A Conceptual Framework for Investigating the Relationship Between Impostor Syndrome and Graduate Soft Skills: The Mediating Roles of Self-esteem and Academic Self-efficacy

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Abstract

This conceptual article analyses core issues in the South African higher education sector, focusing on the mismatch between graduates' skills and post-graduation employability. It proposes a theoretical framework examining how impostor syndrome undermines performance and the demonstration of soft skills, mediated by self-esteem and academic self-efficacy. Impostor syndrome has emerged as a growing concern for capable graduates who feel self-disqualified and fear being exposed as frauds (Clance & Imes, 1978; Chatterjee, 2023). They attribute success to luck or undeserved factors (Langford & Clance, 1993), when in fact they have succeeded despite impostor feelings. This manifests indirectly through lowered self-efficacy, reduced goal-setting, and challenges with avoidance (Abdelaal, 2020), which contrast with work readiness expectations. In educational settings, this conflict heightens aversion to job preparation, clashing with self-interests in workplace needs (Gadsby, 2022). Acquiring adaptive skills—such as communication, teamwork, and flexibility—is essential to enhancing employability. However, impostor syndrome undermines learning, often leading to a perception of fraudulence. The framework identifies self-esteem and academic self-efficacy as mediators in combating impostor syndrome, emphasising learning, work skills, adaptability, and teamwork to build readiness. Low self-esteem leads to self-dysfunction, disrupting social integrity and perceptions of trust (Bowen & Botha, 2023). Diminished self-efficacy hampers task engagement and peer association (Haghighi & Ghorbali, 2022). By bridging cognitive-affective theories with outcome measures, this paper refines the understanding of impostor syndrome's impact on the acquisition of soft skills and informs strategies to advance graduate employment.

Keywords: academic self-efficacy, graduates, impostor syndrome, self-esteem

1. Introduction

Impostor syndrome, proposed by Clance and Imes (1978), is a feeling of intellectual fraud and deceit about one's abilities despite evidence of one's intelligence and achievements. This is especially common among high achievers who believe their success stems not from their skills and hard work but from external luck or circumstances (Langford & Clance, 1993). Because of the harmful effects of impostor syndrome on students' well-being, motivation, academic performance, and post-graduation preparedness, it is increasingly recognised as a vital construct in postsecondary education (Bates et al., 2024; Chatterjee, 2023). It undermines academic self-efficacy and identity formation, potentially harming students' self-esteem and their ability to engage effectively in learning and social situations. It can also adversely affect personal growth experiences and activities in leadership and employment preparation, which underpin understanding of students' transition to employment (Abdelaal, 2020; Bothello & Roulet, 2019).

Individuals with impostor syndrome commonly exhibit generalised anxiety, diminished self-confidence, low self-esteem, and a reduced sense of competence, autonomy, and interpersonal connection; they also frequently experience depression and intense frustration from failing to meet their own excessively high standards (Sonnak & Towell, 2001; Mainali, 2020; Maftei, Dumitriu & Holman, 2021). Furthermore, impostor syndrome has been

positively correlated with burnout among students (Villwock, Sobin, Koester, & Harris, 2016; Alrayyes, Dar, Alrayes, Alghutayghit, & Alrayyes, 2020), and it can hinder the development of essential soft skills.

Soft skills—communication, adaptability, emotional intelligence, teamwork, and problem-solving—are significant for graduate employability and workplace readiness in modern job markets. These competencies enable individuals to manage complex social interactions and adapt quickly to changing workplace contexts (Bowen & Botha, 2023). Employers increasingly require behavioural skills over disciplinary expertise; therefore, soft skills are now seen as crucial for employment, for thriving in team-oriented environments, and for developing leadership potential (Abdelaal, 2020; Bothello & Roulet, 2019).

Nevertheless, soft skills have not been adequately developed in higher education, especially among students with psychological barriers such as impostor syndrome during their postgraduate studies, which impair expression and assertiveness and limit effective collaboration and communication (Chatterjee, 2023; Bates et al., 2024). It is thus vital to overcome psychological inhibitors to enhance their work readiness.

