

Research Paper

Towards Owning Accomplishments: The Relationship Between Self-Esteem, Locus of Control and Imposter Syndrome Among Undergraduate University Students

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ABSTRACT

The purpose of this research work is to study and understand the possible relationship two phenomenon's namely- Self-Esteem and Locus of Control – have with the Imposter Syndrome generated in undergraduate university students in India. This undergraduate student study will allow practitioners working with college students to properly address issues concerning self-imposed negativity resulting from the impostor syndrome by dealing with the factors that might be influencing these feelings. The objectives of the research are to understand the prevalence of Imposter Syndrome in undergraduate university students, to understand the relationship between Self-esteem and Imposter Syndrome, to understand the relationship between Locus of Control and Imposter Syndrome and to understand the relationship between Self-esteem and Locus of Control in undergraduate university students in India. The said dimensions are measured using the Clance IP Scale, Rosenberg Self-esteem Scale and Rotter's I-E Locus of Control Scale. From the results of the study, all three hypothesis- 1. Imposter Syndrome will be prevalent in undergraduate university students in India; 2. Self-Esteem and Locus of Control will be significantly correlated to the Imposter feelings in undergraduate university students in India; and 3. Self-esteem will be significantly correlated to Locus of Control in undergraduate university students in India- are proven to be true.

Keywords: *Denying accomplishments, Imposter Syndrome, Self-Esteem, Locus of Control, Undergraduate students*

The Imposter phenomenon was first described in the 1970s by psychologists Clance and Imes as “a form of self-doubt or insecurity that manifests as an inability to accept success”. It is not just lack of confidence but people feel uncomfortable with compliments or positive feedback, downplay their accomplishments, refuse to accept other people's validation of their abilities and feel that their ideas and skills aren't worthy of attention.

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Self-esteem is the opinion or judgment individuals hold about themselves. It is a person's level of satisfaction or dissatisfaction with oneself and the extent to which one perceives themselves to be a capable and worthy human being (Coopersmith, 1967). Self-esteem is the subjective evaluation of a person's overall sense of self-worth such as one's emotions, beliefs, competencies, appearance and behaviour. Locus of control is how people choose to attribute events and their outcomes in life to internal or external factors. It refers to the amount of control people perceive they have on these events. Individuals with an external locus of control believe that the circumstances in their life and their consequences are controlled by fate, luck or other such factors, whereas individuals with internal locus of control believe that the same are under their own control (Rotter, 1954). The imposter phenomenon is a form of self-doubt or insecurity that manifests as an inability to accept success. (Clance & Imes, 1978) It can be described as a set of feelings of insufficiency that, despite apparent success, continue. Imposters suffer from persistent self-doubt and a sense of intellectual fraud that supersedes any feelings of accomplishment or external evidence of their skills and ability.

Students in universities are vulnerable to career-related anxiety as they are one of the main groups supposed to join and navigate the modern workforce. While the college campus is seen by many as an oasis of tranquillity where intelligent groups seek to discover and share information in a welcoming atmosphere, the truth is markedly different in most cases. The university culture is rooted in academic isolation, hostile competition, lack of discipline, and a lack of mentoring & unclear future goals and the emphasis of product over method. There is an intense pressure to accomplish and show the worthiness of oneself. In such an environment, students are susceptible to these fraudulent feelings that could stem from a variety of underlying personality and socio-cultural factors. This could further lead the students to make ill-fitting academic and career decisions, as well as have a negative impact on their mental well-being. The aim of this research is to study and understand the possible relationship between two such phenomena – namely- Self-Esteem and Locus of Control (attribution types) – and the Imposter feelings generated in these university students. This undergraduate student study will allow practitioners working with college students to properly address issues concerning self-imposed negativity resulting from the imposter syndrome by dealing with the factors that might be influencing these feelings.

The imposter phenomenon or perceived fraudulence is described as a kind of personality characteristic in which individuals imagine that their competencies, skills and accomplishments are not real (Gediman, 2005). This feeling of spurious intelligence in women comes with some sense of guilt, discontent and worries about interpersonal relationships with their fellow workers and teammates. As Chae, Piedmont, Estadt and Wick (2002) have stated, when an individual has a negative feeling about success and is not able to internalize it, he or she perceives a gap between the social position he or she plays and the role that is required of him or her, and this gap creates a negative attitude toward success in him or her.

Clance and Imes, two psychologists, first identified the imposter concept in 1978, and it became widely known after Clance's 1985 book. Clance initially identified the condition in high-achieving career women, but more recent research has reported feelings of inadequacy in men and women, across a wide range of professions, and across races and ethnicities.

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According to Rothman (2000) and Piedmont (2002), accumulating achievement and success is one of the ways to boost self-esteem. Others, on the other hand, do not internalise their accomplishments and disregard them. As a result, self-esteem is harmed by feelings of doubt, anxiety, and the imposter syndrome. It is crucial to undertake research on this subject due to the negative effects that imposter may have on developing or maintaining negative personality characteristics in a competent and progressive individual. Many who suffer from the imposter syndrome are concerned that if they continue to engage in creative practises, feelings of anxiety and uncertainty about their successes and results will surface, lowering their chances of encountering future achievements.

Imposters prefer to keep themselves to exorbitantly high expectations in order to counteract their insecurity (Thompson, Foreman & Martin, 2000). According to Landford and Clance (1993), the "imposter syndrome" is the product of people attempting to live up to an idealised image in order to compensate for feelings of vulnerability and self-doubt. Research linking the imposter phenomenon to hyper-competitiveness (Ross, Stewart, Mugge, & Fultz, 2001), achievement pressures (Kolligan & Sternberg, 1991), and perfectionism (Kolligan & Sternberg, 1991) backs up this argument (Street & Lester, 2000; Thompson et al., 2000). This may be the reason for the imposters' insatiable desire to succeed. External approval is often used by imposters to satisfy their need for legitimacy. Since imposters are unable to internalise a sense of competence (Clance & Imes, 1978), they must constantly seek approval from others. The desire for validation (Cromwell, Brown, Sanchez-Huceles, & Adair, 1990), public self-consciousness (Striegel-Moore et al., 1993), and self-monitoring have all been linked to the imposter phenomenon (Topping & Kimmel, 1985).

Impostor syndrome is not a recognized psychiatric disorder: It is not featured in the American Psychiatric Association's Diagnostic and Statistical Manual⁶ nor is it listed as a diagnosis in the International Classification of Diseases, Tenth Revision (ICD-10). Impostor syndrome has gotten a lot of attention outside of academia, particularly in the context of professional success. While there has been a qualitative review, there has never been a published systematic review of the literature on impostor syndrome, possibly because it is not an officially recognised clinical diagnosis. Despite the broad peer review and lay literature, there has never been a published systematic review of the literature on impostor syndrome. As a result, physicians lack data on the prevalence of impostor syndrome, its comorbidities, and best practises for diagnosing and treating it. Furthermore, its precise impact on professional performance and burnout are unknown.

Recent studies have found that the impostor phenomenon acts as an internal barrier to career advancement (Neureiter and Traut-Mattausch, 2016a) and is negatively related to work-related outcomes such as job satisfaction, salary levels, and promotions as a result of lower career self-management factors (Neureiter and Traut-Mattausch, 2016b). Despite the fact that the impostor condition is linked to a wide range of personality characteristics, observational evidence indicates that it can be distinguished from related constructs such as anxiety, dysphoric mood, or perfectionism, and therefore can be treated as a distinct construct (Rohrmann et al., 2016).

Initially, it was assumed that people who experience the impostor phenomenon are afraid of being overestimated by their surrounding environment because they believe they are less competent than others (e.g., Clance and Imes, 1978). However, research by Leary et al. (2000) found that this anxiety is caused by a negative self-evaluation, rather than a

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difference between self- and other-evaluation, and that people with an imposter self-concept are typically worried about potential negative assessments of themselves or their work.

Self-esteem, according to Langford and Clance (1993), can be one way to quantify the burden that certain people place on themselves, contributing significantly to IP feelings. Someone may, for example, strive to meet a self-imposed norm. Their self-esteem is high and their IP feelings are low as long as they achieve it or receive some recognition and constructive reviews from others. However, if they fail to meet the predetermined target, their self-esteem will plummet, while their IP feelings rise. As a result, we expect females with high self-esteem to have low IP ratings.

