser, 2012), those who procrastinate viewed a site and wrote down their thoughts while procrastinating in real postures. Those who obtain greater points on the procrastination wrote more self-debasing remarks than lower points, according to observed computer-points descriptive investigation of the illogical thoughts linked with procrastination. Some of the statements like I am thinking now that I am just too dumb to benefit from more studying, so I'll just using more Facebook (McCown et al., 2012) it shows the type of negative thinking that were made under the pressure of modest views, procrastinators have been proven to automatically think negatively as they reflect about their earlier procrastination and/or their incapacity to do future tasks. Trait procrastinators experience a certain kind of involuntary thought called procrastinatory perceptions, which is similar to focusing on previous instances of procrastination (Stainton et al., 2000).

In further support, it was established that persons who give more attention to their personal experiences are unlikely to take part in procrastination that was defined through their better self-regulation techniques of downregulating negative thinking (Sirois et al., 2019). Hence, self-compassion strengthens an influential determinant of procrastination because of its part in downregulating worry. In general, we suggest that view of social assistance could promote positive attitude toward personal experiences, this

will result in reduction to procrastination and the indirect way greater levels of self-compassion are also link to lowest negative emotions that might decrease procrastination through the emotional self-regulation process. Additionally, it was discovered that self-compassion was a more accurate indicator of mental wellness than mindfulness (Rendon, 2007). Self-compassion is negatively linked with self-doubting, constant sadness, worry, consideration and thought repression (Neff, 2003a).

Procrastination was linked to stress, lower mindfulness levels and uncommon mindfulness-enhancing activities like yoga, exercises and meditation. More significant, mindfulness moderates the relationship between stress and procrastination. Since self-compassion is more than just mindfulness, because it includes self-kindness and shared humanity (Neff, 2003), if a person is lacking on these traits than they have more traits like self-critics and remorse, it is reasonable that people who score low in self-compassion are closely associated to quality of procrastination.

The mindfulness feature of self-compassion involves considering “consciousness of unpleasant ideas and emotions”. For instance, a representative from the mindfulness subscale of the SCS (Neff, 2003) is “When something bothers me, I make an effort to carry my feelings in balance.” Mindfulness in common indicates to the capacity to give awareness to any event -negative, positive or unbiased with calmness. While it is possible to be aware of eating a raisin an exercise commonly employed in the teaching of mindfulness (Kabat-Zinn 1982), it may not make sensible to feel understanding for eating a raisin (but possibly you had a poor raisin eating incident when you were child!)

Mindfulness was positively linked to self-compassion. Individuals who performed better on mindfulness measures also demonstrated higher levels of self-compassion, indicating that mindfulness practice contributes to more self-kindness and understanding in difficult circumstances (Neff et al., 2005). Mindfulness-based stress reduction program (MBSR) discovered that participants revealed significant rises in self-compassion after completing the program. The authors indicating that mindfulness practice encourage individuals to develop higher self-compassion by increasing consciousness of their emotions and giving space to react with kindness instead of self-criticism (Birmie et al., 2010).

Self-compassion like a whole form is wider in range as compared to mindfulness the reason is that it has more components like self-kindness and shared humanity: vigorously calming and self-soothing when sorrowful events emerge, and recalling that these events are fraction of being a person. Such type of traits is not genetically part of mindfulness (Bishop et al., 2004). Thoughts of self-kindness and shared humanity often accompany awareness of painful events, after all, so that self-compassion may necessarily go hand-in-hand with mindfulness itself. The two do not necessarily co-occur, however, one can be attentively mindful of sorrowful emotions without soothing and reassuring personal experiences, or reminding oneself that these feelings are part of the being human

This combination of mindful awareness and self-compassion encourages greater emotional resilience and helps individuals involve in tasks despite difficulties, reducing procrastination and improving overall well-being (Williams, Stark, & Foster, 2008). Together, these concepts provide a balanced framework for addressing procrastination by foresting emotional regulation, minimizing avoidance, and enhancing self-acceptance.

