A CORRELATIONAL ANALYSIS OF IMPOSTOR SYNDROME, SELF-COMPASSION AND MENTAL HEALTH AMONG GRADUATE STUDENTS

A

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I hereby declare that the work presented in the dissertation entitled:

"**A Correlational Analysis of Impostor Syndrome, Self-Compassion, and Mental Health Among Graduate Students**"

Submitted in partial fulfillment of the requirements for the award of the Degree of [M.A. in Psychology (Clinical and Counselling)], to MIER College of Education (Autonomous), is an authentic record of my own research work carried out under the supervision of Dr. Taniya Raina; Assistant Professor, Psychology.

I further declare that the work embodied in the present dissertation:

a) Is my original work and has not been copied from any research journal, thesis or book
b) Has not been submitted by me for the award of any other Degree / Diploma Certificate of any University or Institution.
c) All sources of information used in this study have been duly acknowledged.

Session 2024-2026

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LIST OF ABBREVIATIONS

IP	Impostor Syndrome
CIPS	Clance Impostor Phenomenon Scale
SC	Self-Compassion
SCS-SF	Self-Compassion Scale – Short Form
MH	Mental Health
DASS-21	Depression Anxiety Stress Scale – 21 Items
DP	Depression
AN	Anxiety
ST	Stress
SD	Standard Deviation
M	Mean
df	Degrees of Freedom
t	t-statistic (Independent Samples t-test)
p	Probability Value (Level of Significance)
r	Pearson's Product Moment Correlation Coefficient
R^2	Coefficient of Determination

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(CIPS)	Clance Impostor Phenomenon Scale
(SCS-SF)	Self-Compassion Scale – Short Form
DASS-21	Depression Anxiety Stress Scale – 21 Items

ABSTRACT

Graduate students are a psychologically vulnerable group facing academic pressure, performance demands, and identity transitions. In this context, impostor syndrome—characterised by persistent self-doubt and difficulty internalising success—can negatively impact mental health. Self-compassion has been proposed as a protective factor that may buffer these effects. However, limited research has examined these variables within the Indian higher education context. The present study investigated the prevalence of impostor syndrome and self-compassion, gender differences, and their relationships with mental health among graduate students in Jammu District, India. A quantitative descriptive-correlational design was used. The sample consisted of 130 graduate students (57 males, 73 females) selected through purposive sampling. Data were collected using the Clance Impostor Phenomenon Scale (CIPS), Self-Compassion Scale–Short Form (SCS-SF), and Depression Anxiety Stress Scale (DASS-21). Statistical analyses included mean, standard deviation, t-test, and Pearson's correlation. Findings showed that 57.7% of participants experienced frequent impostor feelings, indicating high prevalence. Anxiety emerged as the most prominent concern, while depression and stress were mostly within normal levels. Self-compassion was largely moderate. No significant gender differences were found across variables ($p > .05$). Correlation results revealed that impostor syndrome was positively associated with depression, anxiety, and stress, while self-compassion showed significant negative correlations with all variables. These findings highlight impostor syndrome as a risk factor and self-compassion as a protective resource, with implications for student mental health interventions.

Keywords: *Impostor Syndrome, Self-Compassion, Mental Health, Depression, Anxiety, Stress, Correlational Study, Psychological Well-Being*

CHAPTER I

INTRODUCTION

Graduate students represent a population undergoing substantial academic, psychological, and developmental transitions, making them particularly relevant for examining key mental health variables. Early adulthood is often characterized by intense academic pressure, heightened performance expectations, and ongoing identity formation, which together create a uniquely vulnerable context for psychological distress. Research has consistently shown that graduate students experience higher levels of stress, anxiety, and depression compared to the general population. Martow et al. (2025). Within this demanding environment, impostor syndrome is especially prevalent, commonly manifesting as persistent self-doubt, perfectionism, and fear of failure, all of which can negatively impact academic functioning and overall well-being El-Ashry et al. (2024). Conversely, self-compassion has emerged as an important protective psychological resource, enabling individuals to cope more effectively with setbacks, regulate negative emotions, and foster resilience MacBeth & Gumley, (2012). Therefore, examining impostor syndrome, self-compassion, and mental health together within the graduate student population is essential, as it offers deeper insight into their psychological experiences and informs the development of targeted interventions aimed at improving academic adjustment and emotional well-being.

1.1 IMPOSTER SYNDROME

An "internal experience of intellectual phoniness" exhibited by individuals who appear successful to others, but internally feel incompetent Aubeeluck et al. (2016). Breeze (2018) Imposter syndrome sensations of not belonging; feeling that one's competence and success are fundamentally fraudulent and inauthentic; the conviction of having somehow 'tricked' students, colleagues, peer reviewers, and publishers; and the fear that it is only a matter of time before this is discovered is popularly understood as an individual private problem of faulty self-esteem. LaDonna et al. (2018) Beyor d health, impostor phenomenon can profoundly impact various facets of individuals' personal lives, work performance, and professional relationships. Even highly experienced professionals, such as physicians, are not immune to IP symptoms. These symptoms can detrimentally affect their work performance, self- confidence, and decision-making

abilities, potentially leading to delays in professional development and a reduction in patient care quality. Hutchins and Rainbolt (2017) emphasized that impostor feelings often arise during periods of role transition and increased responsibility, such as entry into graduate education or professional training. Their findings suggest that impostor syndrome is not merely a reflection of low confidence but is closely tied to identity incongruence, where individuals struggle to integrate their self-concept with external indicators of success. This mismatch between internal self-perception and external achievement may intensify emotional distress and reinforce persistent self-doubt. Bravata et al. (2020) Imposter syndrome (also commonly-termed imposter phenomenon, fraud syndrome and perceived fraudulence) was first described in 1978 by Suzanne Imes, Ph.D., and Pauline Rose Clance, Ph.D. as an observation first among successful women and other marginalized groups. Imposter syndrome (IS) is a behavioral health phenomenon described as self-doubt of intellect, skills, or accomplishments among high-achieving individuals. These individuals cannot internalize their success and subsequently experience pervasive feelings of self-doubt, anxiety, depression, and/or apprehension of being exposed as a fraud in their work, despite verifiable and objective evidence of their successfulness. Gresham-Dolby (2022) Imposter syndrome has been identified in various disciplines and somewhat quantified utilizing a standardized scale. This feeling of being an intellectual fraud can be present in high-achieving individuals and can cause personal hardship inadequacy. Parkman (2016) noted that individuals with impostor syndrome frequently engage in upward social comparison, which amplifies feelings of inadequacy and fear of failure. Such comparison processes are particularly salient in academic environments characterized by competition and constant evaluation. These findings suggest that impostor syndrome is sustained not only by internal cognitive processes but also by social and contextual factors that contribute to heightened self-scrutiny and emotional vulnerability. Impostor syndrome has also been examined through cognitive behavioral and motivational perspectives, emphasizing the role of maladaptive belief systems and attributional styles. Individuals experiencing impostor feelings tend to hold rigid, unrealistic standards for success and engage in distorted cognitive appraisals, such as attributing achievements to luck while internalizing perceived failures Chrisman et al.(1995) These cognitive patterns reinforce chronic self-doubt and fear of evaluation, leading individuals to continuously question their competence despite repeated success. Research suggests that such attributional biases not only maintain impostor beliefs but

also intensify emotional distress, particularly in high-achievement contexts where performance feedback is frequent and highly salient. Cokley et al. (2017) examined impostor feelings among university students and found that higher levels of impostor syndrome predicted increased anxiety, depression, and academic distress even after controlling for self-esteem. Their work suggests that impostor syndrome contributes uniquely to mental health difficulties beyond general negative self-regard, reinforcing its relevance as an independent psychological construct. Additionally, impostor feelings were associated with fear of failure, excessive self-criticism, and avoidance of academic challenges, all of which can impair emotional well-being and academic functioning. Vergauwe et al. (2015) demonstrated that impostor feelings are not confined to student populations but also manifest in professional environments. Their findings revealed that impostor syndrome contributes to emotional exhaustion, reduced job satisfaction, and increased stress among working adults. These outcomes suggest that persistent impostor experiences may deplete emotional resources and undermine psychological well-being over time. Collectively, these studies reinforce the conceptualization of impostor syndrome as a significant risk factor for compromised mental health across both academic and professional domains, underscoring the importance of identifying protective psychological mechanisms that may reduce its negative impact. The consequences of IP are clear with empirical evidence showing a link between IP and psychological distress. For example, Li et al. (2019) found that medical students 4 scoring high on IP were more likely to experience feelings of shame, embarrassment and inadequacy compared to those scoring low on IP. Additionally, Rosenthal et al. (2021) found that students who scored higher on IP were less likely to regard themselves positively and were self-critical. These findings demonstrate that those struggling with IP tend to view themselves negatively.

Pannhausen et al. (2022) The perfectionism dimensions Doubts about Actions, Concern over Mistakes and Socially prescribed Perfectionism appeared to be efficient predictors of the Impostor Phenomenon. Contrary to Perfectionistic Strivings, Perfectionistic Concerns as a maladaptive perfectionism factor strongly contributed to the prediction of the Impostor Phenomenon. Those suffering from IS are less likely to speak up or volunteer answers and information than their unaffected peers. This may lead to innate differences in learning style and a subsequent need to tailor curriculum to take into account the large proportion of learners with Imposter Syndrome.

1.2 MENTAL HEALTH

An integral and essential part of overall health, which can be defined in at least three ways as the absence of disease, as a state of the organism that allows the full performance of all its functions or as a state of balance within oneself and between oneself and one's physical and social environment Sartorius (2002) .Health is essential for the growth, development, and productivity of a society, and for a happy and healthy life anywhere in the universe (National Mental Health Survey (2015-16). Health refers to a person's physical, mental, and social well-being, which was earlier described as the ability of the body to function well. If a person is free from any physical ailments, mental stress and enjoys good interpersonal relationships, then he is said to be enjoying good health. When a person maintains good health, everything else falls into place. However, maintaining good health depends on various factors such as physical, social, spiritual and emotional factors; that carries equal importance, and even if slip one of them, a person cannot be healthy completely. Being physically fit is the major component of health, which means devoid of any physical illness, whereas, social health relates to interpersonal communication with others, which is also an essential component of maintaining one's good health. To have a healthy mind and body, one must possess good spiritual health, which can help in dealing with tough situations such as rejection, death, or overcoming financial hardships. Being mentally sound is also part of good health that includes the emotional and psychological wellbeing of a person (Mental Health, 2022). Keyes & Westerhof (2010) proposed the complete mental health model, which reconceptualizes mental health as more than the mere absence of psychological disorders by distinguishing between flourishing and languishing individuals. According to this model, mental health and mental illness exist on related but distinct continua, allowing individuals to experience varying levels of well-being even in the presence of psychological symptoms. This framework has been particularly influential in understanding student mental health, as a substantial proportion of students experience moderate psychological distress without meeting formal diagnostic criteria for mental disorders. Such individuals may continue to function academically while experiencing emotional exhaustion, reduced motivation, and diminished well-being, thereby remaining largely unrecognized within traditional clinical approaches. Hyun et al.

(2006) documented significant levels of emotional distress among graduate students, including symptoms of anxiety and depression, and noted that many students experiencing distress did not seek professional help. Similarly, Beiter et al. (2015) reported high prevalence rates of stress, anxiety, and depressive symptoms among university students, identifying academic pressure, workload demands, and performance expectations as major contributors to psychological strain. These findings underscore the role of the academic environment as a persistent source of stress that can negatively impact students' mental health and overall quality of life. Evans et al. (2018) reported alarmingly high rates of depression and anxiety among graduate students compared to the general population, characterizing graduate education as a context marked by chronic stress, uncertainty, and emotional vulnerability. Factors such as competitive academic climates, prolonged evaluation, financial insecurity, and pressure to meet high performance standards contribute to sustained psychological strain. Stallman (2010) further emphasized that university students constitute a high-risk group for developing mental health problems, highlighting the urgent need for preventive approaches that focus not only on symptom reduction but also on the enhancement of psychological well-being. Compas et al. (2017) emphasized that chronic academic stressors, when combined with inadequate coping resources, significantly increase vulnerability to emotional disorders. Their work highlights the importance of individual psychological resources in determining how students adapt to prolonged stress exposure. When coping mechanisms are maladaptive or rigid, stress may accumulate and manifest as anxiety, depression, or emotional exhaustion. A mentally healthy person can more quickly adjust to his physical and social environment, as well as meet emotional and personal needs. People who are mentally healthy can easily adhere to society standards as well as face and accept life's facts, such as the capacity to balance feelings, aspirations, desires, and ideas. Individual difficulties with mental health manifest as symptoms such as worry, tension, depression, restlessness, and helplessness, among others. Each year 20% of young people around the world are considered to have mental health problems. Adolescents are especially prone to mental health issues throughout their transitional years, which are the years between childhood and maturity (Kessler et al., 2005). Girolamo et al.(2012) The onset of most mental disorders usually occurs during the first three decades of life, effective treatment is typically not initiated until a number of years later.