The persons negatively evaluate their own ability to repeat previous achievements, resulting in low levels of self-efficacy. They attribute their previous successes to external factors such as chance. Their non-benevolent attribution style regarding their previous achievements associates with an external locus of control, and their pervasive negative self-views concur with low self-esteem (Clance and Imes, 1978; Chrisman et al., 1995). These negative self-evaluations trigger a spiral of dysfunctional behaviours that ironically perpetuate the negative self-views: individuals with elevated levels of impostorism tend to report both, higher levels of perfectionism and procrastination at work (Clance, 1985; Cowman and Ferrari, 2002). On the one hand, these seemingly incompatible habitual behaviours inoculate individuals with elevated levels of impostorism against the revision of their negative self-views because exerting themselves tirelessly in their perfectionist nature causes them to attribute their accomplishments to persistence rather than skill. On the other hand, procrastinating tasks becomes more likely when they feel they cannot live up to their own perfectionist standards. Both behavioural tendencies, perfectionism and procrastination, are likely to associate with elevated levels of strain.

Certain behaviours such as self-doubt are linked to notions of competence and self-worth. As Jones and Berglas (1978) put it, "Each (the handicapper and the overachiever) is fearful that failure will implicate competence. Each has an abnormal investment in the question of self-worth" (p. 205). More recently, research has shown that engaging in a protective behaviour, such as self-handicapping, appears to be associated with self-esteem maintenance. For instance, after a failure, participants who claimed self-handicaps had higher self-esteem than those who did not claim self-handicaps (Feick & Rhodewalt, 1997). Current psychological distress (Henning, Ey, & Shaw, 1998), poor interpersonal flexibility (Hayes & Davis, 1993), negative feelings (Thompson, Davis, & Davidson, 1998), lack of comfort as a role model or mentor (Brems, Baldwin, Davis, & Namyniuk, 1994), and the propensity to respond helplessly are all predictors of the imposter phenomenon experience (Langford & Clance, 1993). Surprisingly, the IP experience may have some positive correlates, such as high levels of enthusiasm for achievement (Topping, 1983, as cited in Chae, Piedmont, Estadt, & Wicks, 1995).

From a mental wellbeing standpoint, the imposter effect is linked to a slew of negative consequences. The imposter effect has been linked to depression (Street & Lester, 2000; Chrisman et al., 1995), generalised anxiety (Cozzarelli & Major, 1990; Ross et al., 2001), and eating disorders (Bardone-Cone et al., 2010; Striegel-Moore et al., 1997), as well as a general indicator of mental health (Bardone-Cone et al., 2010; Sonnack & Towell, 2001). On well-being, the imposter phenomenon has also been attributed to lower happiness levels (Thompson, Davis & Davidson, 1997) and higher difference scores on the Affect Balance

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Scale (ABS) (Chrisman et al., 1995). Overall, it is quite evident that the imposter phenomenon causes a significant amount of suffering.

In an article by Sheryl Nance-Nash, she explores imposter feelings experienced by working women through in depth personal interviews. She cites stereotypes and biases that women aren't good leaders because they're too emotional, that women aren't good at math or science, and that black, indigenous, and other people of colour are lazy, stupid, or lack honesty. Such preconceptions are what trigger a great deal of self-doubt amongst persons belonging to the said groups. Self-doubt may also be influenced by the conventional emphasis on female appearance. "If you've been raised with messages that you're only respected for your appearance and body, not your talents or intellect, you might find yourself getting a job or a role and questioning whether you really deserve it or whether the hiring manager just thought you were a pretty face," Hu says. Imposter Syndrome is more common in women than in men, according to Nance-Nash's article.

On the other hand, a paper published in the September 2018 edition of the journal *Personality and Individual Differences*, involved two studies of more than 500 undergraduates at a large US public university, concluded that their findings suggest that male IPs [imposters] fair worse when confronted with performance cues than do female impostors. Further researches have suggested that prevalence of the imposter phenomenon in different genders varies on different cultural contexts and thus is a gender neutral issue that needs to be studied as such.

Rotter (1966) defined locus of control as part of the personality that involves a person's beliefs regarding the consequences of his or her own behaviour. An external locus of control is correlated with anxiety, adjustment problems, lower self-confidence (Rotter, 1975), and vulnerability to life stress (Kliwer & Sandler, 1992). An internal locus of control is related to having leadership abilities (McCullough, Ashbridge, & Pegg, 1994), healthier behaviours, lower stress levels (Rotter, 1966), and higher self-esteem (Kishor, 1981; Kliwer & Sandler, 1992; Mullis & Mullis, 1997). Another study looked at the relationship between locus of control, self-esteem, academic achievement, and academic self-esteem, and found a positive relationship between academic self-esteem and academic achievement, as well as a negative relationship between external locus of control and self-esteem (Smith and Sapp, 1998).

REVIEW OF LITERATURE

Kolligian, Jr. and Sternberg, (1991) in their research paper titled *Perceived Fraudulence in Young Adults: Is There an "Impostor - Syndrome"*, examined perceived fraudulence, its measurement, and the personality traits associated with the experience in young adults. 50 undergraduate students were assessed using the Perceived Fraudulence Scale (PFS) in the first experiment and 100 undergraduate students completed several personality questionnaires along with the PFS for the second experiment. The investigation suggested that perceived fraudulence involves a complex interplay of inauthentic ideation, depressive tendencies, self-criticism, social anxiety, high self-monitoring skills, and strong pressures to excel and to achieve. People's own self-critical thoughts will add to their anxiety that others are worried about and will eventually see the weaknesses they see in themselves. These people closely track their actions and the impressions they create on others to reduce the risk of being exposed and to reduce their anxiety. As a result, their self-monitoring habits can aggravate their false self-perceptions.

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F. King and L. Cooley, (1995) in their research paper named Achievement Orientation and the Imposter Phenomenon among College Students, investigated the relationship between imposter syndrome and achievement-related behaviours. There were 127 participants who were assessed using the Clance IP scale. Higher GPA of students was positively correlated to a higher prevalence of the imposter syndrome as well as more number of hours spent on academic endeavors in females more than in males. This was consistent with the conceptualization of imposters as high-achieving and achievement-oriented individuals, but was inconsistent with the existing literature that showed no real gender differences in prevalence of this imposter syndrome. The study also suggested that individuals with the imposter syndrome may suffer from higher levels of unnecessary stress and anxiety, however lack of self-confidence was not a prerequisite. It may adversely affect the level of aspiration, which would in turn inhibit career and educational attainment.

Hermann, Leonardelli and Arkin, (2002) in their research paper titled Self-Doubt and Self-Esteem: A Threat from within, investigated the impact on self-esteem brought about by activating self-doubt, using experimental induction of self-doubt. 123 students participated in the three experiments conducted in the study. They were assessed using the Rosenberg Self-Esteem scale and the Self-doubt subscale of SOS-SD. The findings from the study suggested that people high in self-doubt found their self-esteem to be more threatened when this self-doubt was induced. There was no threat to or loss of self-esteem seen in participants low on self-doubt, who on the contrary expanded their positive regard for themselves when the experimenters induced in them self-doubt. The level of self-esteem was unaffected in low-self-doubt individuals when faced with induction designed to produce self-doubt.

Kumar and M. Jagacinski, (2005) in their research paper named Imposters have goals too: The imposter phenomenon and its relationship to achievement goal theory, studied the relationship between imposter fears and achievement goals. 135 introductory psychology students participated in the study. They found that people with imposter feelings indulge in ability-avoid achievement goals. Test anxiety was positively linked to imposter fears and ability-avoidance achievement goals, whereas belief in one's intelligence was negatively related. Women had more imposter concerns than men, as well as higher ability-avoidance targets. Furthermore, they discovered that imposter fears were linked to lower confidence in intelligence, which is consistent with previous studies. Individuals with lower confidence are more likely to follow ability-avoid goals, according to achievement goal theory. Therefore, imposter fears and ability goals, especially ability-avoidance goals, appear to share antecedents.

Parker, Bresette, O'Niell, Scapino, Walsh, Walters and Woods, (2005) in their research paper titled Self-Esteem, Locus of Control, the Imposter Phenomenon, and Academic Achievement in High School Students, investigated the relation self-esteem, locus of control, the imposter phenomenon had with each and how their relationships affected academic achievement in high school students. The 95 participants were recruited from across the state of Michigan, ranging from 15 to 18 years of age. Lower self-esteem and a more external locus of control both predict a greater experience of the IP, and a greater experience of the IP and a more internal locus of control both predict higher academic achievement, according to the findings. Their data revealed a connection between a stronger internal locus of control and academic success, not found in previous researches. They proposed that treating the IP population as a heterogeneous population can explain the data's apparent inconsistencies. Not all factors existed in the defined population as well. A high IP

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experience, for example, may be the product of a more external locus of control combined with lower scores on the two non-attribution variables. A person with a higher internal locus of control who scored higher on the other two measures, on the other hand, may have more IP experience; this individual may also have a lower self-esteem score. As a consequence, one group of people experiencing the IP may have a wide range of locus of control ratings, from very internal to very external. As it was clear through the study that high school students are affected by the IP, it is a trait that merits more research and prevention, particularly in the context of academic achievement.