3. THEORETICAL FRAMEWORK

Self-Determination Theory (SDT) was evolved by Edward L. Deci (Edward et al., 2000), it is a comprehensive motivational theory, which emphasizes autonomy, competence, and relatedness as three essential needs to satisfy optimal functioning and personal growth and well-being. People will generally be intrinsically motivated to perform tasks when these needs are satisfied, which means they perform the action out of interest and personal value rather than out of pressure or rewards. SDT is very relevant in explaining procrastination because the lack of autonomy and competence is one of the most common factors leading to avoidance behaviors like procrastination.

3.1 Autonomy and Procrastination

Autonomy refers to feeling in charge of personal actions and choices. When individuals procrastinate, they frequently feel cut off from this sense of autonomy, either because they feel overburdened by the task (e.g., strict deadlines or demands) or they feel overwhelmed by the task itself.

Mindfulness and Autonomy: Mindfulness seems to have an essential role in encouraging autonomy by enhancing self-awareness. It helps individuals to observe their feelings, thoughts, and task-related reactions from a non-judgmental perspective (Brown & Ryan, 2003). Mindfulness encourages people to make conscious decisions about how to approach tasks by developing awareness of the reasons behind their avoidance, such as identifying emotional pain or the sense of external pressure. This self-regulation helps shift behavior from reactive avoidance to intentional action, thereby reducing procrastination.

Self-Compassion and Autonomy: Self-compassion enhances this by reducing the fear of criticism or failure, which frequently reduces autonomy. When individuals are kind to themselves, they are getting more responsible of their behaviors, including tasks they find difficult, without being overly harsh against themselves (Neff, 2003). This lowers the emotional burden of procrastination and makes it easier to reach tasks with a spirit of freedom rather than avoidance.

3.2 Competence and Procrastination

Competence means an ability to efficiently carry out and complete a task. A common cause of procrastination is inadequacy or belief for not performing something properly. The individual might procrastinate if they have the fear of failing at the task or they simply doubt their own abilities in the performance.

Mindfulness and Competence: Mindfulness allows individuals to focus on the present without being overwhelmed by thoughts regarding the future or possible consequences of an activity. By breaking things down into manageable steps, mindfulness helps people overcome their fear of failing and feel more competent with each step they accomplish. This approach aligns with self-efficacy theory, which suggests that small successes build confidence (Bandura, 1977).

Self-Compassion and Competence: It allows people to feel competent, even in the face of challenges or mistakes, Neff (2003). It also teaches accepting attitude as regard to personal experiences, rather than resorting to self-criticism when things go wrong. This helps in staying engaged with tasks rather than avoiding them because of inadequacy (Sirois, 2014).