It is crucial, moreover, to appreciate the roles of self-esteem and academic efficacy, and to consider the mediating processes that can be affected by impostor syndrome, to prevent graduates from unlocking their soft skills. Self-esteem involves the internalisation of success and participation in complex social behaviour (Coetzee et al., 2006; Bowen & Botha, 2023). Academic self-efficacy, as detailed in Bandura's (1977) social cognitive theory, has additional effects on students. Academic self-efficacy is further informed by Bandura's (1977) Social Cognitive Theory and influences students' confidence in handling academic tasks and applying them in social contexts (Haghighi & Ghorbali, 2023). People prone to fraudulent actions have also been found to exhibit increased levels of cognitive distortions, such as externalising achievements or catastrophising failure, which lower self-esteem and self-efficacy (Langford & Clance, 1993; Batchelder, 2020). These dispositions can be crucial for developing soft skills such as initiative, flexibility, and assertive communication, which may be hindered in students with impostor syndrome (Chatterjee, 2023). Self-esteem and academic self-efficacy are reliable indicators of intrapersonal processes that mitigate impostor syndrome by influencing workplace readiness.

Recent literature has examined impostor syndrome and its impact on psychological well-being, academic achievement, and progress. The development of soft skills still receives insufficient attention (Bothello & Roulet, 2019; Bates et al., 2024; Chatterjee, 2023). As a result, critical employability-related interpersonal and intrapersonal skills have received little attention in discussions of impostor syndrome (Bowen & Botha, 2023). Beliefs about the impostor phenomenon are distilled and embedded into models of psychological constructs such as self-esteem and self-efficacy. At the same time, the influence on the learning and application of soft skills is often overlooked (Bates et al., 2024). This not only leaves impostor syndrome unacknowledged but also gives insufficient attention to its effects on employability skills. It is a serious concern because little attention has been paid to creating a well-structured conceptual framework related to the impact of impostor syndrome on employability skills to mediate related psychological activities.

It is imperative to support graduates' transition from academia to the working world. To ensure this, it is vital to eliminate all psychological factors that can hamper their growth (Clance & Imes, 1978; Langford & Clance, 1993). These factors can discourage individuals from taking on challenges in their interactions with others at work or in their environment (Chatterjee, 2023; Bates et al., 2024). As a result of there being less emphasis on skills in the working environment nowadays (employers increasingly stressing the importance of skills such as communication skills, adaptability skills, and emotional IQ) (Bates et al., 2024), there is a potential adverse effect on individuals experiencing the "phenomenon of feeling like an impostor in their role" (Bowen & Botha, 2023). Without a clear understanding of how "cheater-related mechanisms" influence intrapersonal factors such as self-esteem and academic self-efficacy (Abdelaal, 2020) among graduates, this could hamper their development and prevent them from thriving in their workplaces.

2. Motivation for the Study

The proposed motivation for this investigation is to address the myriad problems associated with employability skills, psychological preparation, and equity-based individual development in South African higher education. Recent graduates have reported a significant disconnect between the acquisition of academic knowledge and the behavioural skills required for workplace effectiveness (Abdelaal, 2020; Bowen & Botha, 2023). This mismatch is not unique to South Africa; it represents a universal issue, with growing focus on assessing graduates' soft skills, including adaptability, communication, and emotional intelligence (Bothello & Roulet, 2019; Bates et al., 2024). Nevertheless, emotional barriers, such as the fear of impostor syndrome, can deter students' perceptions of their own success (Chatterjee, 2023). This is especially true for students from historically disadvantaged groups as they transition to the

workplace (Bates et al., 2024). Placing this article in the context of South Africa provides insight into how impostor syndrome and its mediators influence graduates' work-readiness.

From the learning context to the workplace, students have been known to experience impediments, including impostor syndrome (a perception of one's skills as low) and low self-esteem or academic efficacy. Moreover, the experience of the impostor phenomenon (IP) could be attributed to anxiety related to adjustment to a situation or task.

This study aimed to investigate the impact of IP on the acquisition of soft skills and the mediating effects of self-esteem and academic self-efficacy in this relationship. Therefore, this study will make a significant theoretical and conceptual contribution by focusing on the theories that underpin the various constructs. Based on the theories, the conceptual framework will illustrate the relationship between impostor syndrome (independent variable) and the acquisition of soft skills (dependent variable), and how this relationship is influenced by self-esteem and academic self-efficacy (mediator variables).