Taylor, (2009) in her dissertation named *The Imposter Phenomenon: A Look at the Outside, the Inside and the other side* through scholarly personal narrative, fully explored the research related to the psychological construct of the Impostor Phenomenon and further shared her personal experiences. Through the exploration she found there were many variations in how the imposter phenomenon manifests across societies, ages, socio-economic strata and diverse occupations. Some places there is a higher prevalence in males than females and vis-à-vis in others. Lack of self-esteem seems to be a prerequisite in some whereas it is not the case in others. While some studies found evidence of inhibition of self-esteem after failure in exams in those suffering from imposter syndrome, the impact was found to be the same in those who did not exhibit these fraudulent feelings. High-achieving individuals tend to suffer more with the imposter feelings. There was also a link found between attribution styles and imposter syndrome in people at managerial posts but a lack of so in medical occupations. She also reviewed studies suggesting the positive implications of imposter syndrome such as increased motivation, thoughtfulness, conscientious and humility in work. M. Saadat et.al, (2012) in their research paper titled *Relationship between self-esteem and locus of control in Iranian University students*, they wanted to look into the relationship between university students' self-esteem and locus of control. Self-esteem components have a positive and significant relationship with internal locus of control, according to the findings of a study involving 370 students, but this relationship becomes negative when discussing external and chance types. Furthermore, internal locus of control could predict all grades of self-esteem components. Furthermore, an examination of the differences in self-esteem and locus of control in boys and girls, as well as the major difference in chance locus of control and self-esteem in boys and girls, shows that the more an individual relies on chance locus of control, the less self-esteem he or she feels. People who believe in chance consider the world's systems to be random and unpredictable, and they hold beliefs in chance, fortuity, and destiny.

Shubert, (2013) in his thesis titled *The Imposter Phenomenon: Insecurity Cloaked in Success*, studies how relationship of self-esteem with the imposter syndrome differs depending on whether it is stable or fragile. 312 Carlton University students from various majors participated in the study. The results support the theory that the imposters' frantic success-seeking is a compensatory attempt to escape a persistent negative self-perception. Furthermore, research indicates that imposters may have competing motives for pursuing success and avoiding failure. The imposter phenomenon was described in this study as a largely maladaptive pattern of thinking and behaviour arising from a person's ambivalence toward their own self. All but one indicator of self-esteem fragility expected imposter ratings, according to the findings. Previous research have only looked at self-esteem levels in relation to the imposter phenomenon, so this gives a more detailed explanation of the imposter's self-view. The hypothesis that fragility will be the best predictor of the imposter syndrome in people with low self-esteem was debunked. Instead, the impact of fragility was

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either the same for everyone or was greater among people who had a high sense of self-esteem.

Moua, (2015) in his paper named Impostor Phenomenon among Hmong College Students, reviewed literature on constructs associated with impostors, mental health and treatment of impostors, personalities of impostors, and specific impostor populations and groups using keywords such as “impostor phenomenon,” “impostor syndrome” and “Hmong college students”. His review suggested a link between impostor fears and achievement goals, as well as impostor syndrome, exam anxiety and low self-efficacy and confidence. Amongst the students of Hmong College, impostor syndrome was more prevalent in males, and males were also more motivated by the need to avoid failure. In another study, he found that researchers assumed women with high self-esteem would have lower levels of Imposter feelings, but this assumption was not supported by the data. Contradicting results of various studies led to the conclusion that self-esteem could not be a universal predictor of impostor syndrome. Tendencies and behaviours exhibited by perfectionists in comparison to those suffering from impostor syndrome are very similar.

Leonhardt, Bechtoldt and Rohrmann, (2017) in their research paper titled All Impostors Aren't Alike – Differentiating the Impostor Phenomenon, examines whether the impostor phenomenon is a homogeneous construct or whether different groups of people who have an impostor self-concept can be categorized based on shared characteristics. The research included 183 professionals in leadership roles who had a strong impostor self-concept. According to the results, the “true impostors” seem to be the same people mentioned by Clance and Imes (1978), namely, people who seriously question their own competence, assign performance to others, and feel they are deceiving others about their accomplishments. As a result, they experience impostor emotions. On the other hand, some people claim to have experienced the impostor phenomenon while not having the corresponding self-perception. This is a deliberate way of presenting oneself in order to appear more humble and keep others' perceptions of one's abilities as low as possible.

Shubert and Bowker, (2017) in their research paper titled Examining the Impostor Phenomenon in Relation to Self-Esteem Level and Self-Esteem Instability, examined the impostor phenomenon in relation to both self-esteem level and self-esteem instability. 304 undergraduate students completed the Clance Impostor Phenomenon Scale, the Rosenberg Self-Esteem Scale and a measure of self-rated instability. A subsample ($n = 38$) was also checked for statistical instability. Self-esteem level ($r = .62$) was negatively associated with the impostor phenomenon, while self-reported ($r = .32$) and statistical ($r = .57$) instability were positively correlated (all $ps.001$). Self-esteem level had a negative main impact and a strong 2-way relationship in a multiple regression model predicting the impostor phenomenon with self-esteem level and self-rated instability. The negative effect of self-esteem level was lower among participants with unstable self-esteem compared to those with positive self-esteem, according to simple slopes research. The findings highlight the importance of self-esteem issues in the impostor phenomenon, showing that people with low self-esteem are more vulnerable to impostor feelings than people with stable high self-esteem.

Mascarenhas, D'Souza and Bicholkar, (2018) in their research paper named Prevalence of impostor phenomenon and its association with self-esteem among medical interns in Goa, India, they studied the prevalence of impostor syndrome and its relationship with self-

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esteem. A cross-sectional study was conducted on 150 medical interns in Goa, using the Clance IP scale and Rosenberg Self-Esteem scale. A significant number of medical interns were found to have elevated levels of impostor phenomenon and low self-esteem. Sleep was found to be significantly correlated with impostor characteristics, implying a connection between feelings of fraudulence and distorted sleep patterns. Individuals with stronger IP characteristics had lower self-esteem and confidence, and vice versa, according to a substantial negative association between self-esteem and impostor phenomenon. Low impostor phenomenon characteristics and a high sense of self-worth are beneficial to effective clinical practice. Measures to boost medical students' and interns' trust and self-esteem should be introduced.

Katharina Heby, (2019) in her thesis titled *The Imposter Syndrome, Identity, and Well-being*, studied the negative effects impostor syndrome has on employee well-being and factors that can somewhat protect against the said adverse effects. The results were based on analyses of 341 participants. The study found prevalence of impostor syndrome in a diversity of occupations, such as college students, medical students, marketing managers and especially in occupations where an image of intelligence is essential for success. It was found that the impostor syndrome reduced levels of work engagement, which hindered work performance development, as well as induced feelings of burnout. Gender identity of the individuals seemed to have no significant effect on the impostor feelings or their negative effects.

Canning, LaCrosse and Kroeper, (2019) in their research paper named *Feeling like an Imposter: The Effect of Perceived Classroom Competition on the Daily Psychological Experiences of First-Generation College Students*, examined longitudinal effects of student's feelings of being an imposter in the highly competitive atmosphere of college. There were 818 final participants in the study enrolled in introductory-level STEM courses. Results indicated that those who perceived high levels of classroom completion also had higher levels of impostor feelings and vis-à-vis. Lack of belief in their abilities in turn resulted in a negative impact on attendance, course engagement, dropout intentions and lower grades in class. This was inconsistent with previous studies that mostly suggested prevalence of the impostor syndrome in high-achievement individuals.

Bravata and her associates, (2019) in their research paper titled *Prevalence, Predictors, and Treatment of Impostor Syndrome: a Systematic Review*, aimed to evaluate the said factors in relation to the impostor syndrome through a systematic review of literature. They reviewed 66 articles, describing 62 studies of total 14,161 participants. These participants ranged from students to employed populations. Sixteen of these studies discovered that women have statistically higher rates of impostor feelings than men, and that men and women deal with these feelings differently. In 17 studies, however, there was no difference in the prevalence of impostor syndrome between men and women. Only among students, not among professionals, did researchers find gender differences in impostor syndrome. As a result, the evidence indicates that, while impostor syndrome is more prevalent in women, it may also affect men. Many of the papers in the collection looked at the psychological problems that often coexist with impostor syndrome, such as depression, anxiety, low self-esteem, somatic symptoms, and social dysfunctions. Studies found no particular relation of age with the impostor feelings. Finally, they discovered a substantial body of literature describing the negative effects of impostor feelings on work results, job satisfaction, and burnout in a variety of employee demographics, including healthcare professionals.