1.3 SELF COMPASSION

Self-compassion is "treating oneself with kindness, recognizing one's shared humanity, and being mindful when considering negative aspects of oneself Neff (2003)

Allen & leary (2010) People who are high in self-compassion treat themselves with kindness and concern when they experience negative events. The present article examines the construct of self-compassion from the standpoint of research on coping in an effort to understand the ways in which people who are high in self-compassion cope with stressful events. Self-compassionate people tend to rely heavily on positive cognitive restructuring and less so on avoidance and escape but do not appear to differ from less self-compassionate people in the degree to which they cope through problem-solving or distraction. Terry and Leary (2011) stated that self-compassion—treating oneself with kindness, care, and concern in the face of negative life events—may promote the successful self-regulation of health- related behaviors. Self-compassion can promote self-regulation by lowering defensiveness, reducing the emotional states and self-blame that interfere with self-regulation, and increasing compliance with medical recommendations. Furthermore, because they cope better with stressful events, people high in self-compassion may be less depleted by illness and injury and thus have greater self-regulatory resources to devote to self-care. Framing medical problems and their treatment in ways that foster self-compassion may enhance people's ability to manage their health-related behavior and deal with medical problems. Clarke and Hartley (2025) conceptualize self-compassion as a theoretical framework to understand the emotional vulnerabilities associated with impostor phenomenon, arguing that self-compassion's facets (self-kindness, mindful awareness, and common humanity) serve as mechanisms to reduce negative self-evaluation, lessen shame, and bolster resilience, thereby mitigating the mental health impact of impostor feelings. Gilbert (2010), through the framework of Compassion-Focused Therapy, conceptualized self-compassion as an evolved emotion-regulation system that counteracts threat-based self-criticism and shame. This perspective emphasizes the role of self-compassion in soothing emotional distress and promoting psychological balance. Empirical support for this framework has been provided by Barnard and Curry (2011), who demonstrated that self-compassion is more strongly associated with psychological well-being than self-esteem, particularly in the context of failure and

personal inadequacy. Allen and Leary (2010) conceptualized self-compassion as an adaptive coping strategy that enables individuals to respond to stressors with acceptance, emotional balance, and self-understanding rather than avoidance, rumination, or harsh self-blame. By fostering a compassionate internal dialogue, self-compassion allows individuals to acknowledge personal shortcomings without becoming overwhelmed by negative self-evaluations, thereby promoting more constructive emotional responses to adversity. Leary et al. (2007) provided experimental evidence demonstrating that self-compassionate individuals experience significantly lower levels of negative affect, such as shame and distress, following perceived failure, indicating that self-compassion buffers the emotional impact of self-threatening events. This capacity to maintain emotional equilibrium in the face of setbacks highlights self-compassion's role in facilitating psychological resilience. **Marshall et al. (2015)** highlighted self-compassion as a crucial factor in reducing shame and emotional dysregulation, both of which are central to impostor experiences. Their findings indicated that individuals with higher levels of self-compassion exhibit lower emotional reactivity and greater emotional stability, even when confronted with perceived failure or performance pressure. This suggests that self-compassion disrupts the pathway through which impostor syndrome negatively influences mental health by promoting acceptance and emotional balance rather than self-criticism. **Kirby & Steindl et al. (2017)** proposed that compassion-based psychological processes activate soothing emotional systems that counteract threat-based responses associated with impostor feelings. Their work suggests that self-compassion enhances psychological resilience by reducing stress reactivity and fostering adaptive coping strategies, thereby improving overall mental well-being. Taken together, these findings support an integrative perspective in which impostor syndrome functions as a psychological risk factor for mental health problems, while self-compassion serves as a protective resource that buffers emotional distress and promotes psychological resilience.

Trompetter et al. (2017) emphasized the contribution of self-compassion to psychological flexibility and overall mental well-being, suggesting that self-compassionate individuals are better able to tolerate distressing thoughts and emotions without excessive avoidance or over-identification. Psychological flexibility, in turn, enables individuals to engage in value-consistent behavior despite emotional discomfort, thereby supporting long-term mental health. Collectively, these findings reinforce the relevance of self-compassion as a protective psychological resource that

not only mitigates emotional distress but also enhances adaptive coping, resilience, and well-being in the face of academic and personal challenges.

Germer & Neff (2019) Mindful Self-Compassion (MSC) is a combination of mindfulness and compassion training a mindfulness-based self-compassion training program. Research typically shows that self-compassion is positively associated with psychological health. The construct of self-compassion is drawn from Buddhist psychology, and was first operationally defined and introduced into the psychological literature. MSC is also a mix of personal development training and psychotherapy. The effectiveness of the MSC program depends, in part, on participants learning how to work with backdraft and also learning to practice self-compassion as a spontaneous response to suffering rather than as a strategy to directly change who we are or manipulate how we feel. Learning to become more self-compassionate is a process of moving from striving to change our experience and ourselves toward embracing who we are already. The Self-Compassion Break is taught as a reflective exercise in the program. Ewert et al.(2021) Self-compassion, a positive and caring attitude toward oneself, has been identified as an important correlate of coping in stressful situations. High self-compassion is related to higher use of adaptive and less maladaptive coping in demanding or painful situations.

1.4 IMPOSTER SYNDROME AND MENTAL HEALTH

Imposter syndrome (IS) is a psychological pattern in which individuals doubt their accomplishments and talents, and then fear being exposed as frauds. Despite their evident success, these feelings may lead to an inability to internalize achievements, often resulting in increased levels of stress, anxiety, and depression. (Qasem et al. 2025). The impact of IS extends far beyond mere academic performance, affecting every aspect of students' lives, including their mental health (Clark et al. 2022). The relentless cycle of self-doubt and perfectionism perpetuated by IS can profoundly impact students' psychological resilience, leading to heightened levels of stress, anxiety, and even depression Thomas & Bigatti, (2020). Fearing judgment or dismissal, many students suffer in silence, hesitant to seek help or support for fear of being perceived as weak or incapable Wang et al., (2019). Imposter Syndrome, like a shadow cast over academic pursuits, undermines students' confidence and sense of self-esteem Alsaleem et al. (2021). An increasing amount of data shows a clear

relationship between mental health disorders, especially anxiety and depression, and IS. Research using standardized psychological tests like the Patient Health Questionnaire and the Generalized Anxiety Disorder-7 (GAD-7) have revealed that those with high imposterism scores also often display high degrees of anxiety and depression symptoms El-Ashry et al. (2024).

1.5 IMPOSTER SYNDROME AND SELF COMPASSION

According to Neff (2003), a total of six factors, namely, self-kindness, common humanity, mindfulness, self-judgment, isolation, and overidentification, are included in the concept of self-compassion. Self-compassion was initially regarded as a one dimensional construct Neff (2003), yet a two dimensional construct of self-compassion was established and substantiated in recent years Carver and Scheier's (1998) self-regulation theory**,** psychological distress arises when individuals perceive a discrepancy between their current performance and internal standards. Impostor syndrome can be understood within this framework as a chronic self-evaluative discrepancy, wherein individuals consistently perceive themselves as falling short of internalized standards despite objective success. Persistent awareness of this perceived discrepancy may lead to heightened emotional distress, anxiety, and diminished psychological well-being. .López et al. (2015) Previous studies also suggested that individuals with low self-compassion levels tended to amplify personal mistakes, overlook personal abilities, and continue searching for evidence to support their false beliefs, eventually forming a self-denial model of thinking Patzak et al. (2017). That is, self-compassion could be the predictive variable for impostor syndrome. Meanwhile, considering the sense of shame and self- examination emphasized in traditional Chinese culture, a lower level of self-compassion was found among Chinese populations than Western populations Neff et al. (2008). Therefore, a chain mediation structure might exist between perfectionism, self-compassion, impostor syndrome, and depressive symptoms.

1.6 MENTAL HEALTH AND SELF-COMPASSION

The World Health Organization defines mental health as not only the absence of mental illness, but also “a state of complete physical, mental, and social well-being” (World Health Organization, 1948). In other words, mental health is the combination of psychological well-being and the absence of mental illness. Self-compassion refers to a way of relating kindly to the self during moments of suffering and perceived personal shortcomings (Neff, 2003b). Psychological well-being and psychopathology can be viewed on a continuum (Beck & Haigh, 2014), where the difference between a normal response and a disorder is a matter of degree and a defined threshold. MacBeth and Gumley (2012) examined the relationship between self-compassion and specific forms of stress-related and depressive psychopathologies, showing that self-compassion is negatively associated with psychopathology. Gross (1998) proposed that adaptive regulation strategies reduce emotional intensity and promote psychological well-being, whereas maladaptive strategies such as rumination and suppression increase vulnerability to distress. Impostor syndrome is associated with maladaptive regulation strategies, including rumination, self-blame, and emotional avoidance, which heighten anxiety and depressive symptoms.

Compassion-based theory, as articulated by Gilbert (2013)**,** suggests that self-compassion activates a soothing emotional system that counteracts threat-based responses. Within this framework, impostor syndrome can be conceptualized as a threat-driven psychological state, while self-compassion functions as a soothing mechanism that promotes emotional safety and resilience. By activating this soothing system, self-compassion reduces emotional arousal and buffers the negative mental health consequences of impostor feelings.

Moreover, it is reduced across a broad range of mental illnesses such as anxiety disorders, affective disorders, borderline personality disorder, and others (Athanasakou et al., 2020). Muris et al. (2016) proposed that excessive self-criticism a core feature of impostor syndrome plays a central role in the development and maintenance of mental health problems. Their work highlights that self-compassion directly counteracts self-criticism by fostering kindness toward the self and balanced emotional awareness. When self-compassion is low, impostor feelings are more likely to translate into

persistent emotional distress; however, when self-compassion is high, individuals demonstrate greater resilience and psychological flexibility. Collectively, these findings support an interactional framework in which impostor syndrome increases vulnerability to mental health difficulties, while self-compassion serves as a protective psychological resource that buffers its negative impact on emotional well-being. Smeets et al. (2014) demonstrated that self-compassion significantly reduces stress and emotional distress by promoting adaptive emotion regulation and reducing rumination. These findings support the view that self-compassion may *mediate* the relationship between impostor syndrome and mental health by explaining how negative self-beliefs translate into psychological outcomes. When individuals respond to impostor feelings with self-kindness and mindful awareness, the intensity of distress associated with perceived inadequacy is substantially reduced. Higgins' (1987) self-discrepancy theory posits that discrepancies between the actual self and ideal or ought selves generate emotional discomfort such as anxiety, guilt, and shame. Impostor feelings emerge when individuals perceive a mismatch between their actual self-concept and the idealized image of a "competent" or "successful" individual. Over time, these discrepancies may intensify emotional distress and negatively affect mental health, particularly in evaluative academic environments.

Self-compassion operates within this framework as a regulatory mechanism that reduces the emotional impact of self-discrepancies. By fostering acceptance and balanced self-awareness, self-compassion reduces over-identification with perceived inadequacy and allows individuals to process failure without excessive emotional reactivity. Thus, self-compassion may alter cognitive–affective processing by weakening the link between self-discrepancy and psychological distress.

Villwock et al. (2016) demonstrated that individuals experiencing high levels of impostor feelings also report elevated psychological distress, including anxiety, burnout, and emotional exhaustion, particularly in high-achievement settings. Their findings suggest that impostor syndrome operates as a vulnerability factor that intensifies stress responses and undermines emotional well-being. In contrast, psychological resources that promote self-acceptance and emotional regulation have been shown to mitigate such vulnerability. Mosewich et al. (2011) found that self-compassion weakened the relationship between self-criticism and emotional distress,

indicating that individuals high in self-compassion experience less psychological harm from self-doubt and perceived failure. Applied to impostor syndrome, this suggests that while impostor feelings may be present, their impact on anxiety, depression, and stress is significantly attenuated when self-compassion is high. Collectively, these findings provide strong theoretical and empirical support for conceptualizing self-compassion as both a mediating and moderating variable in the relationship between impostor syndrome and mental health. Conversely, state and trait self-compassion positively affect mental health in the form of improved well-being, and reduced symptoms of mental disorders, such as stress, eating habits, depression, and anxiety Ferrari et al. (2019).

1.7 THEORETICAL FRAMEWORK

1.7.1 Self-Compassion Theory

Neff (2003) proposed that self-compassion comprises three inter-related components self-kindness, common humanity, and mindfulness that collectively buffer psychological distress. The present study's finding of significant negative correlations between self-compassion and all three mental health dimensions provides strong empirical support for this proposition within the Indian graduate student context. The consistency of the protective effect across depression, anxiety, and stress is particularly notable, suggesting that self-compassion operates as a broad-spectrum psychological resource that moderates distress across multiple affective pathways. Inwood and Ferrari (2018) demonstrated that emotion regulation significantly mediates the relationship between self-compassion and mental health outcomes, suggesting that self-compassion may exert its protective influence partly by enhancing adaptive emotion regulation capacities, a mechanism worthy of further investigation in graduate student samples. The significant negative association between self-compassion and impostor syndrome ($r = -.290$) further supports the position advanced by Clarke and Hartley (2025) that self-compassion's core facets directly counteract the self-evaluative mechanisms that sustain impostor feelings. Since Neff (2003) characterised self-compassion as a trainable capacity rather than a fixed trait, and since the present sample demonstrated predominantly moderate rather than high self-compassion, there is a meaningful window for structured intervention that could simultaneously reduce impostor feelings

and improve mental health outcomes.

1.7.2 Cognitive-Behavioural Framework of Impostor Syndrome

From a cognitive-behavioural perspective, Chrisman et al. (1995) and Parkman (2016) proposed that impostor syndrome is maintained by maladaptive belief systems, distorted attributional styles, and chronic upward social comparison. The present study's finding that impostor syndrome is significantly positively correlated with depression, anxiety, and stress provides empirical support for the cognitive behavioural proposition that maladaptive self-evaluative cognitions generate sustained emotional distress across multiple domains. The significant negative relationship between self-compassion and impostor syndrome (r = -.290) suggests that self-compassionate orientations may directly interrupt the cognitive processes that maintain impostor beliefs. Patzak et al. (2017) found that individuals with low self-compassion tended to amplify personal mistakes, overlook personal abilities, and continue seeking evidence to support their fraudulence beliefs. Higher self-compassion, by contrast, enables individuals to acknowledge shortcomings with equanimity rather than shame, supporting a more stable self-concept under evaluative pressure.