The educational sector will benefit significantly from the initiatives outlined in this study to raise awareness of impostor syndrome, which is often underdeveloped in soft-skills training. Higher education institutions should offer initiatives to boost scholars' self-esteem and self-efficacy. This helps reduce the effects of impostor syndrome and enables individuals to acquire soft skills that meet employers' demands. Higher education institutions will benefit from training in developing transferable skills that employers demand.

This conceptual study provides a theoretical basis for how the impostor experience relates to the development of soft skills among graduates, focusing on self-esteem and academic self-efficacy as mediators. Although there is considerable literature on the psychic and educational implications of the impostor experience, there is a minimal theoretical base for its behavioural implications for skill development. (Abdelaal, 2020; Bothello & Roulet, 2019)

Owing to the increased expectation on graduating individuals to assimilate into non-technical attributes such as communication skills, adaptability, and problem-solving abilities within their area of profession (Bowen & Botha, 2023), there is an identifiable crucial need to understand the role that psychological factors, such as self-doubt, self-concept, and academic beliefs, play in influencing the enhancement of soft attributes. As such, a combination of theoretical approaches to Self-Efficacy Theory (Bandura, 1977) and the Psychological Capital Model (Luthans et al., 2007) is used to describe how cognitive attributes of impostorism affect self-esteem and self-efficacy.

3. Research Objectives

This conceptual paper investigates the extent to which impostor syndrome affects the development of soft skills among university graduates. The work can also mediate the role of academic self-efficacy and self-esteem. This paper applies psychological theories of self-confidence and skill within the higher education setting. The goals are:

- To determine the strength of the association between impostor syndrome and self-reported soft-skill levels.
- To determine whether self-esteem and academic self-efficacy mediate the link between impostor syndrome and self-reported soft-skill levels.

4. Research Questions

Based on the problem statement and objectives, the following research questions are posed:

- What association exists between impostor syndrome and developed soft skills?
- To what extent do self-esteem and academic self-efficacy mediate the relationship between impostor syndrome and perceived soft skills?

5. Literature Review

The literature review focuses on impostor syndrome (independent variable), academic self-efficacy and self-esteem (mediating variables), and soft skills (dependent variable).

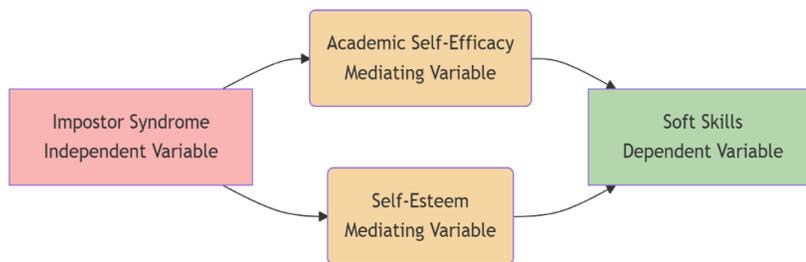The conceptual framework is depicted in Figure 1.

Figure 1. Conceptual framework (Source: Author's own)

Impostor syndrome, soft skills, self-esteem, and academic self-efficacy are interconnected constructs that can significantly affect an individual's life, whether in academic or professional contexts. Impostor syndrome can hinder the development of soft skills and self-esteem, thereby impeding academic self-efficacy.