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Y. Ling, Zhang and L. Tay, (2020) in their research paper named Imposter Syndrome and Gender Stereotypes: Female Facility Managers' Work Outcomes and Job Situations, aimed to investigate the situational job factors that female FMs face, those suffering from imposter syndrome, using male FMs as a comparative group. Participants included 34 females and 35 males working in Singapore. The results showed that while women and men may have similar work outcomes, the females tend to underplay their productivity for their perception is flawed due to higher prevalence of imposter syndrome. This in some cases leads to actual problems in job performance. This imposter syndrome can be a result of the gender stereotypes present at the workplace, which in turn reduce job-satisfaction as well. However, no significant impact was found on either gender's willingness to take over leadership roles at work, therefore not affecting the career goals of the people.

RESEARCH METHODOLOGY

Research problem

The aim of this research is to study and understand the prevalence of Imposter Syndrome in undergraduate university students and whether Self-esteem and Locus of Control have any association with the phenomenon. This undergraduate student study will allow practitioners working with college students to properly address issues concerning self-imposed negativity resulting from the impostor syndrome, by dealing with the factors that might be influencing these feelings. Currently, no study has been done on this phenomena specifically for undergraduate students in India.

Objectives of the research-

- To understand the prevalence of Imposter Syndrome in undergraduate university students.
- To understand the relationship between Self-esteem and Imposter Syndrome in undergraduate university students.
- To understand the relationship between Locus of Control and Imposter Syndrome in undergraduate university students.
- To understand the relationship between Self-esteem and Locus of Control in undergraduate university students.

Hypothesis

1. Imposter Syndrome will be prevalent in undergraduate university students in India.
2. Self-Esteem and Locus of Control will be significantly correlated to the Imposter feelings in undergraduate university students in India.
3. Self-esteem will be significantly correlated to Locus of Control in undergraduate university students in India.

Target population

18-24 year old university students completing their undergraduate studies in India, from affluent middle class and upper middle class households attending English medium universities.

Estimated sample size- 60

Type of sampling- Convenience sampling

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Method of data collection-

Quantitative data from Questionnaires and Self-report tests using- Clance IP Scale developed by Dr. Pauline Clance will be used to measure Imposter feelings. The scale consists of 20 items.

Rosenberg Self-esteem Scale developed by Dr. Morris Rosenberg will be used to measure self-esteem. The scale consists of 10 items and test-retest reliability of 0.85.

Rotter's I-E Locus of Control Scale developed by psychologist Julian Rotter will be used to measure locus of control. The scale consists of 29 items.

Variables – Self-Esteem of students, Locus of Control, prevalence of Imposter Syndrome, Gender

Controlled variables- Socio-economic status, age, ethnic context

RESULTS

Demographic data of the 60 participants of the study:

Age	18	19	20	21	22	23
Number of respondents	3	11	15	21	8	2

Gender	Female	Male	Other
Number of respondents	36	24	0

University/College	Private	Government
Number of respondents	31	29

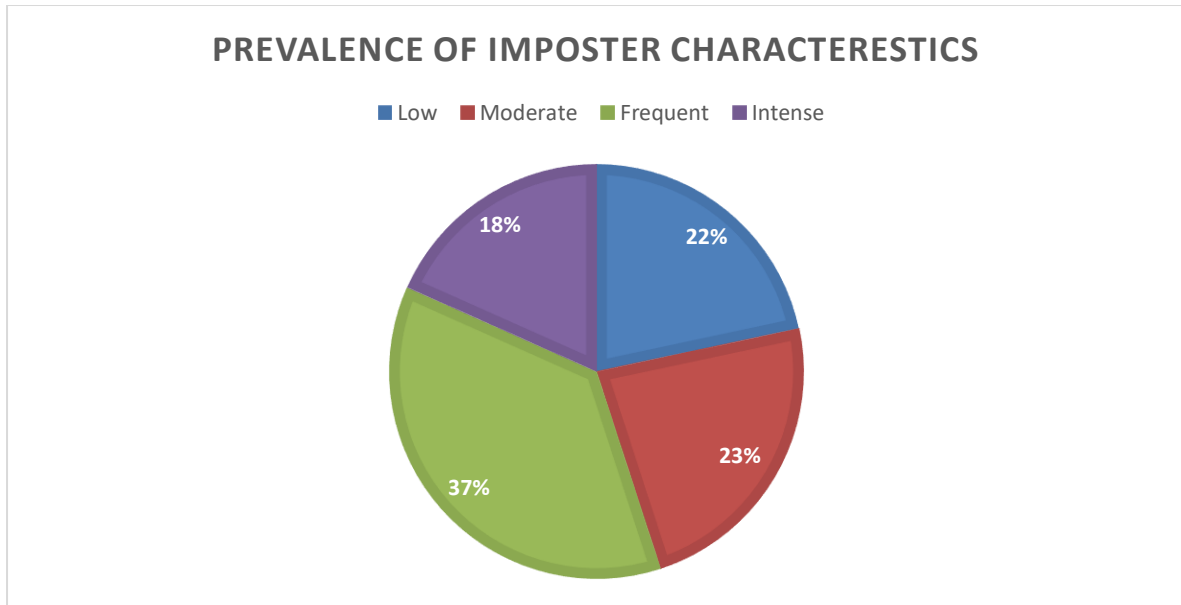
Monthly family income	1 L-3 Lakh	3 L-5 Lakh	5 Lakh or above
Number of respondents	14	32	14

The current study was an investigation of self-esteem, locus of control and imposter syndrome among undergraduate university students. The research questions addressed were:

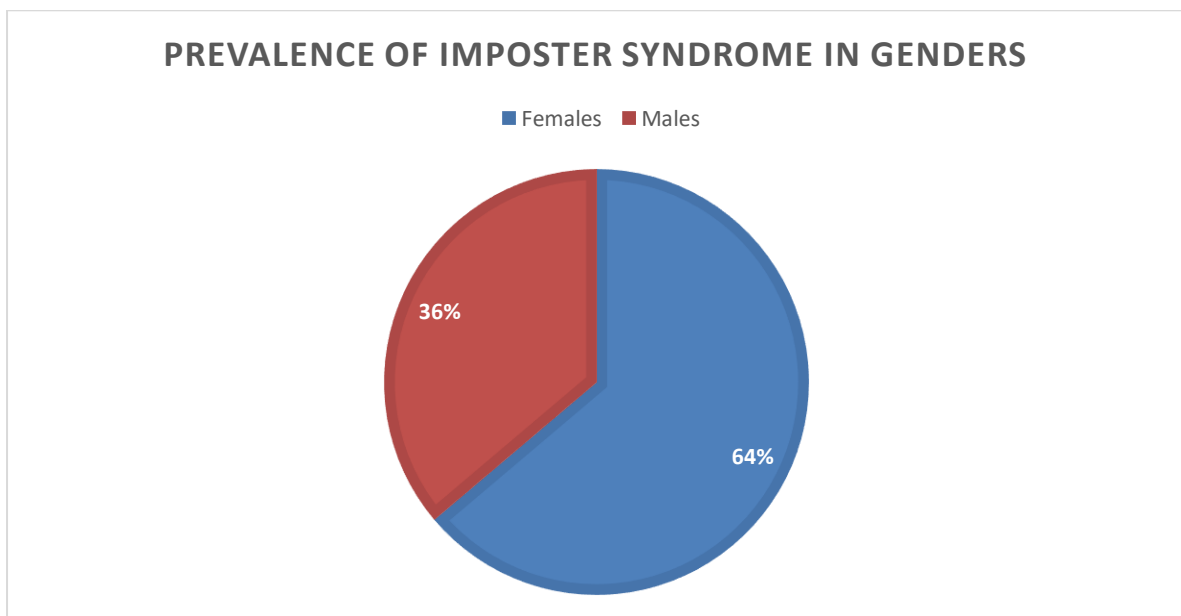
- Is imposter syndrome prevalent in undergraduate university students in India?
- Students with high or low self-esteem are likely to have few, moderate, frequent or intense imposter characteristics?
- Students with external or internal locus of control are likely to have few, moderate, frequent or intense imposter characteristics?
- Are students with high or low self-esteem more likely to be associated with an external or internal locus of control?

The said dimensions were measured using the Clance IP Scale developed by Dr. Pauline Clance, Rosenberg Self-esteem Scale developed by Dr. Morris Rosenberg and Rotter's I-E Locus of Control Scale developed by psychologist Julian Rotter. The scales were scored for each participant, correlation between each dimensions was calculated using the Pearson Correlation formula, and all data was considered significant at $p < 0.05$.