1.8 STATEMENT OF THE PROBLEM

The study examines the relationship between impostor syndrome and mental health, focusing on the role of self-compassion as a protective factor among graduate students

1.9 OPERATIONAL DEFINITION OF THE STUDY

Impostor syndrome: is operationally defined as the degree of self-perceived intellectual fraudulence experienced by graduate students, as measured by scores obtained on the Clance Impostor Phenomenon Scale (CIPS). Higher scores on this 20-item scale indicate greater frequency and intensity of impostor feelings, including persistent self-doubt, fear of being exposed as incompetent, attribution of success to luck or chance, and inability to internalize achievements despite objective evidence of competence.

Self-compassion: is operationally defined as the degree to which graduate students relate to themselves with kindness, a sense of common humanity, and mindful

awareness during moments of personal failure or perceived inadequacy, as measured by scores obtained on the Self-Compassion Scale – Short Form (SCS-SF). This 12-item scale assesses both positive dimensions (self-kindness, common humanity, and mindfulness) and negative dimensions (self-judgment, isolation, and over-identification), with higher total scores reflecting greater levels of self-compassion.

Mental health: is operationally defined as the level of psychological distress experienced by graduate students across three dimensions — depression, anxiety, and stress — as measured by scores obtained on the Depression Anxiety Stress Scale-21 (DASS-21). Each subscale consists of seven items rated over the past week, with higher scores indicating greater severity of depressive symptoms, anxiety symptoms, and stress-related emotional reactivity respectively.

1.10 OBJECTIVES OF THE STUDY

In view of the available literature and the importance of the topic, the following objectives were set:

1. To assess the prevalence of impostor syndrome among graduate students.
2. To assess the prevalence of self-compassion among graduate students
3. To examine the difference in impostor syndrome, mental health, and self-compassion among male and female graduate students.
4. To investigate the relationship between impostor syndrome, mental health, and self- compassion among graduate students.

1.11 HYPOTHESES OF THE STUDY

1. There is no significant gender-based difference in impostor syndrome, mental health, and self-compassion among male and female graduate students
2. There is no significant relationship between impostor syndrome, mental health, and self-compassion among graduate students.

1.12 DELIMITATIONS

• The sample is restricted to the Jammu district, and the findings cannot be generalized to graduate students from other regions.
• The study is cross-sectional, collecting data at one single point in time. It does not measure changes over time or conduct follow-up assessments

1.13 SIGNIFICANCE OF THE STUDY

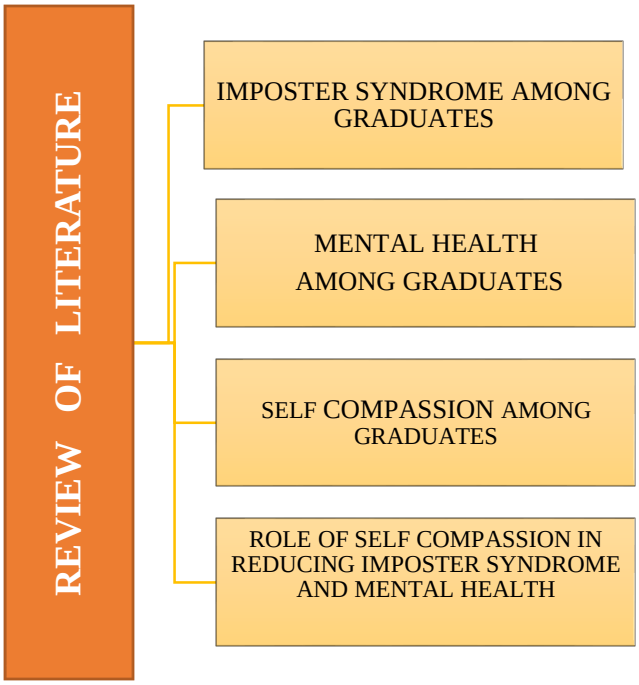
This study will be significant as it will examine the relationship between impostor syndrome and mental health, with particular emphasis on the role of self-compassion among graduate students. Understanding how self-compassion will influence this relationship will help in developing strategies to reduce impostor feelings and enhance students' psychological well-being. The findings are expected to guide universities and mental health professionals in designing supportive programs that will foster self-acceptance, resilience, and overall academic success.

CHAPTER II

REVIEW OF LITERATURE

A literature review is a thorough summary of earlier studies on a subject. The literature review examines scholarly books, journals, and other sources that are pertinent to a particular field of study. This prior research should be listed, described, summed up, impartially evaluated, and clarified in the review. Survey of related literature serves to show what is already available, solves the problem adequately without further investigation, and also avoids the risk of duplication. It provides comparative data useful for the interpretation of results and contributes to the general scholarship of the investigator.

The related studies have been reviewed under the following **Flow Chart**:



Qasem et al.(2025) examined the prevalence of Imposter Syndrome (IS) among university students and its association with stress, anxiety, and depression. A total sample of 1,120 students from the University of Jordan participated using a convenience sampling method. Findings showed that 47.5% experienced moderate IS, 34.7% frequent IS, and 7% intense IS, with no significant differences by gender, age,

specialty, or GPA. Imposter syndrome was positively correlated with depression, anxiety, and stress. The study suggests increasing awareness, encouraging open discussions, and providing coping strategies to mitigate the negative impacts of IS on students' mental health.

Morley & Langton (2025) examined the relationships between burnout, workload, and imposter syndrome among registered mental health nurses in the UK. Correlational analyses revealed moderate to high levels of burnout, workload, and imposter syndrome. A significant positive correlation was found between burnout and workload, whereas no significant associations emerged between burnout and imposter syndrome or workload and imposter syndrome. It was concluded that while workload contributes to burnout, imposter syndrome may operate independently in this population, highlighting the need for further research on its impact in nursing contexts.

Conklin, Ashley B. (2025) investigated the prevalence and contributing factors of imposter syndrome (IS) among 103 graduate allied health students in physical therapy, occupational therapy, and speech-language pathology. Participants completed an online IS survey, with a median Clance Imposter Phenomenon Scale (CIPS) score of 68.0, indicating frequent IS symptoms. Female students had significantly higher IS scores than males ($p = 0.026$). The findings highlight that frequent IS is common among graduate allied health students, with gender influencing severity.

Dao et al. (2024) examined longitudinal associations between sense of belonging, imposter syndrome, depressive symptoms, and well-being in 58 first-year college students in the United States. Students completed questionnaires during the first six months of college (T1) and at the end of the academic year (T2). Results showed that greater social and academic belonging at T1 was associated with lower imposter syndrome, lower depression, and higher well-being. After accounting for T1 measures, lower imposter syndrome predicted greater well-being at T2, but belonging did not predict T2 depression or well-being. It was concluded that fostering a sense of belonging and addressing imposter syndrome early in college may be critical for promoting student mental health.

Syed et al. (2024) examined the prevalence of moral injury and its associations with burnout, impostor syndrome, and self-compassion in 1,017 female physician trainees across 26 institutions. Of 787 respondents completing the Moral Injury Symptom Scale, 76.2% experienced moral injury. Moral injury was significantly associated with burnout, including emotional exhaustion, depersonalization, and low personal accomplishment, as well as with higher impostor syndrome and lower self-compassion. It was concluded that female medical trainees experience high levels of moral injury, which is closely linked to burnout, impostor syndrome, and low self-compassion, highlighting the need for targeted interventions.

Sander et al. (2024) examined the relationship between impostor phenomenon and mental health among 200 Black graduate students, focusing on the moderating role of perceived social support. Findings indicated that social support weakened the association between impostor feelings and both anxiety and depression, with family support specifically moderating anxiety, and family, significant other, and total support moderating depression. The results highlight the protective role of social support in mitigating negative mental health outcomes related to impostor syndrome.

Mohamed El-Ashry et al.(2024) examined the prevalence of imposter syndrome among 1,572 nursing students from three Egyptian universities and its association with depression, anxiety, and stress. Data were collected using the Clance Imposter Phenomenon Scale and Depression Anxiety Stress Scale-21. Findings showed that 46.3% of students experienced moderate imposter syndrome, 33% frequent imposter levels, and 6.2% intense imposter levels, with significant positive correlations between imposter syndrome and depression, anxiety, and stress. Stepwise regression indicated that imposter syndrome and sociodemographic factors explained 45% of the variance in students' mental health outcomes. The study emphasizes that targeted support is needed for students, particularly females in higher academic years, with lower GPAs, urban residence, lower family income, and limited engagement in hobbies.

Eng (2024) examined the relationships between academic resilience, perceived wellness, and imposter syndrome among 172 first-generation graduate counseling students (FGGCS). Survey data were analyzed using bivariate correlations and regression analyses to explore the associations and predictive relationships. Results

showed no significant correlation between academic resilience and imposter syndrome, but a moderate negative correlation was found between perceived wellness and imposter syndrome. Emotional wellness emerged as a significant predictor of imposter syndrome, while demographic factors such as age, gender, race, enrollment status, and parental education did not significantly influence imposter syndrome levels. The findings suggest the importance of supporting FGGCS wellness to mitigate imposter syndrome and promote mental health and retention

Martow (2024) examined mental health and university support among 648 graduate students at a Canadian university using an online survey. Findings revealed high rates of psychological ill-being across multiple domains. Advisor support was consistently associated with better mental health outcomes. Students most frequently recommended increased financial support to improve well-being. The results highlight the urgent need for universities to implement targeted strategies to support graduate student mental health and wellbeing.

Atkinson, C. L. (2024). explored PhD students' experiences of a brief self-compassion intervention to understand challenges in their academic journeys. Semi-structured interviews were conducted with nine students from a London university following a two-week MP3-delivered self-compassion program, and thematic analysis identified six major themes: Scared and Alone, Know thy Enemy, Transforming Perspectives, Everybody Hurts, Unlocking Self-Love, and Turning Guidance into Growth. Results indicated that the intervention helped students confront feelings of isolation, imposter syndrome, and stress, fostering a shift from self-criticism to self-compassion, reducing procrastination, and enhancing emotional resilience.

Hariharan et al.(2024) explored the impact of mindfulness and self-compassion practices embedded in a doctoral-level leadership course on students' stress regulation. Pre- and post-assessment inventories were administered to measure changes across mindfulness subscales and differences among demographic groups. Results indicated significant improvements in nearly all mindfulness subscales, with 5–22% of score variance attributed to course participation. Students over 40 and doctoral students of color showed greater improvements compared to younger and White students. Findings suggest mindfulness and self-compassion practices can enhance stress regulation, though generalizability is limited to doctoral-level students

and further research is needed across other educational levels.

Kilic & Karahan (2023) examined depression, anxiety, and academic distress among 459 graduate students in Turkey (64% women) using an online survey. Results showed that depression/anxiety and academic distress varied by sociodemographic factors, with higher levels observed in students who had previously sought psychological help. Younger students, master's students, and single students were at greater risk. No significant differences were found based on gender or place of residence. Findings suggest that university counselling centers can use these insights to identify at-risk graduate students and implement targeted prevention and intervention strategies.

Liu et al.(2023) evaluated the effectiveness of a 4-week brief self-compassion intervention on reducing impostor phenomenon, maladaptive perfectionism, and psychological distress in 227 college students randomly assigned to intervention or control groups. Results indicated significant reductions in impostor phenomenon and maladaptive perfectionism among intervention participants. Fear of self-compassion moderated reductions in maladaptive perfectionism and psychological distress, with higher fear linked to greater improvements. Core self-evaluation moderated changes in impostor phenomenon and maladaptive perfectionism, with lower self-evaluation predicting greater reductions. It was concluded that brief self-compassion interventions can effectively reduce impostor phenomenon and maladaptive perfectionism, particularly for students with higher fear of self-compassion or lower core self-evaluation.

Cai et al.(2023) explored self-compassion and its links to mental health in autistic versus non-autistic adults. Survey data from 153 autistic and 93 non-autistic adults, plus interviews with 11 autistic participants, showed that autistic adults reported significantly lower self-compassion. Across both groups, higher self-compassion was associated with greater psychological well-being and lower depression. Findings highlight the importance of fostering self-compassion in autistic populations for clinical and research applications.

Gresham-Dolby, C (2022) examine imposter syndrome among student pharmacists. The population included pharmacy students experiencing rapid development of professional identity. Findings suggest that mentorship from faculty and preceptors can help mitigate imposter syndrome. Strategies such as open communication, constructive feedback, and awareness are effective tools. Supporting students in this way may enhance self-confidence and professional growth.

Liu et al. (2022) assessed 1,865 college students over six months to examine how perfectionism influences depressive symptoms. Results showed that positive and negative perfectionism had significant direct effects on depression, with self-compassion and impostor syndrome mediating these relationships. Positive perfectionism reduced depressive symptoms via self-compassion and lower impostor syndrome, whereas negative perfectionism increased depressive symptoms through negative self-compassion and higher impostor syndrome.It was concluded that positive and negative perfectionism exert contrasting effects on depression, highlighting the protective role of self-compassion and the risk associated with impostor syndrome.

Beaton et al. (2022) examined whether self-compassion mediates the relationship between ADHD and mental health outcomes in adults. Using data from 543 adults with ADHD and 313 without, structural equation modeling showed that low self-compassion significantly contributed to poorer well-being and greater ill-being (depression, anxiety, stress) among adults with ADHD. Findings highlight self-compassion as a potential intervention target to improve mental health in this population.

Egan (2021) investigated the relationship between well-being-related attitudinal and personality constructs and academic performance in 206 undergraduate students. Participants completed questionnaires measuring mindfulness, self-compassion, resiliency, procrastination, consideration of future consequences, self-criticism, and social comparison, and academic records were reviewed at the end of the year. Results showed that higher resiliency, mindfulness, self-compassion, and consideration of future consequences were positively associated with academic performance, while

procrastination was negatively associated.