5.1 Impostor Syndrome

Impostor syndrome, also known as the impostor phenomenon and first described by Clance & Imes (1978), is a psychological experience in which high-achieving individuals — despite substantial accomplishments — persistently feel inadequate and live in fear of being exposed as frauds. Langford & Clance (1993) further elaborated on this construct, highlighting key associated features such as perfectionism, a strong propensity toward self-doubt, and intense fear of failure. Additional characteristics include chronic self-doubt (Sakulku 2011). Collectively, these elements can prevent individuals from internalising their successes, which, in turn, can negatively affect the development and demonstration of various skills, including essential soft skills (Abdelaal 2020). Impostor syndrome (IS) is a psychological construct characterised by persistent doubting of one's achievements and an intense fear of being exposed as a fraud, despite clear evidence of success (Noor Qasem et al., 2025). Prevalence among students is notably high, with rates ranging from approximately 47.4% to 58.7% across studies (Shinawatra et al., 2023; Qureshi et al., 2017). Most affected students report moderate to severe levels (Noor Qasem et al., 2025; Patel Pritikumari Dineshbhai & Nirukumari Patel, 2025). Students have been found to exhibit high levels of IS in association with poorer mental health (Noor Qasem et al. 2025; Shinawatra et al. 2023; Maftei et al. 2021), especially depression, anxiety, and stress (Kuppusamy et al. 2022), particularly among those pursuing medicine (Alzufari et al. 2024), as well as with academic performance (Kuppusamy et al. 2022) and leadership skills being affected. It is also associated with procrastination and psychological distress (Maftei et al., 2021), regardless of gender (Shinawatra et al., 2023), academic performance (Shinawatra et al., 2023), or age (Noor Qasem et al., 2025). Impostor syndrome is thought to induce resilience or drive in some cases. It could be because one makes extra efforts due to perceived incompetence (Bothello & Roulet, 2019). This could have short-term effects (Bates et al., 2024), induce burnout (Bates et al., 2024), or decrease well-being.

Impostor syndrome is characterised by feelings of self-doubt and the perception that one does not deserve one's success and is perceived as a fraud (Uslu, 2024; Kark et al., 2021; Hawley, 2019). Impostor theories emphasise the fit between individual dimensions (e.g., personality traits such as introversion, trait anxiety, and shame) and non-supportive background experiences (e.g., family) to maintain feelings of fraudulence (Langford & Clance, 1993). Situational factors such as belonging to minority groups or holding high-profile positions can contribute to such susceptibility (Feenstra et al., 2020; Kark et al., 2021). Impostor experiences encompass individual self-presentational traits rather than merely internal experiences of persuasion (Leary et al., 2000). More recent theories have suggested treating such impersonations with more accurate tools and understanding the context-based nature of these experiences (Walker & Saklofske, 2023; Hawley, 2019). Specific strategies, such as cognitive restructuring of experiences and creating supportive environments, have been beneficial (Uslu, 2024; Kark et al., 2021).

5.2 Academic Self-efficacy

Academic self-efficacy is a subjective judgment of one's capability or accomplishment in learning, or of one's faith in one's potential to accomplish academic tasks and objectives (Zheng, 2024; Ribeiro & Fernandes, 2020). It is often viewed as task-related self-confidence. It is characterised by personal interpretations of one's ability to plan and implement actions necessary for academic achievement (Artino, 2012; Ahn & Bong, 2018). Numerous studies have shown that academic self-efficacy is a crucial predictor of academic achievement, accounting for up to 11.5% of the variance over more extended periods (Lane & Lane, 2001). Students with high self-efficacy actively use their cognitive skills and persist longer on more challenging tasks (Alfassi, 2003). Academic self-efficacy is related to academic motivation, both cognitively and motivationally (Schunk, 2002). Nationality, subject type, and attendance patterns influence academic self-efficacy. International students and technology students have been known to have high levels (Ribeiro & Fernandes, 2020). School image is another influence on academic self-efficacy: academic orientation and administration have been identified as critical factors (Gafoor & Ashraf, 2012).

Academic self-efficacy is described within the theoretical framework of Bandura's Social Cognitive Theory. Social Cognitive Theory defines academic self-efficacy as one's belief in their personal agency to plan and implement the actions needed to achieve designated performance outcomes (Artino, 2012; Shilenkova, 2020). It is perceived as a task-type self-belief and as a crucial element in theories of motivation and learning (Artino, 2012). The theoretical framework includes four primary principles of self-efficacy beliefs: mastery experiences, vicarious experiences, verbal persuasion experiences, and physiological and affective experiences (Delich & Roberts, 2017; Dodobara, 2005). These principles work to moderate behaviour in cognitive, motivational, and selective mannering (Dodobara, 2005). Scholars indicate that task-contingent measures of self-efficacy related to specific tasks outperform general measures in explaining and predicting academic performance (Pajares, 1996). Research shows that self-efficacy predicts academic success. This is supported by the finding that it accounted for 11.5% of academic performance, with a 13-week lag between assessment and testing (Lane & Lane, 2001).