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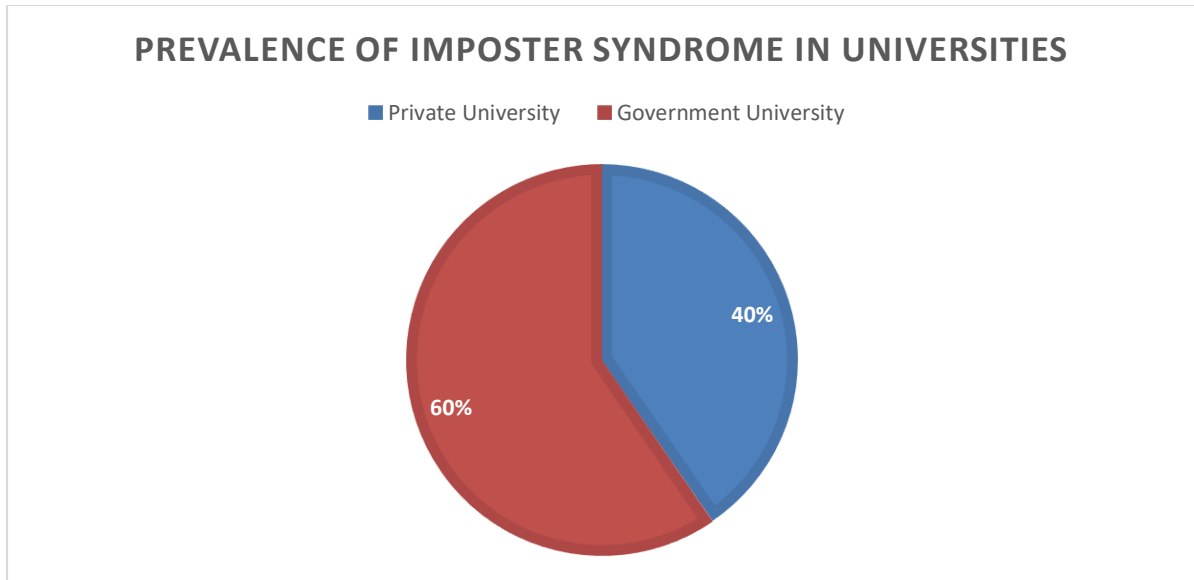


The scores on the Clance IP scale used in this study measure the ideas of self-doubt and illusion of personal incompetence that the respondents have. According to the data collected, the findings suggest that the average score for imposter characteristics is relatively high ($M = 61.48$, $SD = 19.39$), suggesting the average person in the sample experiences the imposter phenomenon. 22% of the sample population had low levels of imposter characteristics, 23% had moderate, 37% had frequent and 18% had intense imposter characteristics. This shows a high prevalence of the Imposter Syndrome in undergraduate university students.

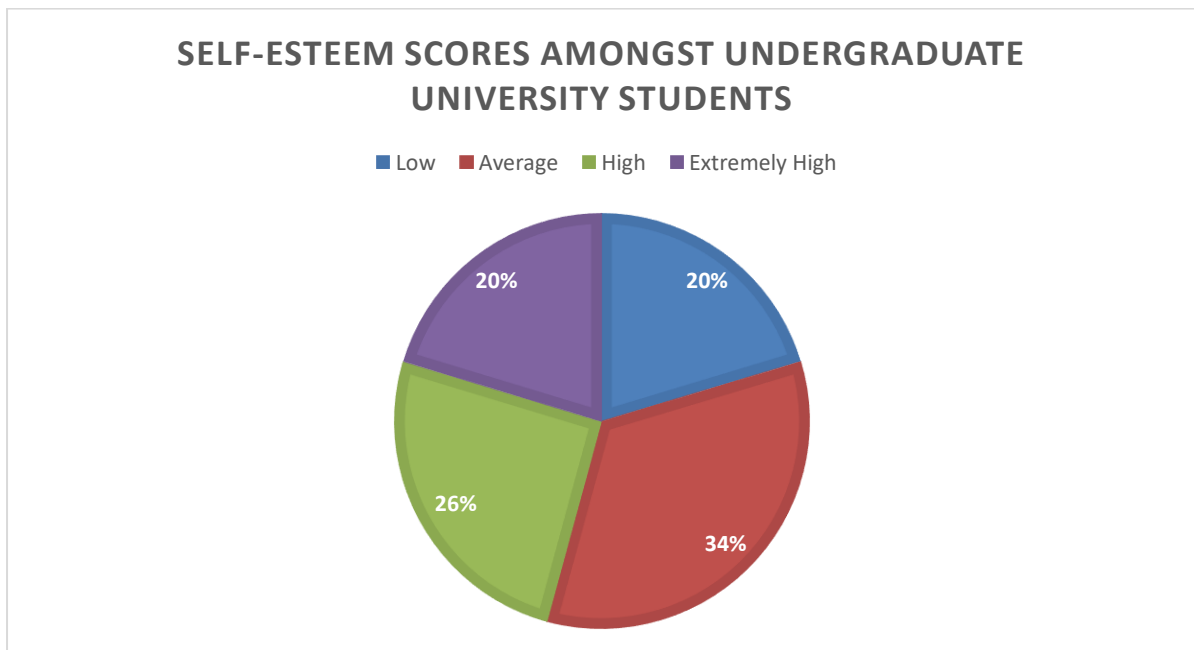


Results depict 64% of the sample population experiencing moderate, frequent or intense imposter characteristics are females and the rest 36% being males. This implies that while prevalence of the imposter syndrome is common in both males and females, it is higher in females than in males in context of undergraduate university students in India.

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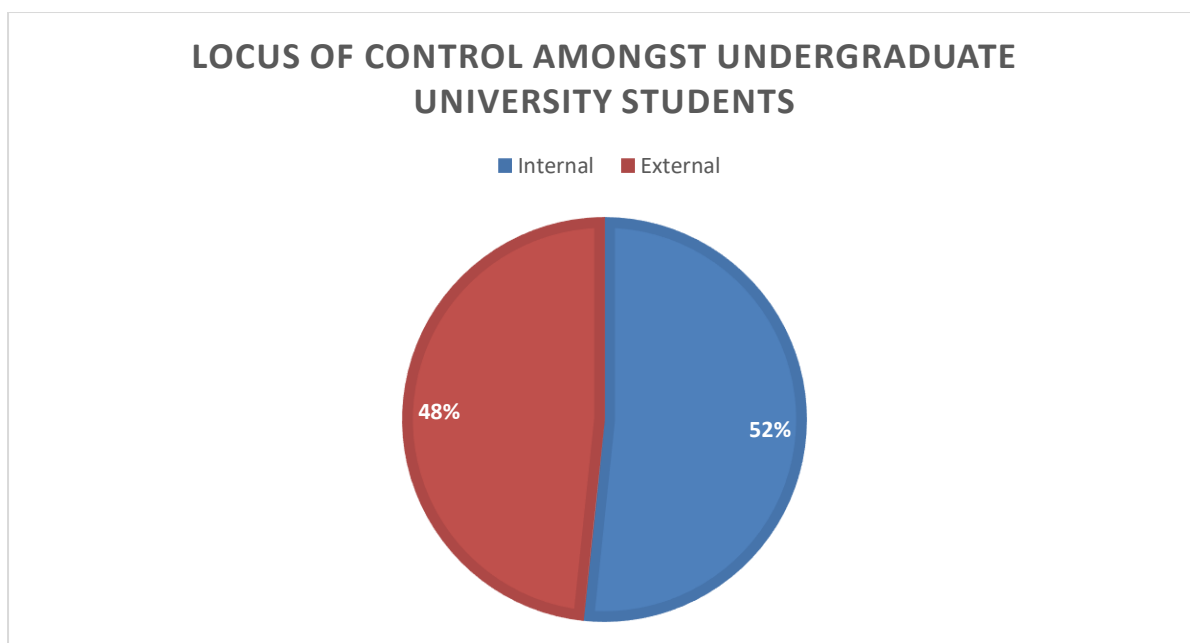


Results also show that 60% of the sample population experiencing moderate, frequent or intense imposter characteristics are students from government universities and the rest 40% study in private universities. This suggests that the prevalence of the imposter syndrome seems to be comparatively higher in government university students than private university undergraduate students in India.