Holden et al.(2021) examined the relationships among imposter syndrome, perfectionism, and stress in 388 college students, including 184 (47.4%) first-generation students. Results showed that levels of imposter syndrome and stress were similar between first- and continuing-generation students. Socially prescribed perfectionism was significantly correlated with both imposter syndrome and stress in both groups, with imposter syndrome more strongly associated with stress among first-generation students. It was concluded that addressing perfectionism and imposter syndrome may be particularly important for supporting the mental health and retention of first-generation college students.

Gallea et al. (2021) examined work-related mental health issues among graduate students, using psychological and biological assessments. Findings revealed high levels of anxiety, depression, and burnout, with time spent in academia contributing to these outcomes. Graduate students exhibited altered HPA axis functioning and low work engagement, indicating a distinct work-related mental health profile. Compared to general workers, graduate students were equally stressed but showed lower engagement and higher anxiety and depression.

D L Schmulian et al. (2020) explored the prevalence of compassion fatigue and impostor syndrome among 72 Australian graduate allied health students (76.4% female, 50% under 25 years old). The Professional Quality of Life (ProQOL) scale measured compassion fatigue, while the Young Impostor Scale (YIS) screened for imposter syndrome. Findings indicated that 37.5% of students experienced imposter syndrome, 15.3% were at risk for compassion fatigue, and 57% were at risk for one or both conditions. Females were more likely to screen positive for imposter syndrome than males (45.5% vs. 11.8%).

Perez (2020). explored the relationship between student involvement and imposter syndrome among graduate students at the University of San Diego. The research aimed to understand how campus engagement impacts mental health and the prevalence of imposter syndrome. Findings indicated a slight correlation between the level of student involvement and the severity of imposter syndrome.

Thomas & Bigatti (2020) examined that medical students had similar overall perfectionism but lower maladaptive perfectionism compared to other students, and impostor phenomenon prevalence ranged from 22.5% to 46.6%, with higher rates in females. Both traits were linked to negative mental health outcomes, and medical culture was found to shape or exacerbate these characteristics, impacting professional identity formation. It was concluded that medical education should address the interplay between culture, perfectionism, and impostor phenomenon, and longitudinal research is needed to guide interventions supporting learner well-being and professional identity.

Kotera et al.(2020) explored links between mental health problems, shame, self-compassion, and sleep among 182 UK nursing students. Findings showed that mental health problems correlated positively with shame and negatively with self-compassion and sleep. Shame predicted higher mental health problems, while self-compassion predicted fewer; sleep was not a direct predictor. Importantly, self-compassion fully mediated the relationship between sleep and mental health. These results underscore self-compassion as a key protective factor against distress and shame, even under sleep deprivation.

Contreras. (2019) examined the relationship between self-compassion and stress coping mechanisms among 97 graduate social work students at a Hispanic-serving university in Southern California. Using non-parametric analyses (Kruskal-Wallis and Mann-Whitney tests), the study assessed correlations between self-compassion levels and coping strategies while controlling for demographic variables. Results indicated a strong, statistically significant correlation between higher self-compassion and more effective coping mechanisms ($p < .001$, $\eta^2 = .18$). The findings suggest that fostering self-compassion may enhance graduate students' ability to manage academic stress. Implications for social work practice include integrating self-compassion training to support student well-being.

Wang et al.(2018) explored the relationships between mental health, social support, and coping styles in 260 graduate students from three Chinese universities. Participants completed the SCL-90, Social Support Revalued Scale, and Coping Style Questionnaire. Results showed that students scored below national norms on most mental health subscales, except anxiety and phobic anxiety. Mental health was

negatively correlated with social support, problem-solving, and help-seeking, and positively correlated with self-blame, fantasy, withdrawal, and rationalization. Regression analyses indicated that coping styles (problem-solving, rationalization, self-blame, fantasy) and social support (subjective and objective) significantly influenced graduate students' mental health.

Inwood,& Ferrari (2018) examined the relationship between self-compassion, emotion regulation, and mental health, synthesizing five studies across community and clinical samples. Findings indicated that emotion regulation significantly mediated the relationship between self-compassion and various mental health outcomes, including stress, depression, and PTSD. All studies were cross-sectional, limiting causal interpretations. It was concluded that self-compassion may improve mental health by enhancing emotion regulation, suggesting it as a potential target for interventions aimed at individuals who struggle with emotional avoidance.

Ko et al. (2018) examined the effects of a Seminar on Compassion on psychological health in 41 college students (14 male, 27 female, mean age 19.8 years). Participants were randomized to the seminar or a wait-list control and completed self-report measures on anxiety, depression, perceived stress, self-compassion, compassion, and mindfulness, with salivary alpha-amylase also assessed. Baseline data showed negative correlations between self-compassion, mindfulness, and depression, anxiety, and stress. Post-intervention, students in the seminar demonstrated significant increases in mindfulness, self-compassion, and compassion, and a reduction in salivary alpha-amylase, but no significant changes in depression, anxiety, or perceived stress. The findings suggest the seminar effectively enhanced positive psychological traits and reduced a physiological marker of stress.

Colman et al. (2016) examined the relationship between self-care practices and positive outcomes in professional psychology graduate students, synthesizing 17 studies with 1,890 participants and 52 effect sizes. Using a random effects model, a weighted average effect size of $d = 0.77$ indicated that students who engaged in self-care experienced greater benefits than those who did not. The effect was moderated by the type of outcome assessed, with larger improvements in self-compassion, decreased

psychological distress, and life satisfaction compared to stress levels. The effect was not influenced by type of self-care, study design, or participant characteristics. Findings highlight the importance of incorporating self-care into graduate training to enhance well-being and professional development.

The review of literature clearly highlights that impostor syndrome is a pervasive psychological phenomenon among graduate and professional student populations, characterised by persistent self-doubt, fear of being exposed as a fraud, and the inability to internalise achievements despite objective evidence of competence (Clance, 1985; Bravata et al., 2020). Studies consistently demonstrate that individuals experiencing higher levels of impostor feelings are more likely to report elevated psychological distress, including depression, anxiety, and stress, underscoring its significance as a risk factor for compromised mental health (Cokley et al., 2017; El-Ashry et al., 2024; Qasem et al., 2025). The negative mental health consequences of impostor syndrome have been documented across diverse academic and professional contexts, including nursing, medicine, allied health, and graduate education, affirming its cross-disciplinary relevance (Thomas & Bigatti, 2020; Schmulian et al., 2020; Conklin et al., 2025). Conversely, self-compassion comprising self-kindness, common humanity, and mindfulness has emerged as a significant protective psychological resource, demonstrating consistent negative associations with impostor feelings and psychological distress (Neff, 2003; MacBeth & Gumley, 2012; Patzak et al., 2017). Research confirms that individuals with higher self-compassion are better equipped to cope with failure, regulate negative emotions, and maintain psychological resilience in the face of academic and professional demands (Allen & Leary, 2010; Marshall et al., 2015; Liu et al., 2023). The theoretical frameworks of Neff's Self-Compassion Model and the cognitive-behavioural conceptualisation of the impostor phenomenon together provide a strong foundation for understanding how self-compassionate orientations buffer the negative psychological impact of persistent self-doubt and fear of evaluation (Clarke & Hartley, 2025; Gilbert, 2010). However, despite this growing body of evidence, research examining the interrelationship between impostor syndrome, self-compassion, and mental health specifically among graduate students in India, with attention to gender differences, remains largely absent from the existing literature.

2.1 RESEARCH GAP

- Most studies on impostor syndrome and self-compassion have been conducted in Western countries or East Asian academic contexts, with very little research available specifically within the Indian higher education setting.
- Existing research has largely focused on medical, nursing, and allied health students rather than graduate students in humanities and social science disciplines, limiting the generalizability of findings to broader academic populations.
- Gender has mostly been treated as a background variable in previous studies rather than as a primary focus, leaving the relationship between gender, impostor syndrome, and self-compassion largely underexplored.
- Studies simultaneously examining impostor syndrome, self-compassion, and all three dimensions of mental health, depression, anxiety, and stress together within a single sample are scarce, particularly in non-Western student populations.
- No study was found that specifically examined the interrelationship between impostor syndrome, self-compassion, and mental health among graduate students in Jammu, India, making the present study one of the first to address this regional and contextual gap.

CHAPTER III

RESEARCH METHODOLOGY

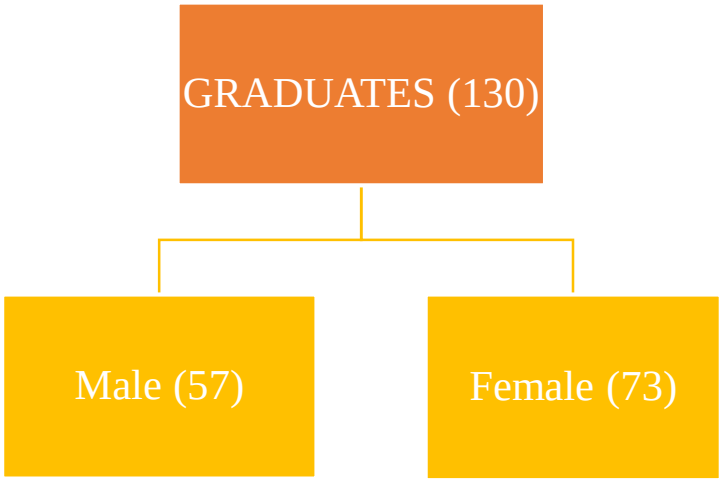
Research methodology is basically the overall plan or blueprint of how a study is conducted. It describes the entire process a researcher follows to collect, analyse, and interpret data in order to answer the research questions. It includes everything from how the sample was selected, what tools were used to collect data, how data was analysed, and what statistical techniques were applied.

3.1 RESEARCH DESIGN

The present study adopted a cross-sectional, descriptive-correlational research design. It is cross-sectional in nature as data was collected from all participants at a single point in time, without any follow-up or longitudinal assessment. It is descriptive as it aims to assess the prevalence of impostor syndrome and self-compassion among graduate students and to examine the levels of depression, anxiety, and stress within the sample. It is correlational as it investigates the nature and strength of the relationships between impostor syndrome, self-compassion, and the three dimensions of mental health, namely depression, anxiety, and stress.

3.2 POPULATION AND SAMPLE

Sampling formed the foundation of the present scientific investigation, as a well-selected sample ensured accuracy, efficiency, and reliability of the findings. The size and nature of the sample were determined according to the objectives, scope, and feasibility of the study. The population for the present study comprised graduate students from various colleges and universities located in the Jammu District. Due to limitations of time and resources, it was not feasible to study the entire population; therefore, a sample was selected for detailed investigation. The present study included a total sample of 130 graduate students, consisting of both male and female participants. Among them, 57 were male graduates and 73 were female graduates. The participants were selected from different colleges and universities of Jammu District to ensure adequate representation of the graduate population.



3.2.1 INCLUSION CRITERIA

• Participants were required to be currently enrolled as undergraduate or postgraduate students in recognized colleges or universities within the Jammu District.
• Students aged 21 years and above were included, as this range represented the typical graduate population in early adulthood.
• Both male and female students were included to allow for gender-based comparisons.
• Only those who provided informed consent and were willing to respond honestly to the study measures were included.

3.2.2 EXCLUSION CRITERIA

• Individuals not enrolled in a graduate-level programme were excluded.
• Students studying outside the Jammu District were not considered for the study.
• Participants with partially filled or incomplete questionnaires were excluded to ensure data accuracy.
• Individuals with diagnosed psychiatric disorders or undergoing treatment were excluded to avoid potential confounding effects.

3.3 SAMPLING TECHNIQUE

In the present study, the investigator used the Purposive Sampling Technique for data collection. This method was chosen to ensure that participants met specific criteria relevant to the study, namely being enrolled as graduate students and willing to share their experiences related to impostor syndrome, self-compassion, and mental health.

3.4 RESEARCH TOOLS USED AND ITS DESCRIPTION

Data for the present study were collected using standardized questionnaires through an online mode. The questionnaires were administered via Google Forms and were distributed electronically among eligible participants. The selection of appropriate research tools was essential for obtaining valid and reliable data, as the choice of tools depended on the nature and objectives of the problem under investigation.
Accordingly, each tool was selected based on its relevance, reliability, validity, and suitability for the target population.

For the present investigation, the following research tools were used:

3.4.1 THE DEPRESSION, ANXIETY AND STRESS SCALE – 21 ITEMS (DASS-21)

Depression Anxiety Stress Scales (DASS) is a self-report instrument specifically designed to tap into stress and distress. In other words, it measures the emotional state of depression, anxiety, and tension/stress. DASS has two commonly used versions; DASS-42 and DASS-21. The present study used DASS-21 developed by Lovibond and Lovibond (1995). For DASS-21, there are seven items in each of the subscales which were selected to be representative and sum as close to half of the respective full-scale scores as possible (Henry and Crawford, 2005). The depression subscale assesses symptoms such as dysphoria, hopelessness, self-worthlessness, and lack of interest, whereas the anxiety scale contains items that assess somatic symptoms, situational anxiety, and subjective experience of anxious affect. The third scale, which is the stress scale, assesses a condition of persistent arousal and tension consisting of symptoms such as difficulty in relaxing, agitation, irritability, and impatience (Lovibond and Lovibond, 1995). Each item is scored on a 4 grade Likert scale from 0 to 3. All items can be added to a total score as a measure of general psychological distress. Higher composites indicate higher levels of stress and distress.

3.4.2 SELF-COMPASSION SCALE SHORT FORM (SCS-SF)

The Self-Compassion Scale Short Form (SCS-SF) developed by Raes, Pommier, Neff, and Van Gucht (2011) is a self-report instrument designed to measure an individual's tendency to be kind and understanding toward oneself in times of difficulty or failure.