5.3 Self-esteem

The literature on the relationship between student self-esteem and academic achievement is complex. Research indicates direct and indirect effects. Several studies show a direct association between self-esteem and academic achievement. Higher performance goes hand in hand with stronger self-esteem (Jayanthi et al., 2018; Noronha et al., 2018). At the same time, there is uncertainty about causality. Holly (1987) states that self-esteem does not cause academic achievement—instead, it stems from academic success.

Studies often report that gender is a significant predictor. On average, men report higher self-esteem than women (McKenzie, 1999). The ratio varies across different levels of academic achievement. Remarkably, no statistically significant relationship between self-esteem and study performance was observed in gifted students. According to Vialle et al. (2015), cognitive ability may act as a moderating variable.

Latest studies have shifted the focus to analysing the relationship between self-esteem and other psychological dimensions. Auyelbekova et al. (2025) found strong correlations between self-esteem and perseverance ($r = .34$) and between self-esteem and extraversion ($r = .61$). This paper also revealed disturbing statistics regarding students' well-being; for instance, 23.5% suffered from loneliness, and 23.2% had thoughts of suicide. These findings provide evidence that self-esteem is part of the broader domain of psychology. Domain-based studies further support this. For instance, Kaniuka (2010) identified that reading-based self-esteem can be enhanced with targeted reading interventions. Similarly, Burnard et al. (2001) reported that, among nursing students, overall self-esteem remained relatively consistent across categories such as social and personal, as well as social and general.

Some theoretical perspectives offer additional insight. A theoretical model proposed by Dickstein (1977) included five levels (or stages) in the development of the self-concept, each associated with a corresponding type of self-esteem. Drawing on identity theory, Cast and Burke (2002) conceptualised self-esteem as both a product of self-verification processes (in which individuals seek confirmation of their identities) and a psychological mechanism that buffers against threats. Its roots in self-meaning, self-identity, self-image, and self-concepts have been articulated by Bailey (2003), who emphasised these as foundational mental building blocks underlying self-esteem. Other theories further enrich our understanding. Terror Management Theory posits that self-esteem functions as a buffer against the anxiety arising from awareness of mortality, with people striving to maintain it as a coping mechanism for existential terror (Pyszczynski et al., 2004). Sociometer Theory, in contrast, views self-esteem not primarily as a builder of personal worth but as a gauge of social acceptance and relational value that motivates behaviours aimed at maintaining inclusion and belonging (Leary, 1999). Various theories also outline methods to maintain self-esteem, highlighting its dynamic role across developmental, social, and existential domains.

Better performance is inevitably accompanied by higher self-esteem (Jayanthi et al., 2018; Noronha et al., 2018). However, there is ambiguity regarding causality. Holly (1987) asserts that there is no cause-and-effect relationship between self-esteem and academic achievement; instead, self-esteem is a consequence of academic success. Combined, these theoretical perspectives provide insight into how self-esteem can be both a personality trait and a social psychological construct (Carducci & Nave, 2020; Ervin & Stryker, 2001).

The literature typically indicates that study outcomes, demographic characteristics, personality, and social environment collectively influence students' self-esteem. It not only influences outcomes but is also pivotal to the overarching construct termed "well-being". Theories confirm that self-esteem has two dimensions, which have made it a popular construct in psychology.

5.4 Soft Skills

The importance of soft skills to employability and work competence has been appreciated. These soft skills complement knowledge. The literature has identified communication, teamwork, leadership, problem-solving, emotion management, and time management as part of soft skills (Jayaram & Musau, 2017; Tyschenko, 2023). The remaining social skills pertain to esteem and courtesy (Padhi, 2014; Rani, 2017). These transferable skills are relevant to work and can be performed with minimal machine handling, according to Whitmore and Fry (1974).

These attributes are considered key competencies and receive significant emphasis during hiring and promotion. The literature indicates that when technical competence is equal, soft skills play an important role in hiring decisions. The variables that play a crucial role include teamwork and communication (Velasco, 2012; Comstock, 2015). Employers hire graduates with a positive attitude, strong interpersonal behaviours, and interpersonal communication skills (Murdock, 2018). This is just one of the many requirements placed on students. The curriculum should prioritise the development of soft skills, given evidence of insufficient emphasis in the literature.