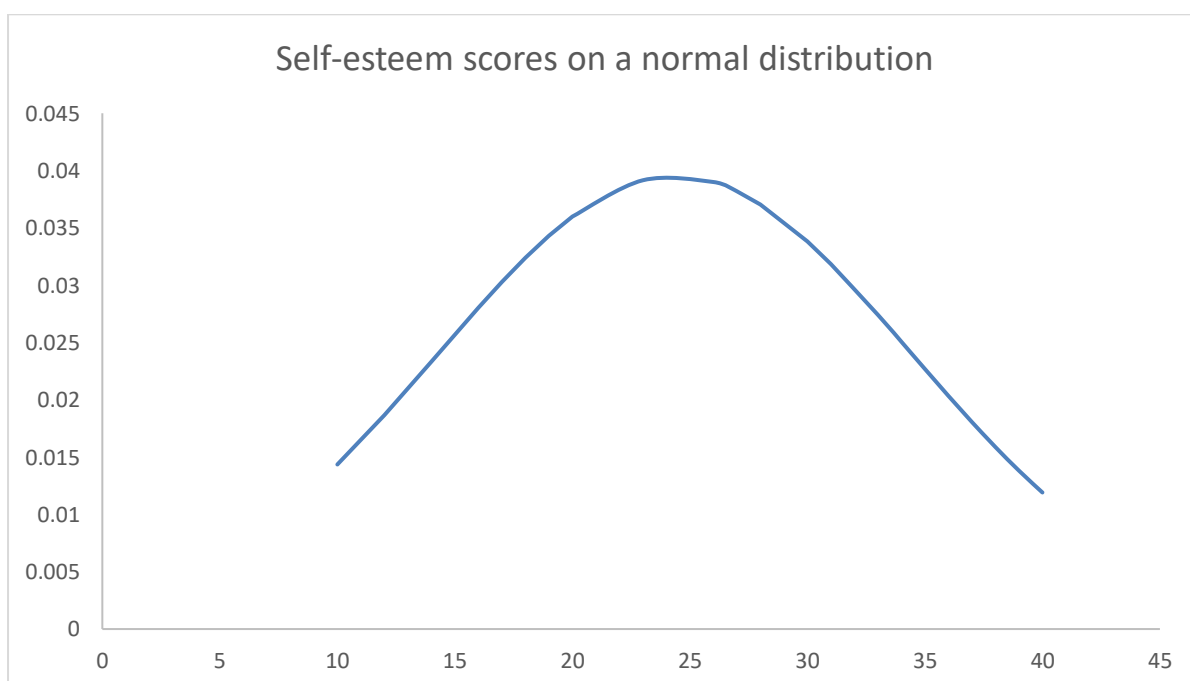


The scores on the Rosenberg Self-esteem Scale used in this study help measure the global self-esteem of the respondents and give an idea about their overall feelings of self-acceptance or self-worth. Lower scores on the scale indicate lower self-esteem and higher scores indicate higher self-esteem. According to the data collected, the findings suggest that the mean score for self-esteem is average ($M = 24.36$, $SD = 10.09$), suggesting the average person in the sample has a decent and healthy self-esteem measure. 20% of the sample population had low levels of self-esteem, 34% had average, 26% had high and 20% had extremely high self-esteem.

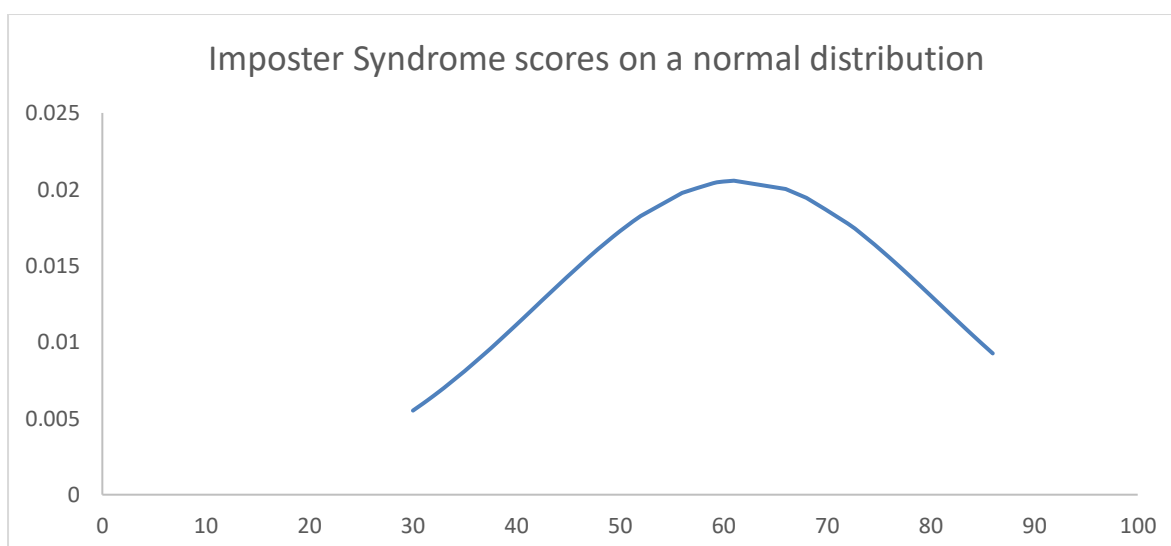
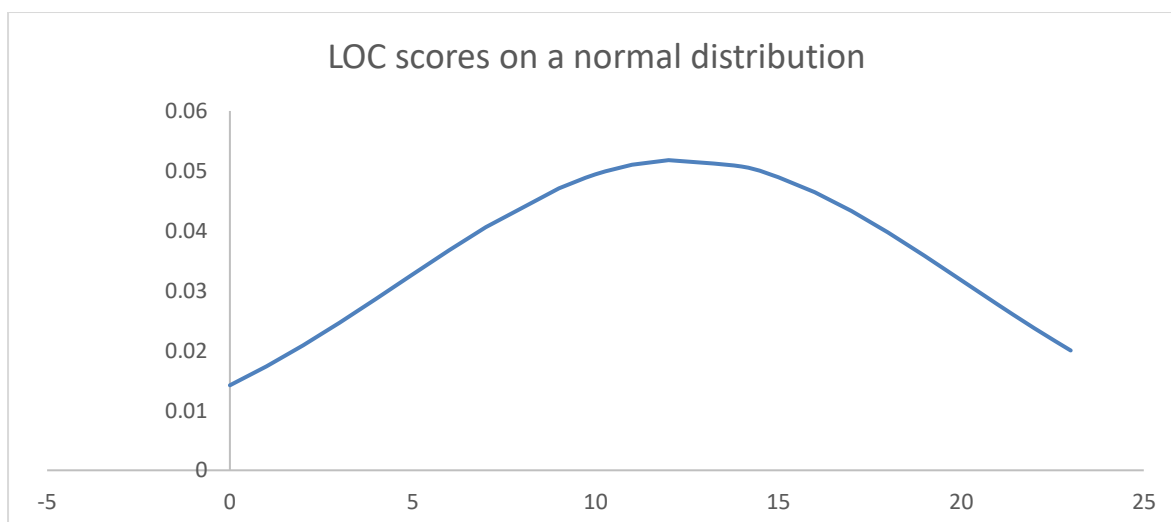
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The scores on Rotter's I-E Locus of Control Scale used in this research help measure the extent to which respondents have an internal or external locus of control. Low scores indicate an internal locus of control and high scores indicate an external locus of control. According to the data collected, the findings suggest that the average score for locus of control ($M = 12.38$, $SD = 7.69$), suggests the average person in the sample has an equal chance of having an internal or external locus of control. 48% of the sample population had an external locus of control, while 52% had an internal locus of control.



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According to the statistical analysis, the impostor phenomenon was significantly associated with all self-esteem scores in predicted directions. Using Pearson's Correlation Formula, the correlation between Self-Esteem and Imposter Syndrome is $r = -0.875$, $p < 0.05$, which indicates very strong negative correlation between the two variables, showing that there is a significant and inverse relationship between them i.e. if one increases, the other will decrease and vis-à-vis. This means, the higher the self-esteem in an individual is, the fewer imposter feelings being experienced will be. This however does not imply any causal relationship between the two variables. Thus, self-esteem and imposter syndrome are significantly correlated in the context on undergraduate university students in India.

Using Pearson's Correlation Formula, the correlation between Locus of Control and Imposter Syndrome is $r = 0.824$, $p < 0.05$, which indicates very strong positive correlation between the two variables, showing that there is a significant relationship between them and both variables move in a tandem i.e. if one increases, the other will also increase and vis-à-vis. This means that the more external the locus of control in an individual is, the more intense the imposter feelings being experienced will be. This however does not imply any causal relationship between the two variables. Thus, locus of control and imposter syndrome are significantly correlated in the context on undergraduate university students in India.

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According to the data collected, the correlation between Self-Esteem and Locus of Control is $r = -0.687$, $p < 0.05$, which indicates strong negative correlation between the two variables, showing that there is a significant and inverse relationship between them i.e. if one increases, the other will decrease and vis-à-vis. This means, the higher the self-esteem in an individual is, the more internal their locus of control will be. This however does not imply any causal relationship between the two variables. Thus, self-esteem and locus of control are significantly correlated in the context on undergraduate university students in India.