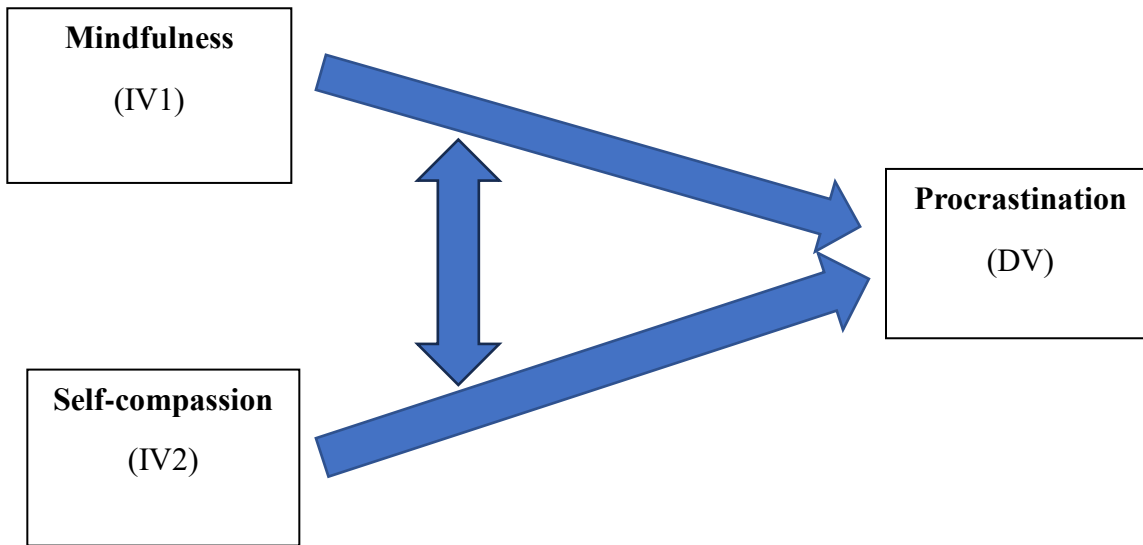
3.3 Relatedness and Procrastination

Relatedness is the feeling of belonging and being supported by others. When people feel alone or unsupported in their tasks, they are more likely to procrastinate because of alienation or anxiety.

Mindfulness and Relatedness: Mindfulness encourages an increased sense of belonging by reducing negative perceptions about oneself and allowing an individual to experience tasks and challenges as part of human existence (Brown & Ryan, 2003). It strengthens one's feeling of belonging by accepting positive and negative aspects of task experience, thus reducing procrastination.

Self-Compassion and Relatedness: Self-compassion also promotes relatedness through encouraging individuals to recognize that suffering, failure, and imperfection are a fraction of the shared individual experience (Neff, 2003). This reduces feelings of isolation that may promote procrastination. Rather than viewing challenges as personal failures, people who are kind to oneself are most possibly to view themselves normal, hence promoting persistence and reducing procrastination (Sirois & Tosti, 2012).

Figure 1: Conceptual Framework



4. METHOD

4.1 Operational Definitions of the Study Variables

4.1.1 Mindfulness

The Mindfulness Attention Awareness Scale (MAAS) is a self-report scale designed to assess the frequency and intensity of an individual's mindfulness in daily life. It was measured by using a 15-item scale developed by (Brown & Ryan, 2003). The scale comprises a set of statements that individuals respond to, indicating how often they experience mindful awareness and attention in various situations. Higher scores on the MAAS indicate a greater tendency towards being present and attentive in the moment, while lower scores may suggest a tendency toward distraction or a lack of mindfulness (Kabat-Zinn, 2003).

4.1.2 Self-compassion

The Self-compassion-short form (SCSSF) is a self-report scale designed to assess the frequency and intensity of an individual's feelings of compassion. It was measured by using a 12-item scale developed by (Kristin D. Neff, 2002). The scale comprises a set of statements that individuals respond to, indicating how often they experience these emotions in various situations. Higher scores on the SCSSF indicate a greater tendency towards positive feelings of compassion, while lower scores may suggest stronger feelings of lack of compassion (Neff, 2003)

4.1.3 Procrastination

The Pure Procrastination Scale (PPS) is a self-report scale designed to assess the frequency and intensity of an individual's procrastination behaviors. It was measured by using a 15-item scale developed by (Steel, 2010). The scale comprises a set of statements that individuals respond to, indicating how often they delay or postpone tasks and responsibilities in various situations. Higher scores on the PS indicate a greater tendency to procrastinate, suggesting a delay in task completion due to avoidance or avoidance-related emotions, while lower scores may suggest a timelier approach to responsibilities.

4.2 Measuring Instruments

4.2.1 The Mindfulness Attention Awareness scale (MAAS)

The Mindful Attention Awareness Scale (MAAS), was initially developed by Kirk Warren Brown (Kirk et al., 2003). The (MAAS) is a self-report scale that assesses a person's capacity of being mindful in their daily routine. It consists of 15 items and evaluates both general and particular situations of mindful states. Participants rated items on a six-point Likert scale.

4.2.2 Self-compassion Scale: Short form (SCS-SF)

The Self-Compassion Scale – Short Form (SCS-SF) was initially created by Kristin D. Neff. The (SCS-SF) is a twelve-item scale which is used by adults to assess their ability for self-compassion – a capacity to carry one's shortcomings while maintaining warmth, connection, and care. The original SCS has twenty-six items assessing six features of self-compassion: Self-care, Self-assessment, Common Humanity, Insulation, being mindful, and Over-recognition. The scale is five-point Likert scale. Some items in this scale such as 1,4,8,9,11 and 12 are reversed scores.