It assesses the construct of self-compassion through 12 items derived from the original 26-item Self-Compassion Scale (Neff, 2003). The scale consists of six subscales: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification, each represented by two items. Responses are recorded on a 5-point Likert scale ranging from 1 (“Almost never”) to 5 (“Almost always”). The negative subscales (self-judgment, isolation, and over-identification) are reverse scored before computing the mean scores. A higher total score indicates a greater level of self-compassion. The SCS-SF has demonstrated high internal consistency (Cronbach’s alpha $\geq$ .86) and a strong correlation with the long form (r $\geq$.97), confirming its reliability and validity. It is widely used in psychological research to examine the role of self-compassion in emotional well-being, resilience, and mental health, providing a brief yet effective measure for both research and clinical purposes.

3.4.3 CLANCE IMPOSTOR PHENOMENON SCALE (CIPS)

The CLANCE IMPOSTOR PHENOMENON SCALE (CIPS), developed by Pauline Rose Clance (1985), is a self-report instrument designed to identify the presence and intensity of impostor feelings among individuals who, despite evident success, persistently doubt their abilities and fear being exposed as frauds. The scale consists of 20 items, each rated on a 5-point Likert scale ranging from 1 (Not at all true) to 5 (Very true), assessing various aspects of impostor tendencies such as fear of failure, discounting praise, feelings of intellectual phoniness, and attribution of success to luck or external factors. After completing the scale, the total score is calculated by summing responses to all items. A total score of 40 or below indicates few impostor characteristics; 41–60 reflects moderate impostor experiences; 61–80 suggests frequent impostor feelings; and above 80 indicates intense impostor experiences.

Higher scores represent greater severity of impostor phenomenon. The CIPS has been widely used in research and clinical settings to assess self-doubt, achievement-related anxiety, and perfectionistic tendencies across diverse populations. It serves as a reliable and valid measure for understanding the psychological experience of the Impostor Phenomenon.

3.5 STATISTICAL TECHNIQUE EMPLOYED

In order to analyse the data, the investigator used the following statistical techniques.

1. Mean

2. Standard Deviation

3. t-test

4. Pearson's Product Moment Correlation

CHAPTER-IV

ANALYSIS & INTERPRETATION OF DATA

This chapter presents the analysis and interpretation of the data collected, integral to addressing the research questions and hypotheses set forth in the study. The data, both quantitative and qualitative, has been systematically proceed and analysed using appropriate statistical and thematic techniques. The results are presented in a structured manner, highlighting key patterns, relationships, and trends that emerged from the analysis.

4.1 DEMOGRAPHIC PROFILE OF THE RESPONDENTS

Table 4.1*:*

Demographic profile of the respondents

Demographic	**Variables**	**Percentage**	**N**
Gender	Male	43.8%	57
	Female	56.2%	73
Educational Level	UG	35.4%	46
	PG	64.6%	84
Year of study	1 year	12.3%	16
	2 year	53.1%	69
	3 year	34.6%	45
Age	21-25 year	60.0%	78
	26-30 year	33.8%	44
	31 and above	6.2%	8

Note: *N* = 130.

The study was conducted on 130 graduate students of Jammu District. As per Table 4.1, the demographic characteristics of the sample indicate an equal gender distribution,

with 50% female (n = 65) and 50% male (n = 65) participants. The table also shows the mean values for age (M = 1.46), gender (M = 1.56), education level (M = 1.65), and year of study (M = 2.22). Figure 4.1 depicts the same.

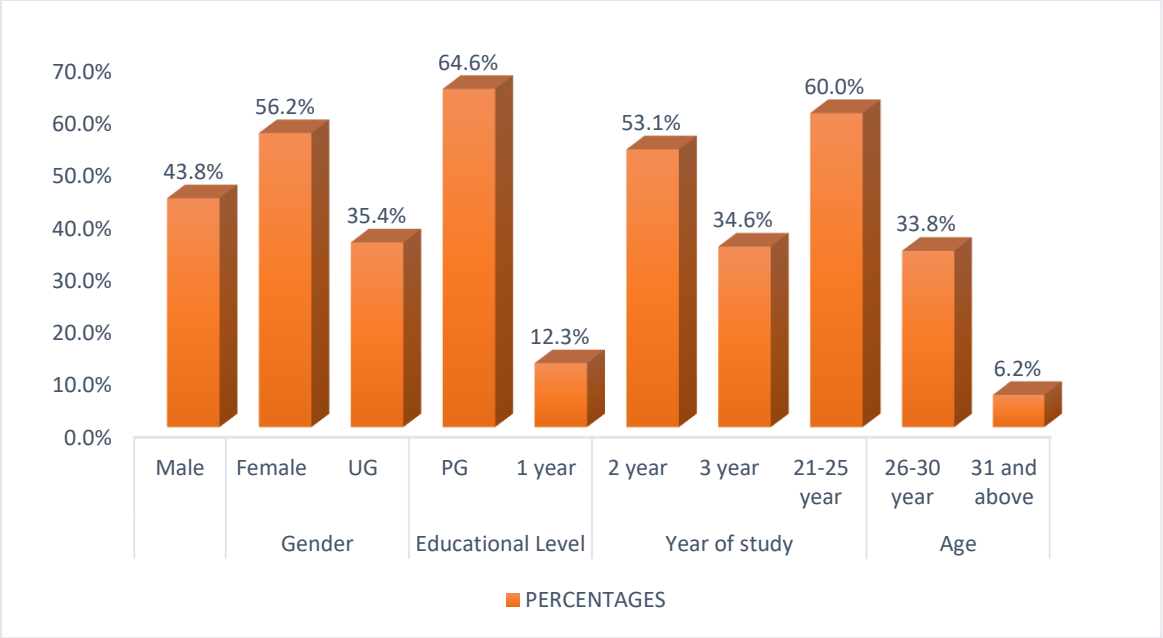


Figure 4.1

Demographic details of participants.

4.2 PREVALENCE OF IMPOSTER SYNDROME, MENTAL HEALTH AND SELF COMPASSION AMONG GRADUATE

To examine the prevalence of imposter syndrome, mental health and self-compassion among the graduate sample, frequency distributions were computed for each variable using established categorical cut-offs. Participants were classified into different levels for each variable, such as few, moderate, frequent, and intense for imposter syndrome; normal, mild, moderate, and severe levels for mental health; and low, moderate, and high levels for self-compassion based on score distributions. The results are presented in Table 4.2

Table 4.2*:*

Prevalence of imposter syndrome, mental health and self-compassion among graduates

Variable	Category	F	%
IP	Few IP	4	3.1
	Moderate IP	46	35.4
	Frequent IP	75	57.7
	Intense IP	5	3.8
DP	Normal	80	61.5
	Mild	40	30.8
	Moderate	10	7.7
AN	Normal	31	23.1
	Mild	21	16.2
	Moderate	62	47.7
	Severe	16	12.3
	Extremely severe	1	.8
ST	Normal	111	85.4
	Mild	17	13.1
	Moderate	2	1.5
SC	Low	10	7.7
	Moderate	112	86.2
	High	8	6.2

Note: IP= Imposter syndrome, AN=Anxiety, DP=Depression, ST=Stress, SC= Self compassion, F= Frequency

The table shows the distribution of graduates across levels of imposter syndrome, mental health and self-compassion. For imposter syndrome, most participants reported frequent levels (57.7%), followed by moderate levels (35.4%). Very few participants experienced intense (3.8%) or few imposter feelings (3.1%). This suggests that imposter feelings are quite common among graduates, although extreme levels are rare.

In the case of depression, the majority of participants were in the normal range (61.5%), while 30.8% showed mild depression and only 7.7% reported moderate levels. This indicates that overall depression levels are relatively low in this group. For anxiety, the highest proportion of participants fell under moderate anxiety (47.7%), followed by normal (23.1%) and mild (16.2%) levels. Some participants experienced severe (12.3%) and extremely severe anxiety (0.8%), showing that anxiety is more prominent compared to depression. Regarding stress, most participants were in the normal category (85.4%), with 13.1% experiencing mild stress and only 1.5% moderate stress. This indicates generally low stress levels among graduates. For self-compassion, the majority of participants reported moderate levels (86.2%), while smaller proportions had low (7.7%) and high (6.2%) self-compassion. This suggests that most individuals have an average level of self-compassion. Overall, the findings indicate that graduates commonly experience frequent imposter feelings and moderate anxiety, while depression and stress levels remain mostly normal, and self-compassion is generally moderate.

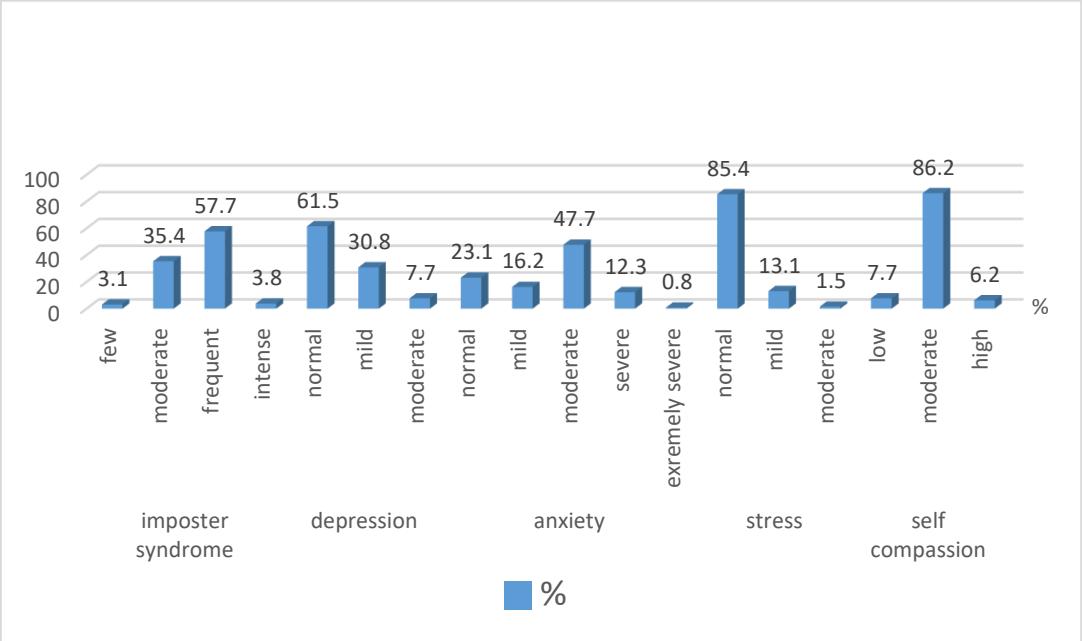


Figure 4.2:

Prevalence of imposter syndrome, mental health and self-compassion among graduates

4.3 GENDER DIFFERENCES IN IMPOSTER SYNDROME, SELF-COMPASSION AND MENTAL HEALTH (DASS)

An independent samples *t*-test was conducted to examine whether statistically significant gender differences existed in imposter syndrome, mental health and self-compassion (SCS). The standard independent samples *t*-test values are reported. Results are presented in Table 4.3

Table 4.3*:*

Independent Samples t-test showing differences in imposter syndrome, self-compassion and depression, anxiety & stress (DASS)

Variable	**Male M (SD)**	**Female M (SD)**	***t***	***df***	***p***	***Cohen's d***
Imposter syndrome	2.58 (.65)	2.66 (.58)	-.724	128	.471	.614
Depression	1.46 (.62)	1.47 (.64)	-.085	128	932	.639
Anxiety	2.63 (1.06)	2.42 (.95)	1.166	128	.246	1.00
Stress	1.17 (.42)	1.15 (.39)	.341	128	.734	.410
Self-Compassion	2.01 (.35)	1.95 (.38)	.888	128	.376	.373

Note: M = Mean; *SD* = Standard Deviation. All tests are two-tailed. Cohen's *d* values represent effect sizes and are interpreted using Cohen's (1988) guidelines: small (.20), medium (.50), and large (.80). No statistically significant gender differences were found across any variables (all $p > .05$).

As presented in Table 4.3, male and female participants reported comparable mean scores across imposter syndrome, depression, anxiety, stress, and self-compassion (SCS). Female participants showed slightly higher mean scores on imposter syndrome (M = 2.66, SD = .58) compared to males (M = 2.58, SD = .65), whereas males reported marginally higher scores on anxiety (M = 2.63, SD = 1.06) and self-compassion (M =

2.01, SD = .35) than females. However, these differences were minimal.

No statistically significant gender differences were observed for any of the variables. Specifically, imposter syndrome showed no significant difference, *t* (128) = -0.724, p = .471, Cohen's d = .614, indicating a moderate effect size but non-significant result. Similarly, depression scores were nearly identical across genders, *t* (128) = -0.085, p = .932, d = .639, suggesting no meaningful difference.

For anxiety, although males had slightly higher mean scores, the difference was not statistically significant, *t* (128) = 1.166, p = .246, d = 1.00. Stress levels were also comparable between males and females, *t* (128) = .341, p = .734, d = .410, indicating a small effect size. Likewise, self-compassion (SCS) did not differ significantly between genders, *t* (128) = .888, p = .376, d = .373.

Overall, the findings indicate that gender does not significantly influence levels of imposter syndrome, depression, anxiety, stress, or self-compassion in this sample. Although minor mean differences were observed, the lack of statistical significance and generally small to moderate effect sizes suggest that these differences are not practically meaningful.

4.4 RELATIONSHIP BETWEEN IMPOSTER SYNDROME, SELF-COMPASSION AND MENTAL HEALTH (DASS)

Pearson product-moment correlation coefficients were computed to examine the interrelationships among imposter syndrome, mental health, and self-compassion (SCS). The correlation matrix is presented in Table 4.4.