DISCUSSION

Results of the study show a high prevalence of the Imposter Syndrome in undergraduate university students. The study suggests that students with imposter feelings experience an amalgamation of anxiety, perceived incompetence, fear of being found out, avoidance behaviour due to evaluation anxiety, fear of inability to live up to other's expectations and denial of accomplishments, despite all the evidence that exists to suggest the contrary. They tend to avoid taking up new and desirable projects due to their lack of confidence in their skills and they tend to keep on replaying past mistakes over and over in their minds, viewing the mistakes as evidence of their perceived incompetence. They majorly attribute their accomplishments and success to external factors such as luck or being at the right place at the right time, and when receive compliments or praise for their achievements, they discredit the value of their work, whilst fostering doubts that they could reproduce their success. They tend to often compare their knowledge and skills with others around them and feel discouraged if they aren't 'the best' or 'very special' in situations that involve achievement.

These results are in congruence with the literature on previous research conducted on similar populations in different socio-cultural contexts. In research conducted by Kolligian, Jr. and Sternberg, (1991) they examined perceived fraudulence, its measurement, and the personality traits associated with the experience in young adults, where 150 undergraduate students were assessed using the Perceived Fraudulence Scale (PFS) and several personality questionnaires. The investigation suggested that Imposter Syndrome was quite common amongst undergraduates and that perceived fraudulence involves a complex interplay of inauthentic ideation, depressive tendencies, self-criticism, social anxiety, high self-monitoring skills, and strong pressures to excel and to achieve. Their investigation suggested that people's own self-critical thoughts will add to their anxiety that others are worried about and will eventually see the weaknesses they see in themselves. The literature shows students' self-monitoring habits can aggravate their false self-perceptions, which seems to be true in context of the current study as well. The results also correspond to literature that suggests that individuals with the imposter syndrome may suffer from higher levels of unnecessary stress and anxiety, and it may adversely affect the level of aspiration, which would in turn inhibit career and educational attainment (King and Cooley, 1995). Similarly, Kumar and M. Jagacinski, (2005) in their research found that people with imposter feelings indulge in ability-avoid achievement goals. Test anxiety was positively linked to imposter fears and ability-avoidance achievement goals, whereas belief in one's intelligence was negatively related. The results are also congruent to literature suggesting that the "true impostors" seem to be the same people mentioned by Clance and Imes (1978), namely, people who seriously question their own competence, assign performance to others, and feel they are deceiving others about their accomplishments. As a result, they experience impostor emotions (Leonhardt, Bechtoldt and Rohrman, 2017). However, there is no clear stance found in the current research that could verify the claims that people might use this as a deliberate way of presenting oneself in order to appear more humble and keep others'

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perceptions of one's abilities as low as possible (Leonhardt, Bechtoldt and Rohrmann, 2017). Thus, overall results of the current research are consistent with previous studies. In the university culture that is rooted in academic isolation, hostile competition, lack of discipline, and a lack of mentoring & unclear future goals and the emphasis of product over method, there is an intense pressure to accomplish and show the worthiness of oneself. In such an environment, undergraduate students in universities are vulnerable to career-related anxiety as they are one of the main groups supposed to join and navigate the modern workforce.

The results of the research imply that while prevalence of the imposter syndrome is common in both males and females, it is higher in females than in males in context of undergraduate university students in India. There is mixed literature regarding the prevalence of Imposter Syndrome in different genders, according to the previous researches. The results of this study are in congruence with certain studies, such as the one conducted by Kumar and M. Jagacinski, 2005 where they found that women had more imposter concerns than men, as well as higher ability-avoidance targets. Through a systematic review of literature, Bravata and her associates, (2019) in their research discovered at least sixteen studies that depicted women have statistically higher rates of impostor feelings than men, and that men and women deal with these feelings differently. In seventeen studies, however, they found that there was no difference in the prevalence of impostor syndrome between men and women among professionals, and it was only among students, that the researchers did find gender differences in impostor syndrome.

Literature also shows that while women and men may have similar work outcomes, the females tend to underplay their productivity for their perception is flawed due to higher prevalence of imposter syndrome. This in some cases leads to actual problems in job performance, amongst working women. This imposter syndrome can be a result of the gender stereotypes present at the workplace, which in turn reduce job-satisfaction as well (Y. Ling, Zhang and L. Tay, 2020). Katharina Heby, (2019) in her investigation, found that gender identity of the individuals seemed to have no significant effect on the imposter feelings or their negative effects globally. It rather depended on the socio-cultural factors of the individual's environment and varied from culturally from one region to another.

In the Indian context, higher prevalence of the syndrome in women as compared to men could be because of many factors rooted in society and culture. For women here, imposter feelings rather than being acknowledged as an issue are even portrayed positively and provided a special interpretation, normalised in the collective workplace culture as a 'good' trait relating to discretion, dignity, or modesty. During childhood and early adolescence, the seeds are frequently sown in informal family conversations and through societal verbal and non-verbal indications that foster risk aversion and the fear of failure. Women later in life are unable to accept that they belong or are capable of professional achievement or advancement as a result of this. This is consistent to the work done by Sheryl Nance-Nash, where she explores imposter feelings experienced by working women through in depth personal interviews. She found that preconceptions and stereotypes are what trigger a great deal of self-doubt amongst women. Self-doubt may also be influenced by the conventional emphasis on female appearance. She says in her work that if you've been taught that you're only valued for your looks and body, not your abilities or intelligence, you could find yourself having a job or a position and wondering if you really deserve it or whether the hiring manager just thought you were a pretty face. Through the results of the current research and previous literature present, the evidence indicates that, while impostor

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syndrome is more prevalent in women in the Indian undergraduate students' context, it also affects men to a significant level.

The study further suggests that the prevalence of the imposter syndrome seems to be comparatively higher in government university students than private university undergraduate students in India.

The scores on the Rosenberg Self-esteem Scale used in this study help measure the global self-esteem of the respondents and give an idea about their overall feelings of self-acceptance or self-worth. Lower scores on the scale indicate lower self-esteem and higher scores indicate higher self-esteem. According to the data collected, the findings suggest that the average person in the sample has a decent and healthy self-esteem measure.

The scores on Rotter's I-E Locus of Control Scale used in this research help measure the extent to which respondents have an internal or external locus of control. Low scores indicate an internal locus of control and high scores indicate an external locus of control. According to the data collected, the findings suggest that the average person in the sample has an equal chance of having an internal or external locus of control.

According to the statistical analysis, the impostor phenomenon was significantly associated with all self-esteem scores in predicted directions. Results indicate a very strong negative correlation between the two variables, showing that there is a significant and inverse relationship between them i.e. if one increases, the other will decrease and *vis-à-vis*. This means, the higher the self-esteem in an individual is, the fewer imposter feelings being experienced will be. This however does not imply any causal relationship between the two variables. Thus, self-esteem and imposter syndrome are significantly correlated in the context on undergraduate university students in India.

There is mixed literature present on the relationship between self-esteem and imposter syndrome based on previous researches. In a study, it was found that researchers assumed women with high self-esteem would have lower levels of imposter feelings, but this assumption was not supported by the data.

Contradicting results of various studies led to the conclusion that self-esteem could not be a universal predictor of imposter syndrome (Moua, 2015). Taylor, (2009) in her work fully explored the research related to the psychological construct of the impostor phenomenon and found that lack of self-esteem seems to be a prerequisite in some studies for IP feelings, whereas it is not the case in others. The reciprocal relationship between the two also varied when tested in different populations. While some studies found evidence of inhibition of self-esteem after failure in exams in those suffering from imposter syndrome, the impact was found to be the same in those who did not exhibit these fraudulent feelings. The results of this research are however, congruent to other literature that lower self-esteem can predict prevalence of imposter syndrome, as well as greater experience of IP can lower the self-esteem of an individual (Parker et.al, 2005). Hermann, Leonardelli and Arkin, (2002) in their research investigated the impact on self-esteem brought about by activating self-doubt, using experimental induction of self-doubt on students. The findings from the study suggested that people high in self-doubt found their self-esteem to be more threatened when this self-doubt was induced. There was no threat to or loss of self-esteem seen in participants low on self-doubt, who on the contrary expanded their positive regard for themselves when the

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experimenters induced in them self-doubt. The level of self-esteem was unaffected in low-self-doubt individuals when faced with induction designed to produce self-doubt.