4.2.3 Pure Procrastination Scale (PPS)

The (PPS) is a self-report tool for measuring procrastination. The PPS is based on a twelve-item scale that was created to assess procrastination as a dysfunctional delay. Each of these items is marked by the participant on 1 to 7 corresponding to different responses. Although Steel (2010) does not define the scale points explicitly.

4.3 Sample

The sample consists of 300 students from different public and private universities (153 males, 147 females). Each of them belonged to different departments/courses, different genders and different age groups (18 to 25) mostly from 18 to 24 years' age group having qualifications varying from undergraduate, graduate. Most of them were at undergraduate level. There were a total of (300) participants which were included in the research, with (79%) identifying as unmarried and 56% reporting that they live in nuclear family systems.

4.4 Demographic Form

Demographic Form including variables; Age, Gender, Qualification, marital status and family system.

4.5 Procedure

The demographic sheet was attached with the scales. Relevant information was taken from the participants, which were the students of private and public sector institutions by sending the online questionnaires. The data was mostly collected from the students ranging from 18 to 25 years. The study was conducted among the students, so the language was understandable and there was no need to translate the scales. The scales used along with the demographic form were The Mindful Attention Awareness Scale (MAAS), Self-compassion scale: short form (SCS-SF) and Pure Procrastination scale (PPS). The respondents were asked to choose the best possible answer. Then directions were given to them for carrying out the forms. While collecting the data, all principled guidelines were given, and they were given assurance that their provided data will be only used for study purpose and stay confidential.

4.6 Statistical Analysis

After data assembly was accomplished, a statistical package for social sciences (SPSS-21) was used for examining the results. The collected information was marked in SPSS for inferential and descriptive statistical analysis. The major analysis used included Correlation among the study variables, and independent sample T-test.

5. RESULTS

This research was conducted to identify the relationship between mindfulness and self-compassion on reducing procrastination. The data for this research was conducted from many private and public educational institutions through online questionnaires. The total sample comprised of 300 participants both males and females.

Table 1: Demographic characteristics of the sample (N=300)

Demographics		<i>f</i>	%
Gender	Male	153	51%
	Females	147	49%
Educational level	Graduate	92	30%
	Undergraduate	208	69%
Family system	Nuclear	168	56%
	Joint	132	44%
	Unmarried	238	79.3%
Marital Status	Married	52	17.3%
	Engaged	10	3.3%

Note: F= Frequency, %= Percentage

Table 1 indicates that the sample of individuals in this study consisted of 300 constituting mainly n=147 (49%) female and n=153 (51%) male belonging to different Background. Most of the participants were undergraduate (12 yrs) in qualification, having the highest percentage i.e. 69%. Most of the participants were unmarried. However, only 10% of them were engaged. Most of the participants belonged to the nuclear system 56%, 44% belonged to joint system.

Table 2: Psychometric properties Study Variables (N = 300)

Variables	<i>M</i>	<i>SD</i>	Range		Skewness	Kurtosis
			Actual	Potential		
MAAS	58.51	11.607	21-90	15-90	.287	-.504
SCSSF	46.07	9.127	22-78	12-84	.748	.178
PPS	52.99	9.533	21-70	12-72	.391	-.161

Note: M=Mean, SD=Standard Deviation, MAAS=Mindfulness Attention Awareness scale, SCSSF=The Self-Compassion Scale – Short Form, PPS=Pure procrastination scale

Table 2 shows the Mean, Standard Deviation, Range, Skewness and Kurtosis for the variables that are included in study. The distribution of MAAS is flat with a minor positive skew. SCSSF has a distribution that is almost normal and has moderate positive skewness. PPS displays mild positive skewness and a slightly flatter distribution. Overall, all three variables have positive skewness and slight deviations from normal kurtosis. The mean of Mindfulness is 58.51 while the Standard Deviation is 11.6. The mean of self-compassion is 46.07 while the Standard Deviation is 9.12. The mean of procrastination is 52.9 while the Standard Deviation is 9.53.