Table 4.4:

Correlation Analysis

	IP	**DP**	**AN**	**ST**	**SC**
IP	-	270**	.320**	.304**	-.290**
DP	-	-	.706**	730**	-299**
AN	-	-	-	.774**	-248**
ST	-	-	-	-	-305**

NOTE: IP = Imposter Syndrome; DP = Depression; AN = Anxiety; ST = Stress; SC = Self-Compassion. $p < .05$. ** $p < .01$ (2-tailed).

As presented in Table 4.4, significant positive correlations were observed among imposter syndrome, depression, anxiety, and stress. Imposter syndrome was significantly positively correlated with depression ($r = .270$, $p = .002$), anxiety ($r = .320$, $p < .001$), and stress ($r = .304$, $p < .001$), indicating that individuals with higher imposter feelings tend to experience higher levels of psychological distress.

Strong positive intercorrelations were also found among the distress variables. Depression showed a high positive correlation with anxiety ($r = .706$, $p < .001$) and stress ($r = .730$, $p < .001$), while anxiety and stress were very strongly correlated ($r = .774$, $p < .001$). These findings suggest that depression, anxiety, and stress co-occur and are closely related constructs within this sample.

In contrast, self-compassion (SCS_TOTAL) was found to be significantly negatively correlated with all other variables. Specifically, self-compassion showed negative correlations with imposter syndrome ($r = -.290$, $p = .001$), depression ($r = -.299$, $p = .001$), anxiety ($r = -.248$, $p = .004$), and stress ($r = -.305$, $p < .001$). This indicates that higher levels of self-compassion are associated with lower levels of imposter feelings and psychological distress.

Overall, the findings highlight that while imposter syndrome and psychological distress variables are positively interrelated, self-compassion serves as a protective factor, demonstrating consistent inverse relationships with these variables.

To visually illustrate the significant negative correlation between self-compassion and imposter syndrome, a scatterplot with an ordinary least squares linear regression fit line was constructed. This is presented as Figure 4.3.

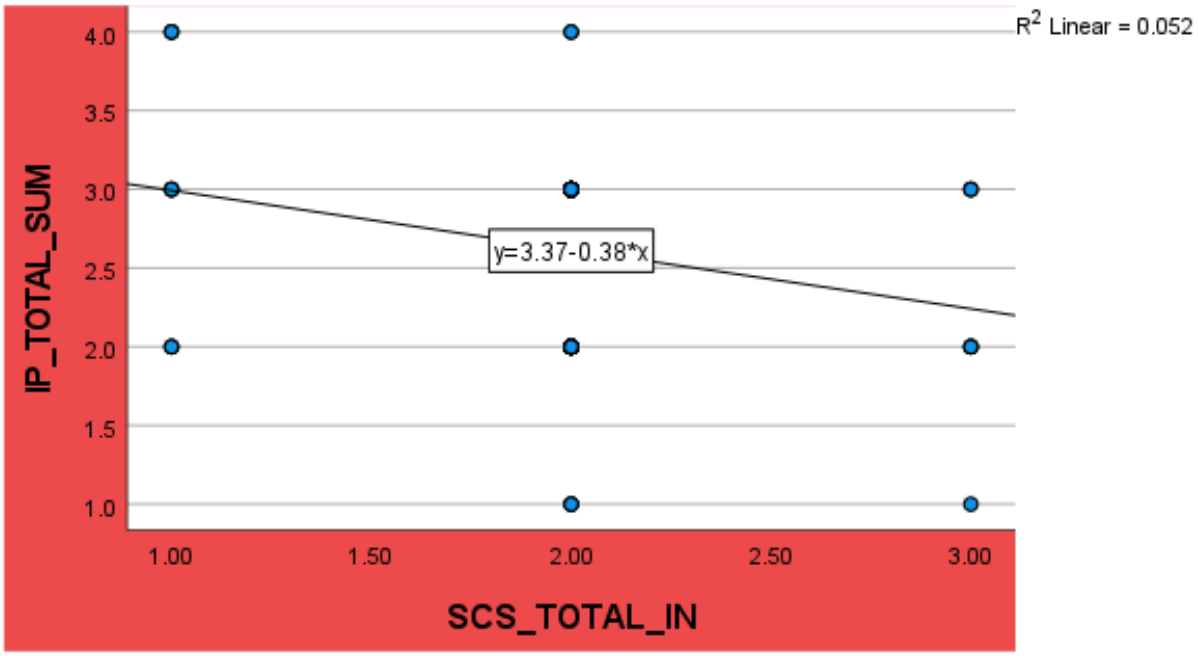


Figure 4.3*:*

Scatterplot Showing the Relationship Between Self-Compassion and Imposter Syndrome.

Note. SCS_TOTAL_IN = Self-Compassion Scale total score; IP_TOTAL_SUM = Imposter syndrome scale total score. Higher scores indicate greater levels of the respective construct. The solid line represents the OLS linear regression fit ($y = 3.37 - 0.38x$). The relationship between SCS total and IP total is weak and negative, with $R^2 = .052$, indicating that approximately 5.2% of the variance in IP total is explained by SCS total.

4.5 SUMMARY OF FINDINGS

Taken together, the results indicated that imposter syndrome and mental health variables (depression, anxiety, and stress) are significantly and positively interrelated within this sample, suggesting that individuals experiencing higher imposter feelings are more likely to report elevated levels of emotional distress. Among these, the strongest associations were observed between anxiety and stress ($r = .774$, $p < .01$), followed by depression with stress ($r = .730$, $p < .01$) and anxiety ($r = .706$, $p < .01$), highlighting the close co-occurrence of these distress dimensions.

In contrast, self-compassion demonstrated a consistent and significant negative

relationship with all variables, including imposter syndrome ($r = -.290$, $p < .01$), depression ($r = -.299$, $p < .01$), anxiety ($r = -.248$, $p < .01$), and stress ($r = -.305$, $p < .01$). This indicates that individuals with higher self-compassion tend to experience lower levels of imposter feelings as well as reduced mental health, suggesting its role as a protective psychological resource.

The most substantively important finding emerging from this analysis is the strong positive association between anxiety and stress, along with the consistent inverse relationship between self-compassion and stress ($r = -.305$, $p < .01$), which suggests that self-compassion may play a crucial role in buffering stress and related emotional difficulties. Overall, these findings highlight the dual pattern of risk (imposter syndrome and distress interlinkages) and protection (self-compassion), which may have important implications for psychological interventions and mental health promotion.

CHAPTER- V

FINDINGS, CONCLUSION, FUTURE IMPLICATIONS & SUGGESTIONS

The purpose of the present chapter is to interpret and contextualise the findings of the study within the existing body of empirical and theoretical literature on impostor syndrome, self-compassion, and mental health among graduate students. The chapter is organised around the four objectives of the study: (a) assessing the prevalence of impostor syndrome among graduate students, (b) assessing the prevalence of self-compassion among graduate students, (c) examining gender-based differences in impostor syndrome, mental health, and self-compassion, and (d) investigating the relationship between impostor syndrome, mental health, and self-compassion. Each objective and its corresponding null hypothesis are addressed in turn. The chapter proceeds with a discussion of theoretical and practical implications, followed by an acknowledgement of the study's limitations and recommendations for future research. The chapter concludes with a summary of the key findings and their significance for the fields of clinical psychology, positive psychology, and graduate education.

Four null hypotheses guided the investigation. The first (H01) stated that there is no significant prevalence of impostor syndrome among graduate students. The second (H02) stated that there is no significant prevalence of self-compassion among graduate students. The third (H03) stated that there is no significant gender-based difference in impostor syndrome, mental health, and self-compassion among male and female graduate students. The fourth (H04) stated that there is no significant relationship between impostor syndrome, mental health, and self-compassion among graduate students. The results provided grounds for the rejection of H01 and H02, while H03 was fully retained, and H04 was partially rejected on the basis of significant correlations across multiple variables. These outcomes are elaborated in the sections that follow.

5.1 INTERPRETATION OF FINDINGS

The findings of the present study are interpreted in the context of the literature reviewed in Chapter II. While the sample was drawn from a specific regional context, namely colleges and universities in the Jammu District, India, the patterns that emerged are

broadly consistent with international research on impostor syndrome, self-compassion, and student mental health. Each finding is discussed below in relation to the four study objectives.

OBJECTIVE 1: PREVALENCE OF IMPOSTOR SYNDROME AMONG GRADUATE STUDENTS

The first objective of the study was to assess the prevalence of impostor syndrome among the graduate student sample using the Clance Impostor Phenomenon Scale (CIPS). The null hypothesis (H01) stated that no significant prevalence of impostor syndrome would be found. This hypothesis was clearly rejected. The majority of graduate students (61.5%) reported frequent impostor feelings, with 30.8% reporting moderate and 5.4% reporting intense impostor experiences. Only a small minority reported few impostor characteristics, confirming that impostor syndrome is not a peripheral or minor concern within this population but a widely distributed psychological experience affecting the large majority of graduate students sampled.

This finding is consistent with and extends a substantial body of international research documenting the high prevalence of impostor syndrome in academic populations. Qasem et al. (2025), in a study of 1,120 students at the University of Jordan, found that 34.7% experienced frequent impostor syndrome and 7% reported intense impostor experiences. El-Ashry et al. (2024) similarly reported that 33% of Egyptian nursing students experienced frequent impostor levels, with 6.2% at the intense level. Bravata et al. (2020), in their systematic review of the impostor phenomenon across diverse populations, confirmed that academic contexts are particularly fertile environments for impostor feelings, owing to the constant evaluation, performance pressure, and competitive climates that characterise graduate education. The present findings extend this evidence to the Indian graduate student context in Jammu, affirming that impostor syndrome is not confined to Western academic environments and merits urgent attention in Indian higher education.

The high prevalence of frequent impostor feelings (61.5%) observed in this sample, which is notably higher than rates reported internationally, may reflect particular features of the graduate student experience in the Jammu context, including competitive admission processes, intense academic evaluation, limited peer support structures, and the pressure to prove academic worthiness in a rapidly expanding higher education

system. Hutchins and Rainbolt (2017) emphasised that impostor feelings often arise specifically during periods of role transition and increased responsibility, such as entry into graduate education, where individuals must integrate a new academic identity with their prior self-concept. The present sample, comprising students in the early and middle years of graduate study, may have been especially susceptible to this identity incongruence, thereby exhibiting elevated impostor prevalence.

OBJECTIVE 2: PREVALENCE OF SELF-COMPASSION AMONG GRADUATE STUDENTS

The second objective was to assess the prevalence of self-compassion among graduate students using the Self-Compassion Scale – Short Form (SCS-SF). The null hypothesis (H02) stated that no significant prevalence of self-compassion would be found. The results led to the rejection of this hypothesis. The majority of graduate students (86.2%) reported moderate levels of self-compassion, with smaller proportions reporting low (7.7%) and high (6.2%) self-compassion. While this finding confirms that self-compassion is present at an average level in this population, it also underscores that only a very small minority of students demonstrate the high self-compassion that serves as the most robust protective resource against impostor feelings and psychological distress.

The predominance of moderate self-compassion levels in the present sample is consistent with findings from comparable graduate student populations. Contreras (2019) noted that self-compassion practices in graduate training settings are often underdeveloped despite their demonstrable benefits, a pattern that may contribute to the moderate rather than high self-compassion levels observed here. Colman et al. (2016), in a meta-analysis of self-care outcomes in professional psychology graduate students, found that self-care and self-compassion practices, when implemented, produced significant improvements in psychological well-being; however, the majority of graduate programmes do not systematically cultivate these capacities. Liu et al. (2023) demonstrated that even a brief four-week self-compassion intervention significantly reduced impostor phenomenon and maladaptive perfectionism in college students, suggesting that the moderate self-compassion baseline observed in the present sample represents both a current limitation and a meaningful opportunity for structured

intervention.

From a theoretical perspective, Neff's (2003) conceptualisation of self-compassion as comprising self-kindness, common humanity, and mindfulness suggests that graduate students operating at moderate levels may be employing some components of self-compassion while under-utilising others. The competitive and evaluative climate of graduate education may, in particular, constrain the development of self-kindness and common humanity the recognition that imperfection and struggle are shared human experiences while selectively cultivating mindfulness as a coping tool. Barnard and Curry (2011) demonstrated that self-compassion is more strongly associated with psychological well-being than self-esteem, particularly in contexts of failure and personal inadequacy, reinforcing the importance of cultivating all three self-compassion components among graduate students.

OBJECTIVE 3: GENDER-BASED DIFFERENCES IN IMPOSTOR SYNDROME, MENTAL HEALTH, AND SELF-COMPASSION

The third objective was to examine whether gender-based differences existed in impostor syndrome, mental health dimensions, and self-compassion among the graduate student sample. The null hypothesis (H03) stated that no significant gender-based differences would be found. This hypothesis was fully retained. No statistically significant gender differences were observed for impostor syndrome [$t(128) = -0.724$, $p = .471$], depression [$t(128) = -0.085$, $p = .932$], anxiety [$t(128) = 1.166$, $p = .246$], stress [$t(128) = .341$, $p = .734$], or self-compassion [$t(128) = .888$, $p = .376$]. The uniformly non-significant results across all five variables confirm the absence of practically meaningful gender differences in this sample.

The retention of H03 is consistent with a growing body of contemporary literature that challenges the assumption that impostor syndrome is inherently a gendered phenomenon. Qasem et al. (2025), in a study of 1,120 Jordanian university students, similarly found no significant differences in impostor syndrome by gender. Kiliç and Karahan (2023) found that depression, anxiety, and academic distress did not differ significantly by gender in their study of graduate students in Turkey, suggesting that the psychological vulnerabilities of graduate education may transcend gender boundaries in certain academic and cultural contexts. These findings collectively

indicate that when relevant psychological variables are taken into account, gender per se does not independently drive impostor experiences or mental health outcomes among graduate students.