Similarly, consistent with current results, it has been suggested by previous research that imposter fears were linked to lower confidence in intelligence, which is consistent with previous studies. Individuals with lower confidence are more likely to follow ability-avoid goals, according to achievement goal theory (Kumar and M. Jagacinski, 2005). The current research results are also supported by the theory that the imposters' frantic success-seeking is a compensatory attempt to escape a persistent negative self-perception. Studies indicate that the imposter phenomenon was a largely maladaptive pattern of thinking and behaviour arising from a person's ambivalence toward their own self (Shubert, 2013). Shubert and Bowker, (2017) in their research on 304 undergraduate students, in a multiple regression model predicting the impostor phenomenon with self-esteem level and self-rated instability, it was discovered that self-esteem level had a negative key effect and a clear 2-way relationship. Their study highlights the importance of self-esteem issues in the impostor phenomenon, showing that people with low self-esteem are more vulnerable to impostor feelings than people with stable high self-esteem.

In line with current research results, another research conducted on medical interns in Goa, India showed a significant number of medical interns were found to have elevated levels of impostor phenomenon and low self-esteem. Individuals with stronger IP characteristics had lower self-esteem and confidence, and vice versa, according to a substantial negative association between self-esteem and impostor phenomenon (Mascarenhas, D'Souza and Bicholkar, 2018). The evidence suggests that, the findings of the current study are mostly congruent with previous literature.

According to the statistical analysis, the results indicates very strong positive correlation between Locus of Control and Imposter Syndrome, showing that there is a significant relationship between them and both variables move in a tandem i.e. if one increases, the other will also increase and vis-à-vis. This means that the more external the locus of control in an individual is, the more intense the imposter feelings being experienced will be. This however does not imply any causal relationship between the two variables. Thus, locus of control and imposter syndrome are significantly correlated in the context on undergraduate university students in India.

The results of the study are congruent with the theory that individuals with an external locus of control who attribute their success to fate, luck or chance are more likely to be dissatisfied with their skills and knowledge, leading to higher imposter feelings (Rotter, 1966, Parker, 2005). Literature from previous studies shows a more external locus of control predicts a greater experience of the IP, and a greater experience of the IP and a more internal locus of control both predict higher academic achievement, according to the findings. The data reveals a connection between a stronger internal locus of control and academic success.

However, literature also suggests that a high IP experience, for example, may be the product of a more external locus of control combined with lower scores on self-esteem variables. A person with a higher internal locus of control who more on IP experience, may also have a lower self-esteem score. As a consequence, one group of people experiencing the IP may have a wide range of locus of control ratings, from very internal to very external (Parker et.al, 2005). According to research, people who are more affected by the syndrome conclude

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that their accomplishments are due to external influences and do not believe they are deserving of praise and reward. They attribute success to a random occurrence, despite the fact that a large number of people may applaud them on their accomplishments or give them widespread recognition (Oikonomakou, 2020). Leonhardt, Bechtoldt and Rohrman, (2017) in their research found that individuals suffering from the imposter syndrome negatively judge their own ability to repeat previous achievements, resulting in low levels of self-efficacy. They attribute their previous successes to external factors such as chance. Their benevolent attribution style for previous accomplishments is linked to an external locus of control. Thus, results of this study are congruent with some, while contradictory to other previous findings.

According to results of the data analysis, the correlation between Self-Esteem and Locus of Control indicates strong negative correlation between the two variables, showing that there is a significant and inverse relationship between them i.e., if one increases, the other will decrease and vis-à-vis. This means, the higher the self-esteem in an individual is, the more internal their locus of control will be. This however does not imply any causal relationship between the two variables. Thus, self-esteem and locus of control are significantly correlated in the context on undergraduate university students in India.

The result of the current study indicates that students with higher self-esteem will have a more internal locus of control and those with lower self-esteem will have a more external locus of control. This result is supported by literature from previous studies that suggest an external locus of control could be a predictor of lower self-esteem in individuals and vice versa (Parker et.al, 2005). An internal locus of control is related to having leadership abilities (McCullough, Ashbridge, & Pegg, 1994), healthier behaviours, lower stress levels (Rotter, 1966), and higher self-esteem (Kishor, 1981; Kliewer & Sandler, 1992; Mullis & Mullis, 1997).

However, depending on the age and profession of individuals, internal locus of control could also be present in individuals with lower self-esteems (Leonhardt, 2017). Individuals with external LOC negatively judge their own ability to repeat previous achievements, resulting in low levels of self-efficacy. They attribute their previous successes to external factors such as chance. Their negative self-views correlate with low self-esteem, and these negative self-evaluations cause a cascade of unhealthy habits that ironically reinforce the negative self-views. (Clance and Imes, 1978 and Chrisman et al. 1995).

Self-esteem components have a positive and significant relationship with internal locus of control, according to the findings of a study involving 370 university students. Furthermore, internal locus of control could predict all grades of self-esteem components and an examination of the differences in self-esteem and locus of control in boys and girls, shows that the more an individual relies on chance locus of control, the less self-esteem him or her feels (M. Saadat et.al, 2012). Thus, the findings of the current research are congruent with some, while contradictory to other previous findings.

CONCLUSION

The imposter phenomenon is a form of self-doubt or insecurity that manifests as an inability to accept success. (Clance & Imes, 1978) It can be described as a set of feelings of insufficiency that, despite apparent success, continue. Imposters suffer from persistent self-

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doubt and a sense of intellectual fraud that supersedes any feelings of accomplishment or external evidence of their skills and ability.

Results in this current study indicate that there is a high prevalence of the Imposter Syndrome in undergraduate university students, both female and male; belonging to both private and government universities. Therefore, the hypothesis that Imposter Syndrome will be prevalent in undergraduate university students in India is proven true. In an environment which is rooted in academic isolation, hostile competition, lack of discipline, and a scarcity of mentoring & unclear future goals and therefore the emphasis of product over method, with an intense pressure to accomplish and show the worthiness of oneself, undergraduate students in universities are susceptible to career-related anxiety as they're one among major groups supposed join and navigate the current workforce.

The results further imply that while prevalence of the imposter syndrome is common in both males and females, it is higher in females than in males in context of undergraduate university students in India. This difference between the genders could be because of many factors rooted in society and culture. For example, imposter feelings in women being portrayed positively by relating to discretion, dignity, or modesty; stereotypes and biases that women face in the cultural context; the seeds sown through societal verbal and non-verbal indications that foster risk aversion and the fear of failure throughout childhood and early adolescence, that lead them to be unable to accept that they belong or are capable of professional achievement or advancement later in life. The prevalence of the imposter syndrome also seems to be comparatively higher in government university students than private university undergraduate students in the same context.

Self-esteem is the opinion or judgment individuals holds about themselves. It is a person's level of satisfaction or dissatisfaction with oneself and the extent to which one perceives themselves to be a capable and worthy human being (Coopersmith, 1967). Locus of control is how people choose to attribute events and their outcomes in life to internal or external factors. It refers to the amount of control people perceive they have on these events. Individuals with an external locus of control believe that the circumstances in their life and their consequences are controlled by fate, luck or other such factors, whereas individuals with internal locus of control believe that the same are under their own control (Rotter, 1954).

According to the data collected, the findings suggest that the average person in the sample has a decent and healthy self-esteem measure and has an equal chance of having an internal or external locus of control. According to the statistical analysis, the impostor phenomenon was significantly associated with all self-esteem scores with very strong negative correlation between the two variables, showing that there is a significant and inverse relationship between them. The higher the self-esteem in an individual is, the fewer imposter feelings being experienced will be and vis-à-vis. Results indicate a very strong positive correlation between locus of control and imposter syndrome, showing that there is a significant relationship between them and both variables move in a tandem. The more external the locus of control in an individual is, the more intense the imposter feelings being experienced will be and vice versa. Therefore, the hypothesis that Self-Esteem and Locus of Control will be significantly correlated to the Imposter feelings in undergraduate university students in India is proven true.

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The results imply a strong negative correlation between the self-esteem and locus of control, showing that there is a significant and inverse relationship between them. This means, the higher the self-esteem in an individual is, the more internal their locus of control will be, and so on. Therefore, the hypothesis that Self-esteem will be correlated to Locus of Control in undergraduate university students in India is proven true.

The study does not take into account a few independent variables that might be impacting the measured concepts, and further research into those can help improve the research. Variables such as family environment, parenting styles, actual performance in class, interpersonal relationships with peers and faculty, subjective interpretations of students etc. and their relation to the imposter feelings, self-esteem and locus of control could be further researched upon. People who score high on impostor syndrome and have deeply negative self-perceptions may pursue therapy, which may have led to the emergence of the impostor hypothesis in academic literature. Coaching and psychotherapeutic approaches can be used to help them improve their unhealthy thought patterns and self-evaluations, as well as their dysfunctional working styles such as, perfectionism or procrastination. These approaches are intended to alleviate psychological distress and increase the quality of life of those who are affected by the imposter phenomenon.

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Conflict of Interest

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