Table 3: Cronbach's Alpha Reliability of Scales (N = 300)

Scales	No. of Items	<i>A</i>
MAAS	15	.852
SCSSF	12	.624
PPS	12	.845

Note: MAAS=Mindfulness Attention Awareness scale, SCSSF=The Self-Compassion Scale – Short Form, PPS=Pure procrastination scale

Table 3 indicates the number of items and reliability for three different scales provides are shown on the table. The first scale composed of 15 items and has a high reliability coefficient of 0.852, indicating

strong internal consistency. The second scale consist of 12 items, it has a moderate reliability of 0.624, suggesting fair internal consistency. The third scale also consist of 12 items and has a reliability of 0.845, showing excellent internal consistency. Overall, the first and third scales demonstrate strong reliability, while the second scale displays very moderate reliability.

Table 4: Correlation of the study variables (N=300)

Variables	1	2	3
1. MAAS	-		
2. SCSSF	.707**	-	
3. PPS		-.423**	-.194**

Note: MAAS=Mindfulness Attention Awareness scale, SCSSF=The Self-Compassion Scale – Short Form, PPS=Pure procrastination scale

Table 4 shows the correlation between different variables. Correlation analysis is computed between different variables. MAAS is positively correlated with SCSSF ($r = .707$, $p < .01$), indicating a strong significant relationship between these two variables. SCSSF shows a moderate significant, negative correlation with PPS ($r = -.432$, $p < .01$). Additionally, MAAS and PPS have a negative correlation ($r = -.194$, $p < .01$), suggesting a significant weak relationship between them.

Table 5: Regression analysis of the study variables.

Variables	Pure procrastination scale				
	B	SE	β	95% CI	
				LL	UL
Constant	53.383	2.859		47.75	59.01
MAAS	.169	.059	.209	.052	.283
SCSSF	-.709	.091	-.571	-.888	-.530

Note: MAAS=Mindfulness Attention Awareness scale, SCSSF=The Self-Compassion Scale – Short Form, PPS=Pure procrastination scale

A regression analysis was conducted to examine the predictive relationship between MAAS), (SCSSF), and the PPS. The results revealed a significant positive relationship between mindfulness (MAAS) and the PPS, with a standardized regression coefficient (β) of 0.209. The unstandardized coefficient (B) for MAAS was 0.169, meaning that for every one-unit increase in MAAS, the PPS increased by 0.169 units, assuming SCSSF is held constant. This relationship was statistically significant, as the 95% confidence interval for the regression coefficient did not include zero (CI = [0.052, 0.283]). In contrast, self-compassion (SCSSF) showed a significant negative relationship with the PPS, with a β of -0.571, indicating that higher levels of self-compassion are associated with lower levels of the Procrastination. The unstandardized coefficient for SCSSF was -0.709, meaning that for each one-unit increase in SCSSF, the PPS decreased by 0.709 units, assuming MAAS is held constant. The 95% confidence interval for this coefficient was also significant, not including zero (CI = [-0.888, -0.530]). The constant in the model was 53.383 (95% CI = [47.75, 59.01]).

Table 6: Mean differences across the gender on MAAS, SCSSF and PPS

Variables	Male (N = 153)		Female (N =147)		t(df)	P	95% CI	
	M	SD	M	SD			LL	UL
MAAS	58.2353	12.21	58.8095	10.97	.428	.121	-2.067	3.216
SCSSF	45.5556	9.411	46.6054	8.822	.966	.637	-1.024	3.124
PPS	53.3856	10.30	52.5850	8.675	-.727	.015	-2.96	1.367

Note: MAAS=Mindfulness Attention Awareness scale, SCSSF=The Self-Compassion Scale – Short Form, PPS=Pure procrastination scale