It is important to note that some prior studies have reported higher impostor syndrome scores in women. Conklin (2025) found higher impostor syndrome scores among female graduate allied health students, and Schmulian et al. (2020) reported that females were more likely to screen positive for impostor syndrome than males (45.5% versus 11.8%). However, these findings typically emerge from specialised professional training contexts such as nursing and allied health programmes, where gender role expectations and professional identity pressures may be more pronounced. The present sample, comprising graduate students across diverse disciplines in the Jammu District, may not carry the same degree of field-specific gendered pressures, which may partly explain the absence of gender differences observed here.

The absence of gender differences in mental health outcomes is also consistent with Evans et al. (2018), who attributed high rates of co-occurring distress among graduate students to shared academic stressors competitive climates, financial insecurity, performance pressure, and sustained evaluation that affect male and female students with comparable intensity. The present findings suggest that graduate student mental health support programmes in the Jammu context need not be exclusively gender-differentiated; rather, they should focus on universal risk factors such as impostor syndrome and low self-compassion that operate similarly across gender lines.

OBJECTIVE 4: RELATIONSHIP BETWEEN IMPOSTOR SYNDROME, MENTAL HEALTH, AND SELF-COMPASSION

The fourth and most theoretically central objective of the study was to investigate the relationships between impostor syndrome, mental health (depression, anxiety, and stress), and self-compassion among graduate students. The null hypothesis (H04) stated that no significant relationship would be found. This hypothesis was partially rejected on the basis of multiple significant correlations. Specifically, impostor syndrome was significantly positively correlated with depression ($r = .270$, $p = .002$), anxiety ($r = .320$, $p < .001$), and stress ($r = .304$, $p < .001$). Self-compassion was significantly negatively correlated with impostor syndrome ($r = -.290$, $p = .001$), depression ($r = -.299$, $p =$

.001), anxiety (r = -.248, p = .004), and stress (r = -.305, p < .001). Strong positive intercorrelations were found among depression, anxiety, and stress (r = .706 to .774).

The significant positive associations between impostor syndrome and all three mental health dimensions confirm that impostor syndrome is not a benign self-evaluative tendency but a meaningful psychological risk factor that covaries with clinically relevant levels of depression, anxiety, and stress. These findings are congruent with the extensive literature documenting the negative psychological consequences of impostor feelings. Cokley et al. (2017) demonstrated that impostor syndrome independently predicts anxiety and depression even after controlling for self-esteem, reinforcing its status as a unique psychological construct with distinct mental health implications. El-Ashry et al. (2024) found that impostor syndrome and sociodemographic factors together explained 45% of the variance in mental health outcomes among nursing students. Thomas and Bigatti (2020) reported that the impostor phenomenon was linked to negative mental health outcomes including anxiety, depression, and burnout across academic and medical student samples.

The strength of the association between impostor syndrome and anxiety (r = .320) is particularly noteworthy. Impostor syndrome is centrally characterised by fear of failure, fear of evaluation, and anticipatory anxiety about exposure as a fraud. These cognitive patterns are intrinsically anxiety-generating, as students experiencing impostor feelings engage in persistent monitoring of their performance, hypervigilance to evaluative cues, and anticipatory rumination about potential failure. Vergauwe et al. (2015) demonstrated that impostor feelings contribute to emotional exhaustion and heightened stress in professional environments, suggesting that the psychological depletion associated with sustained self-doubt may directly amplify both anxious and depressive symptomatology. The present findings extend these observations to a South Asian academic population, affirming the cross-cultural generalisability of the impostor syndrome–anxiety relationship.

The strong positive intercorrelations among depression, anxiety, and stress (r = .706 to .774) reflect the transdiagnostic co-occurrence of these distress dimensions among graduate students. Evans et al. (2018) documented high co-occurring rates of depression and anxiety attributable to chronic academic stressors, competitive climates, and sustained performance pressures. The replication of this transdiagnostic pattern in the

present Indian graduate student sample confirms the construct validity of the DASS-21 in this context and affirms that psychological distress in graduate students requires comprehensive, transdiagnostic intervention approaches rather than disorder-specific responses.

The significant negative relationships between self-compassion and all study variables represent the most practically consequential finding cluster of the present study. Self-compassion demonstrated protective associations with impostor syndrome (r = -.290), depression (r = -.299), anxiety (r = -.248), and stress (r = -.305), confirming its role as a broad-spectrum psychological buffer. These findings are strongly congruent with MacBeth and Gumley's (2012) meta-analytic conclusion that self-compassion is robustly negatively associated with psychopathology across diverse populations. Patzak et al. (2017) demonstrated that self-compassion buffers impostor feelings by fostering self-kindness and reducing self-criticism. The protective mechanism of self-compassion can be understood through Gilbert's (2010) Compassion-Focused Therapy framework, which conceptualises self-compassion as an evolved emotion-regulation system that counteracts threat-based self-criticism and shame. Clarke and Hartley (2025) extended this by demonstrating that self-compassion's facets self-kindness, mindful awareness, and common humanity serve as specific mechanisms to reduce negative self-evaluation, lessen shame, and bolster resilience, thereby mitigating the mental health impact of impostor feelings.

5.2 IMPLICATION FOR PRACTISE

Beyond their theoretical significance, the findings of the present study carry several concrete implications for graduate programme administrators, university counselling services, faculty supervisors, and institutional policy-makers.

First, the high prevalence of frequent impostor feelings (61.5%) and the significant positive relationships between impostor syndrome and depression, anxiety, and stress establish impostor syndrome as a priority target for graduate student mental health programming. Dao et al. (2025) demonstrated that addressing impostor syndrome early in college is critical for promoting student mental health and well-being. Universities should implement proactive, structured programmes that normalise impostor experiences, provide psychoeducation about the impostor phenomenon, and offer skills-based workshops in cognitive reframing and self-compassionate coping.

Gresham-Dolby (2022) emphasised that mentorship from faculty and preceptors, combined with open communication and constructive feedback, can effectively mitigate impostor syndrome and enhance professional self-confidence.

Second, the consistent protective role of self-compassion across impostor syndrome, depression, anxiety, and stress establishes self-compassion training as a particularly cost-effective and broadly beneficial target for psychological intervention. Liu et al. (2023) demonstrated that a four-week brief self-compassion intervention significantly reduced impostor phenomenon and maladaptive perfectionism in college students. Atkinson (2024) similarly found that a brief self-compassion programme helped doctoral students confront feelings of isolation and impostor syndrome, fostering a shift from self-criticism to self-compassion and enhancing emotional resilience. Evidence-based programmes such as Mindful Self-Compassion (MSC) training should be formally integrated into graduate student orientation curricula and ongoing wellness programmes. The dual benefit of self-compassion simultaneously reducing impostor feelings and alleviating depression, anxiety, and stress makes it an especially efficient intervention target.

Third, the absence of significant gender differences across all variables supports the design of universal, inclusive graduate student mental health programmes rather than exclusively gender-targeted interventions. Impostor syndrome and psychological distress appear to be shared academic phenomena that transcend gender, suggesting that institution-wide strategies are likely to yield broadly equitable outcomes. However, institutions should remain attentive to the specific stressors experienced by different student demographic groups. Sander et al. (2024) found that perceived social support moderated the relationship between impostor feelings and mental health outcomes among Black graduate students, underscoring the importance of ensuring that universal programmes are culturally responsive and structurally inclusive.

Fourth, the strong positive intercorrelations among depression, anxiety, and stress ($r = .706$ to $.774$) confirm that graduate student distress is transdiagnostic in character. University counselling centres should adopt transdiagnostic intervention models that address shared emotional processes underlying depression, anxiety, and stress simultaneously, rather than restricting services to diagnosis-specific modalities that may fail to reach the majority of distressed graduate students who do not meet full

diagnostic criteria for any single disorder.

5.3 LIMITATIONS OF THE STUDY

The present study makes a meaningful contribution to understanding impostor syndrome, self-compassion, and mental health among Indian graduate students; however, several limitations must be acknowledged. First, the use of purposive sampling and restriction of data collection to institutions within the Jammu District limits the representativeness and generalisability of the findings. The sample may not adequately reflect the diversity of graduate student experiences across India's varied regional, institutional, and disciplinary contexts. Second, the cross-sectional design prevents the establishment of causal or directional conclusions regarding the relationships among impostor syndrome, self-compassion, and mental health; longitudinal designs would be better suited to examining developmental trajectories and causal precedence (Dao et al., 2025). Third, the absence of measures of contextual variables such as academic workload, supervisor relationship quality, financial stress, and social support limits a full understanding of the environmental conditions that amplify or buffer impostor experiences and psychological distress. Fourth, reliance on self-report data introduces the risk of social desirability bias and shared method variance, which may have influenced the magnitude of the correlations obtained. Finally, the absence of normative data specific to Indian graduate student populations limits direct comparison of the present prevalence estimates with those from Western academic samples.

5.4 RECOMMENDATIONS FOR FUTURE RESEARCH

Building on the findings and limitations described above, several directions for future research are recommended. First, future studies should employ longitudinal or quasi-experimental designs to track changes in impostor syndrome, self-compassion, and mental health dimensions across the graduate student journey, from admission through graduation. Such designs would enable examination of whether impostor feelings intensify, stabilise, or diminish over time, and would identify critical transitional periods that represent heightened vulnerability windows for targeted

intervention.

Second, future research should investigate the mediating role of self-compassion in the relationship between impostor syndrome and mental health using structural equation modelling or path analysis, with adequate sample sizes to ensure statistical power. Liu et al. (2022) found that self-compassion mediated the relationship between perfectionism and depressive symptoms via impostor syndrome, providing a template for investigating similar mediation chains in graduate student samples. Inwood and Ferrari (2018) further demonstrated that emotion regulation mediated the self-compassion–mental health relationship, suggesting that additional mediating mechanisms including cognitive flexibility and shame resilience warrant investigation in future models.

Third, intervention efficacy studies evaluating self-compassion-based and impostor-focused programmes specifically designed for Indian graduate students are urgently needed. Randomised controlled trials replicating Liu et al.'s (2023) brief self-compassion intervention within Indian graduate student samples, with follow-up assessments to evaluate sustained impact, would provide the strongest evidence base for programme development in the Indian higher education context.

Fourth, future research should examine individual self-compassion components self-kindness, common humanity, and mindfulness as separate predictors of specific impostor syndrome dimensions and mental health outcomes. This disaggregated approach would clarify which self-compassion components are most specifically protective against particular impostor experiences and distress domains, enabling more targeted and efficient intervention design.

Finally, qualitative research methods such as in-depth interviews and focus groups would add important depth to the quantitative findings by capturing the subjective meanings graduate students attach to their impostor experiences and the types of institutional support they regard as most beneficial. Mixed-methods designs integrating quantitative and qualitative data would offer the most comprehensive understanding of the lived psychological experience of Indian graduate students.

5.5 CONCLUSION

The present study examined impostor syndrome, self-compassion, and mental health among 130 graduate students in the Jammu District, India, with the aim of assessing the prevalence of these constructs, exploring gender-based differences, and investigating the nature of their interrelationships. The findings make a meaningful contribution to the growing literature on impostor syndrome and psychological well-being in South Asian graduate student populations.

The study revealed that a large majority of graduate students experienced frequent impostor feelings (61.5%), confirming that impostor syndrome is a pervasive and pressing psychological concern within this population. Self-compassion was predominantly moderate across the sample, suggesting a significant opportunity for structured enhancement. Strong positive intercorrelations among depression, anxiety, and stress reflected the transdiagnostic character of graduate student psychological distress in this context.

With respect to gender, the study found no significant differences across impostor syndrome, mental health, or self-compassion, affirming that the psychological vulnerabilities of graduate education are shared concerns that transcend gender. This finding supports the design of inclusive, universal mental health programmes while calling for structural responsiveness to the specific stressors experienced by different student subgroups.

The most consequential finding cluster of the study is the pattern of significant correlations: impostor syndrome was positively associated with depression, anxiety, and stress, while self-compassion was negatively associated with impostor syndrome, depression, anxiety, and stress. These findings establish impostor syndrome as a meaningful risk factor and self-compassion as a meaningful protective resource for graduate student mental health. Together, they define a clear intervention logic: reducing impostor feelings and cultivating self-compassion are evidence-based priorities for institutional action that can simultaneously address psychological distress across multiple dimensions.

In conclusion, the present study affirms that impostor syndrome and inadequate self-compassion are not peripheral concerns in graduate education but are central determinants of student psychological well-being and, by extension, of the quality and

sustainability of graduate-level learning and research. Higher education institutions in Jammu and across India would be well served by developing systemic, evidence-based strategies to identify, address, and prevent impostor experiences among their graduate students, and to cultivate the self-compassionate orientations that enable students to engage with academic challenge, failure, and imperfection as integral and navigable dimensions of intellectual growth. The well-being of graduate students is inseparable from the vitality of the academic communities they inhabit and from the future of knowledge creation in India.

SUMMARY

TOPIC: A CORRELATIONAL ANALYSIS OF IMPOSTOR SYNDROME, SELF-COMPASSION AND MENTAL HEALTH AMONG GRADUATE STUDENTS

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INTRODUCTION

Graduate students represent a population undergoing substantial academic, psychological, and developmental transitions. Early adulthood is characterized by intense academic pressure, heightened performance expectations, and ongoing identity formation, which together create a uniquely vulnerable context for psychological distress. Research has consistently shown that graduate students experience higher levels of stress, anxiety, and depression compared to the general population. Within this demanding environment, impostor syndrome is especially prevalent, commonly manifesting as persistent self-doubt, perfectionism, and fear of failure, all of which can negatively impact academic functioning and overall well-being.