Current students have been reported to have deficiencies in skills (Groh et al., 2016). Early intervention can improve performance in studies and occupations (Dalaya et al., 2015; Vasanthakumari, 2019). The impact of soft skills goes beyond employability to influence learning outcomes. Goals and goal accomplishment influence self-perception and the ongoing pursuit of goals. Interpersonal skills, such as problem-solving and team building, influence the pursuit of employment or occupation (Kember et al., 2007). Globalisation requires critical thinking and skills such as innovation and adaptability, which place soft skills at the forefront to produce workforce-ready students (Gore, 2013). Other skills, such as communication, have been identified as having equal status to technology skills.

Communication skills have been identified as one of the top ten skills employers ask students to have (Hart Research Associates, 2015). Despite their high value, their viability remains a subject of debate. Some researchers (Stewart et al., 2016) have argued that there is no value in integrating them into the training structure, as they can be developed outside the classroom. Project-based learning is identified as contributing to the development of these skills. Baldwin et al. (2011) indicated that students have failed to take advantage of learning software skills. This is because they have not taken advantage of internships. Managers have stated the need for a business structure that places greater value on learning these skills. These skills are directly linked to organisational performance (England et al., 2020). Hard skills have been identified as having little link to personal resilience. Succi (2015) indicated that they have been determined to resist occupational demands and other day-to-day activities. This is supported by Nazaré de Freitas and Almendra (2021), who suggest that soft skills enable individuals to define their uniqueness in the context of workplace automation, which aligns with Chaitanya's (2018) argument on employability.

The theoretical background of soft skills remains fragmented across several fields and is highly ambiguous. Some studies noted a lack of consensus regarding the definition of soft skills, with overlapping concepts, including competencies (Marin-Zapata et al., 2021; Malykhin et al., 2021). This is because their classification is currently dichotomous and lacks a universal nomenclature (Malykhin et al., 2021). Some of the primary theoretical bases for improving soft skills include experiential learning theories proposed by Kolb (1984), which are effective in entrepreneurship education through active learning (Novaes, 2024). Other bases include psychological constructs related to personal and systemic activity, with perspectives from acmeological and level-related fields (Makhmetova & Ungarbayeva, 2023). Developmental theories of assessment include control theories of learning, theories of learning goals, and attribution theories, with a focus on the latter, which appear to have potential for treating self-regulation associated with attribution (Gibb, 2014). Despite their theoretical disintegration, soft skills have increasingly been identified as exhibiting cross-cutting meta-qualities that seem integral to success at the professional level (Malykhin et al., 2021; Žilinskienė & Knyvienė, 2024).

5.5 Relationship Between Impostor Syndrome and Students' Soft Skills Development

Research on impostor syndrome consistently shows that it negatively impacts students' ability to develop soft skills. Soft skills such as self-efficacy, resilience, emotional intelligence, and self-compassion are core to academic and professional development. Multidisciplinary studies indicate that intense feelings of impostorship impede the reinforcement of these skills among students.

Self-efficacy is among the most researched non-technical skills associated with impostor syndrome. Empirical findings show a clear negative correlation. Among medical residents, a strong inverse association was reported ($r =$ $-.738$, $p < .001$), with higher impostor feelings predicting lower self-efficacy (Batur et al., 2024). Similarly, the impostor syndrome in master's students in data science is associated with lower academic self-efficacy (Duncan et al., 2023). The findings indicate that students who doubt their competence exhibit lower confidence in their academic abilities. Lower self-efficacy weakens perseverance in high-demand fields such as STEM (Tao & Gloria, 2018).