The study attempted an independent sample t-test concerning to compare the impact of mindfulness, self-compassion on procrastination among male and female students. For mindfulness, the mean score for females (M = 58.80, SD = 10.97) was slightly higher than that of males (M = 58.23, SD = 12.21), but the statistical analysis showed no significant difference ($t(298) = 4.28, p = .121$), with the 95% confidence interval (CI) ranging from -2.067 to 3.216. In case of Self-Compassion, females had a higher mean (M = 46.60, SD = 8.822) compared to males (M = 45.55, SD = 9.411), but again, the difference was not significant ($t(298) = 0.996, p = .637$), with the CI between -1.024 and 3.124. For Procrastination, females scored lower (M = 52.58, SD = 8.675) than males (M = 53.38, SD = 10.304), and significant difference was seen in this case ($t(298) = -0.727, p = .015$), with the CI ranging from -2.969 to 1.367.

Table 7: Mean differences of educational level on MAAS, SCSSF and PPS

Variables	Undergraduate (n=208)		Graduate (n=92)		<i>t(df)</i>	<i>P</i>	95% CI	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>
MAAS	54.07	13.46	53.47	13.48	.352	.959	-2.72	3.91
SCSSF	43.22	8.566	42.91	9.00	.283	.773	-1.83	2.45
PPS	31.89	10.99	31.76	10.34	.099	.718	-2.52	2.79

Note: MAAS=Mindfulness Attention Awareness scale, SCSSF=The Self-Compassion Scale – Short Form, PPS=Pure procrastination scale

The study attempted an independent sample t-test concerning to compare the impact of mindfulness, self-compassion on procrastination among undergraduate and graduate. For mindfulness, the mean score for undergraduate (M = 54.07, SD = 13.46) was slightly lower than that of graduates (M = 53.47, SD = 13.48), but the statistical analysis showed no significant difference ($t = 3.52, p = .959$), with the 95% confidence interval (CI) ranging from -2.72 to 3.91. In case of Self-Compassion, undergraduate had a higher mean (M = 43.22, SD = 8.566) compared to graduates (M = 42.91, SD = 9.00), but again, the difference was not significant ($t = 2.83, p = .773$), with the CI between -1.836 and 2.452. For Procrastination, undergraduate scored slightly higher (M = 31.89, SD = 10.99) than graduate (M = 31.76, SD = 10.34), and again non-significant difference was seen in this case ($t = .099, p = .718$), with the CI ranging from -2.52 to 2.79.

6. DISCUSSIONS

This research was intended to examine the relationship of both mindfulness and self-compassion on reducing procrastination. One of the hypotheses of the research was that people with various levels of self-compassion and mindfulness would procrastinate at significantly different level. Another hypothesis of the research was that is a significant positive relationship between mindfulness and self-compassion. It was also hypothesized that there will be a significant negative relationship between self-compassion and procrastination. Furthermore, it was hypothesized that there is significant negative relationship between mindfulness and self-compassion. Pearson correlation was used to test three hypotheses regarding the association of mindfulness with procrastination, self-compassion with procrastination. Independent sample t-test was used to test the major hypothesis.

The findings of the study proposed that there is a positive relationship between mindfulness and self-compassion. The results of this study provided support for this hypothesis, showing that mindfulness was positively correlated with self-compassion. Participants who scored higher on mindfulness measures also exhibited greater levels of self-compassion. This finding is consistent with previous research by Neff, Hsieh, & Dejitterat (2005), who found that mindfulness practices can foster self-kindness and understanding, particularly in the face of challenging situations. This means that those who practiced mindfulness or reported being more mindful in their daily lives tended to have higher levels of self-compassion. Essentially, individuals who are more mindful seem to be better at treating themselves with

kindness and understanding when they face challenges or personal difficulties. The 2005 study found that people who engage in mindfulness practices often experience a reduction in self-criticism and an increase in the ability to In this way, the current study builds upon the existing body of research, reinforcing the idea that mindfulness not only helps people stay in the present moment but also plays a crucial role in promoting self-compassion. The practice of being mindful can lead individuals to be more forgiving and understanding of themselves, particularly during times of emotional distress or when facing life's challenges. be compassionate towards themselves, even when they make mistakes or encounter setbacks.