Self-compassion has emerged as an important protective psychological resource, enabling individuals to cope more effectively with setbacks, regulate negative emotions, and foster resilience. Examining impostor syndrome, self-compassion, and mental health together within the graduate student population is essential, as it offers deeper insight into their psychological experiences and informs the development of targeted interventions aimed at improving academic adjustment and emotional well-being. Therefore, the present study investigated these three variables among graduate students in Jammu District, India.

IMPOSTOR SYNDROME

Impostor syndrome (IS), also commonly termed imposter phenomenon or fraud syndrome, was first described in 1978 by Suzanne Imes, Ph.D., and Pauline Rose Clance, Ph.D. It is a behavioral health phenomenon characterized by self-doubt of intellect, skills, or accomplishments among high-achieving individuals. These individuals cannot internalize their success and subsequently experience pervasive feelings of self-doubt, anxiety, depression, and apprehension of being exposed as a fraud in their work, despite verifiable and objective evidence of their competence. Imposter syndrome can profoundly impact various facets of individuals' personal lives, work performance, and professional relationships, affecting even highly experienced professionals.

MENTAL HEALTH

Mental health is an integral and essential component of overall health, defined as a state of balance within oneself and between oneself and one's physical and social environment. The World Health Organization defines mental health not only as the absence of mental illness, but also as a state of complete physical, mental, and social well-being. Research has documented significant levels of emotional distress among graduate students, including symptoms of anxiety and depression. Evans et al. (2018) reported alarmingly high rates of depression and anxiety among graduate students compared to the general population, characterizing graduate education as a context marked by chronic stress, uncertainty, and emotional vulnerability.

SELF-COMPASSION

Self-compassion, as defined by Neff (2003), involves treating oneself with kindness, recognizing one's shared humanity, and being mindful when considering negative aspects of oneself. It comprises three inter-related components: self-kindness, common humanity, and mindfulness. Self-compassion has been identified as an important correlate of coping in stressful situations. High self-compassion is related to greater use of adaptive coping strategies and lower use of maladaptive ones. Research consistently shows that self-compassion is negatively associated with psychopathology and positively associated with psychological well-being, making it a significant protective psychological resource.

NEED AND SIGNIFICANCE OF THE STUDY

Graduate students face unique psychological challenges arising from academic pressure, performance demands, and identity transitions. Impostor syndrome, if left unaddressed, can escalate into more serious mental health concerns including chronic anxiety, depression, and burnout. While global literature has documented the relationship between impostor syndrome and mental health, limited research has examined these variables within the Indian higher education context, particularly in the Jammu region. Understanding how self-compassion influences this relationship is vital for developing targeted interventions. The findings are expected to guide universities and mental health professionals in designing supportive programs that foster self-acceptance, resilience, and overall academic success.

STATEMENT OF THE PROBLEM

The present study is entitled as: "A Correlational Analysis of Impostor Syndrome, Self-Compassion and Mental Health Among Graduate Students".

OPERATIONAL DEFINITIONS

Impostor Syndrome: Operationally defined as the degree of self-perceived intellectual fraudulence experienced by graduate students, as measured by scores on the Clance Impostor Phenomenon Scale (CIPS). Higher scores indicate greater frequency and intensity of impostor feelings.

Self-Compassion: Operationally defined as the degree to which graduate students relate to themselves with kindness, a sense of common humanity, and mindful awareness during moments of personal failure, as measured by the Self-Compassion Scale – Short Form (SCS-SF).

Mental Health: Operationally defined as the level of psychological distress across three dimensions depression, anxiety, and stress as measured by scores on the Depression Anxiety Stress Scale-21 (DASS-21).

OBJECTIVES OF THE STUDY

The following objectives were formulated for the present study:

- To assess the prevalence of impostor syndrome among graduate students.
- To assess the prevalence of self-compassion among graduate students.

- To examine gender differences in impostor syndrome, mental health, and self-compassion among male and female graduate students.
- To investigate the relationship between impostor syndrome, mental health, and self-compassion among graduate students.

HYPOTHESES OF THE STUDY

- There is no significant gender-based difference in impostor syndrome, mental health, and self-compassion among male and female graduate students.
- There is no significant relationship between impostor syndrome, mental health, and self-compassion among graduate students.

POPULATION OF THE STUDY

The population for the present study comprised graduate students from various colleges and universities located in the Jammu District, India.

SAMPLE FOR THE STUDY

A purposive sampling technique was employed for selecting the sample. The present study included a total sample of 130 graduate students from different colleges and universities of Jammu District, consisting of 57 male and 73 female graduate students.

TOOLS USED

Three standardized tools were used for data collection:

- Clance Impostor Phenomenon Scale (CIPS): A 20-item scale measuring the frequency and intensity of impostor feelings on a 5-point Likert scale.
- Self-Compassion Scale – Short Form (SCS-SF): A 12-item scale assessing both positive dimensions (self-kindness, common humanity, mindfulness) and negative dimensions (self-judgment, isolation, over-identification) of self-compassion.
- Depression Anxiety Stress Scale-21 (DASS-21): A 21-item scale measuring the severity of depression, anxiety, and stress symptoms over the past week.

STATISTICAL TECHNIQUES EMPLOYED

The following statistical techniques were used to analyze the data:

- Mean and Standard Deviation
- Independent Samples t-test (for gender-based comparisons)
- Pearson's Product Moment Correlation Coefficient (for examining relationships between variables)

RESULTS OF THE STUDY

Objective 1 Prevalence of Impostor Syndrome: The findings revealed that 57.7% of participants experienced frequent impostor feelings, indicating a high prevalence of impostor syndrome among graduate students in Jammu District. This confirms impostor syndrome as a widespread psychological concern in the Indian higher education context.

Objective 2 Prevalence of Self-Compassion: Self-compassion among graduate students was found to be largely moderate. This suggests that while participants possess some capacity for self-compassionate responding, there is significant room for improvement through structured intervention.

Objective 3 Mental Health: Anxiety emerged as the most prominent mental health concern among graduate students. Depression and stress were found to be mostly within normal levels. These findings highlight the particular vulnerability of graduate students to anxiety-related distress.

Objective 4 Gender Differences: No significant gender-based differences were found in impostor syndrome, self-compassion, or any of the three mental health dimensions (depression, anxiety, and stress) ($p > .05$). This suggests that impostor syndrome and its related psychological correlates are experienced relatively uniformly across genders in this population.

Objective 5 Correlational Analysis: Impostor syndrome showed significant positive correlations with depression, anxiety, and stress, confirming its role as a psychological risk factor for mental health difficulties. Self-compassion showed significant negative correlations with all three mental health dimensions, as well as with impostor syndrome ($r = -.290$), establishing its role as a meaningful protective psychological resource.

DELIMITATIONS OF THE STUDY

- The study was delimited to 130 graduate students only.
- The study was confined to students from the Jammu District; findings cannot be generalized to other regions.
- The study is cross-sectional in nature; it does not capture changes over time.
- Three standardized tools were used: CIPS, SCS-SF, and DASS-21.

SUGGESTIONS FOR FURTHER RESEARCH

- The present study cannot be called final and comprehensive. More work can be done on different and larger samples.
- Similar studies can be conducted in other cities or regions of India to allow for broader generalizability.
- Longitudinal research designs may be adopted to track changes in impostor syndrome, self-compassion, and mental health over time.
- Future research could explore the mediating or moderating role of self-compassion between impostor syndrome and mental health using advanced statistical techniques such as mediation or moderation analysis.
- Experimental or intervention-based studies can be conducted to examine the effectiveness of self-compassion training programs in reducing impostor syndrome and improving mental health among graduate students.
- A comparative study can be undertaken to investigate these variables among undergraduate versus postgraduate students or students from different disciplines.

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APPENDICES

Appendix A

Clance IP Scale

For each question, please circle the number that best indicates how true the statement is of you. It is best to give the first response that enters your mind rather than dwelling on each statement and thinking about it over and over.

1. I have often succeeded on a test or task even though I was afraid that I would not do well before I undertook the task.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

2. I can give the impression that I'm more competent than I really am.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

3. I avoid evaluations if possible and have a dread of others evaluating me.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

4. When people praise me for something I've accomplished, I'm afraid I won't be able to live up to their expectations of me in the future.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

5. I sometimes think I obtained my present position or gained my present success because I happened to be in the right place at the right time or knew the right people.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

6. I'm afraid people important to me may find out that I'm not as capable as they think I am.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

7. I tend to remember the incidents in which I have not done my best more than those times I have done my best.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

8. I rarely do a project or task as well as I'd like to do it.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

9. Sometimes I feel or believe that my success in my life or in my job has been the result of some kind of error.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

10. It's hard for me to accept compliments or praise about my intelligence or accomplishments.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

11. At times, I feel my success has been due to some kind of luck.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

12. I'm disappointed at times in my present accomplishments and think I should have accomplished much more.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

13. Sometimes I'm afraid others will discover how much knowledge or ability I really lack.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

14. I'm often afraid that I may fail at a new assignment or undertaking even though I generally do well at what I
attempt.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

15. When I've succeeded at something and received recognition for my accomplishments, I have doubts that I can keep repeating that success.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

16. If I receive a great deal of praise and recognition for something I've accomplished, I tend to discount the importance of what I've done.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

17. I often compare my ability to those around me and think they may be more intelligent than I am.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

18. I often worry about not succeeding with a project or examination, even though others around me have considerable confidence that I will do well.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

19. If I'm going to receive a promotion or gain recognition of some kind, I hesitate to tell others until it is an
accomplished fact.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

20. I feel bad and discouraged if I'm not "the best" or at least "very special" in situations that involve achievement.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

Appendix B

Self-Compassion Scale Short Form (SCS-SF)

Please read each statement carefully before answering. Indicate how often you behave in the stated manner, using the following scale:

Almost never				Almost always
1	2	3	4	5

1. When I fail at something important to me I become consumed by feelings of inadequacy.

2. I try to be understanding and patient towards those aspects of my personality I don't like.

3. When something painful happens I try to take a balanced view of the situation.

4. When I'm feeling down, I tend to feel like most other people are probably happier than I am.

5. I try to see my failings as part of the human condition.

6. When I'm going through a very hard time, I give myself the caring and tenderness I need.

7. When something upsets me I try to keep my emotions in balance.

8. When I fail at something that's important to me, I tend to feel alone in my failure

9. When I'm feeling down I tend to obsess and fixate on everything that's wrong.

10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.

11. I'm disapproving and judgmental about my own flaws and inadequacies.

12. I'm intolerant and impatient towards those aspects of my personality I don't like.

Appendix C

DASS 21

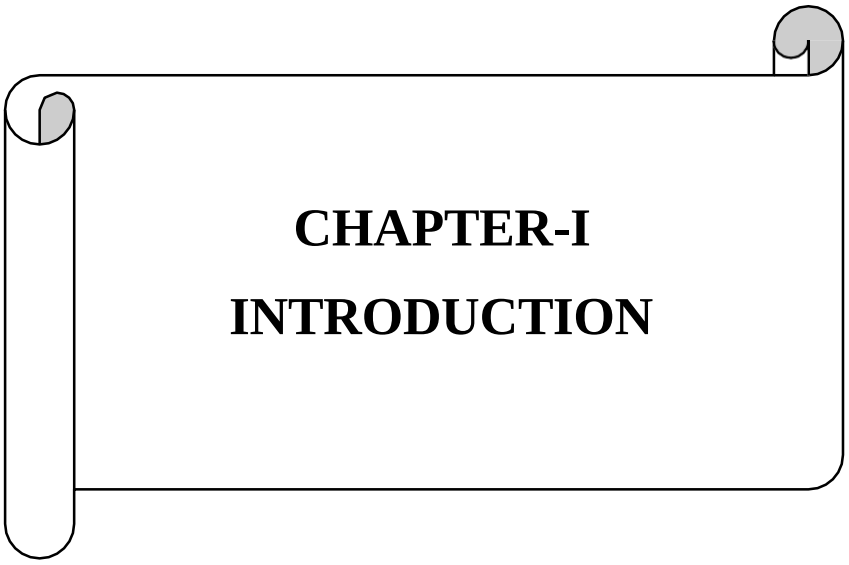
Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers..

The rating scale is as follows:

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree or a good part of time
3 Applied to me very much or most of the time

1 (s)	I found it hard to wind down	0	1	2	3
2 (a)	I was aware of dryness of my mouth	0	1	2	3
3 (d)	I couldn't seem to experience any positive feeling at all	0	1	2	3
4 (a)	I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5 (d)	I found it difficult to work up the initiative to do things	0	1	2	3
6 (s)	I tended to over-react to situations	0	1	2	3
7 (a)	I experienced trembling (e.g. in the hands)	0	1	2	3
8 (s)	I felt that I was using a lot of nervous energy	0	1	2	3
9 (a)	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10 (d)	I felt that I had nothing to look forward to	0	1	2	3
11 (s)	I found myself getting agitated	0	1	2	3
12 (s)	I found it difficult to relax	0	1	2	3
13 (d)	I felt down-hearted and blue	0	1	2	3
14 (s)	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15 (a)	I felt I was close to panic	0	1	2	3
16 (d)	I was unable to become enthusiastic about anything	0	1	2	3
17 (d)	I felt I wasn't worth much as a person	0	1	2	3

18 (s)	I felt that I was rather touchy	0	1	2	3
19 (a)	I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	0	1	2	3
20 (a)	I felt scared without any good reason	0	1	2	3
21 (d)	I felt that life was meaningless	0	1	2	3



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