The findings of the study proposed that there is a negative relationship between mindfulness and procrastination. The results of the study provided support for this hypothesis, suggesting that mindfulness may be associated with an increased awareness of procrastination behaviors. Specifically, individuals who scored higher on mindfulness measures were more likely to recognize their tendencies to procrastinate. (Kabat-Zinn, 1990). In this case, the study suggests that higher levels of mindfulness are associated with lower levels of procrastination. However, the way this relationship was described is important: mindfulness does not necessarily reduce procrastination directly, but it appears to increase awareness of procrastination behaviors, which could lead to individuals taking action to address it. When people are more mindful, they become better able to notice when they are engaging in behaviors like procrastination. This heightened self-awareness allows them to observe their actions in real time and acknowledge procrastination as it happens, rather than ignoring or rationalizing it. For instance, a mindful person may become aware of delaying tasks or avoiding work, not because of external pressures, but because of internal patterns like fear of failure, perfectionism, or simply a lack of motivation. The key here is that mindfulness helps people recognize what they are doing and why they are doing it, leading to a greater understanding of procrastination as a behavior that can be changed.

Referring to the third hypothesis, the findings of this study suggest that there is negative relationship between self-compassion and procrastination. Thus, this hypothesis is also approved.

Research indicates that individuals with higher self-compassion are better at controlling their emotions (Neff, 2003). Poor emotional regulation, especially the avoidance of negative emotions like anxiety or fear of failure, is often associated with procrastination. By promoting self-kindness and acceptance during difficult situations, self-compassion helps reduce these negative emotions, thereby lowering the tendency to procrastinate (Sirois, 2016). The tendency to procrastinate is often linked to poor emotional regulation. In particular, procrastination is frequently a coping mechanism used to avoid negative emotions, such as anxiety, fear of failure, or self-doubt. When individuals face tasks they find unpleasant or daunting, they may procrastinate as a way to avoid the uncomfortable feelings associated with them. For example, a person may delay starting a project because they fear it won't be perfect, or they may avoid a difficult conversation due to anxiety about how it will unfold. However, poor emotional regulation exacerbates procrastination by reinforcing this avoidance behavior. The longer a person avoids the uncomfortable emotions tied to a task, the more entrenched the procrastination becomes, leading to a cycle of stress and inaction.

Findings of this study have proposed that there exists a little difference in procrastination between males and females. Thus, this hypothesis is also approved. Few studies found that female procrastinate more than males and some suggest that there exists no difference between them. Further studies may be conducted in order to investigate the phenomenon.

6.1 Limitations

Following are the few limitations of current study.

1. This research study was accompanied in a limited time so no longitudinal preferences can be considered.
2. This sample was taken only from few institutions which were easily approachable by the researcher students.

3. This research was focusing solely on mindfulness and self-compassion which may not fully capture the complexity of procrastination.

6.2 Suggestions

1. The statistical analysis used to examine the results of this study should be extended in future studies. On other hand, future research work can use further statistical analysis tools to describe and interpret the results acquired.
2. In future research, non-quantitative research should also be utilized to observe more particular report for the relationship between mindfulness and procrastination.
3. The data should be collected from other universities and other cities to see the perspective on larger grounds and enhance comparative studies.

6.3 Implications

Our main goal in this study was to address the almost total lack of research analysis on this particular sample that we have chosen for our study. Our study, being a survey method have some areas that can give rise to further researches i.e. inclusion of mindfulness practices, widening the demographics of participants and considering multiple institutions or even cities over longitudinal time periods for better evaluation. Further studies may be conducted to evaluate procrastination in the long run.

7. CONCLUSION

The research concluded that there was considerable positive relationship between mindfulness and self-compassion. However, mindfulness itself is negatively correlated with procrastination and also self-compassion is negatively correlated with procrastination. The study's findings align with previous literature, supporting the idea that mindfulness and self-compassion are stronger tool for building positive psychological outcomes. Also, further research is considered necessary to explore these relationships across different populations and cultural contexts, as well as to set up causal pathways through longitudinal studies and experimental designs.

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