Resilience is an essential skill that enables scholars to successfully cope with academic exigencies. Studies have shown a negative relationship between resilience and higher levels of impostor experiences. Amongst Swedish medical undergraduates, a mild negative correlation was discovered ($r = -.412$, $p < .001$) (Kristoffersson et al., 2024). Amongst Saudi Arabian undergraduates pursuing programs in nursing and medicine, similar findings emerged ($r =$ $-.220$, $p < .001$) (Khalil et al., 2024). Experiencing impostor syndrome reduces short-term self-confidence and resilience, which are integral to adaptation during studies and in a profession. Emotional skill strategies counteract the impact. The correlation between higher self-compassion and reduced experiences of being an impostor in first-year scholars was strongly negative ($r = -.55$, $p < .001$) (Patzak et al., 2017). The impact is reduced by empathy on the part of supervisors amongst doctoral scholars ($r = -.122$, $p = .045$) (Slimi et al., 2024). The adverse effect is mitigated by emotional intelligence and social support within relationships.

Despite this negative connotation, there may be exceptions to this association. A study on undergraduates in the Philippines indicated that there is a positive link between impostor syndrome and self-efficacy ($r = .559$, $p < .001$) (Abduhalim, 2025). Another positive association has been identified between impostor syndrome and practice readiness among nursing students (Christensen et al., 2016). These studies revealed that contextual factors, such as academic culture, gender roles, and support mechanisms, can moderate this link. A supportive environment and understanding supervisors reduce feelings of impostorship, while increased exposure to social media widens these feelings (Landry et al., 2022).

The overall results indicate a generally negative relationship between impostor syndrome and transferable skill outcomes. A lack of strong positive experiences with impostor syndrome is associated with lower self-efficacy, resilience, self-compassion, and academic competence. Self-reported emotional skills, such as empathy and self-compassion, are protective factors. Demographic and contextual variables, such as gender, level, and support context, can serve as moderators. Addressing impostor syndrome in educational settings is crucial to improving outcomes in soft skills.

5.6 Mediating Role of Self-esteem and Academic Self-efficacy in the Relationship Between Impostor Syndrome and Soft Skills

The literature shows growing attention to the link between impostor syndrome and transferable skills in students, with self-esteem and academic self-efficacy as core mediators. Stronger impostors experience lower subjective competence and undermine their communication, emotional intelligence, and leadership. Mediation analyses confirm the adverse indirect effects via self-esteem and self-efficacy.

Various studies have shown a negative association between impostor feelings and self-esteem. For instance, a survey of medical undergraduate students in India found that those with high levels of impostorism reported lower self-esteem (Sawant et al., 2023). Additionally, a cross-cultural validation study among Iranian and Armenian medical students found that impostor feelings predicted lower self-esteem, which, in turn, was associated with reduced emotional intelligence (Ghorbanshirodi, 2012). This means that self-esteem plays a mediating role. Students with impressions of impostorism experience a drop in their self-esteem, hence they struggle with hard skills like emotional awareness and communication skills.

The mediating role of academic self-efficacy has been well established. For instance, in a survey of Malaysian medical students, a negative association was observed between feelings of fraudulence and subjective academic accomplishment, a proxy for self-efficacy. This indirectly affected associated leadership soft skills (Kuppusamy et al., 2022). Among counselees, a link was observed between feelings of fraudulence and reduced self-efficacy in counselling. This directly affected their professional skills in empathy and communication (Clarke et al., 2024). In

another survey of language learners, a predictive relationship was found between fraudulence and decreased willingness to communicate. However, this mediation occurred through second-language proficiency. This is a form of self-efficacy related to a specific subject (Brauer et al., 2023). All the above studies show that self-efficacy not only declines under the pressure of fraudulence but also filters its effects on essential soft skills.

Across individual studies, self-esteem and self-efficacy have been identified as continuous predictors of soft skills with positive coefficients. This means that impostorism is always predictive of unfavourable outcomes. For example, high self-esteem was positively associated with EQ and personality strengths (Ghorbanshirodi, 2012; Sawant et al., 2023). On the other hand, high self-efficacy was positively associated with assertiveness, leadership virtues, and likability (Medline et al., 2022; Kuppusamy et al., 2022). These variables were confirmed to mediate the effect of impostorism on soft skills through mediation tests. Some studies reported full mediation (Clarke et al., 2024), while others reported partial mediation (Brauer et al., 2023).

Collectively, it is evident that self-esteem and academic self-efficacy play a crucial mediating role in the relationship between impostor syndrome and the acquisition of soft skills. Low self-esteem and self-efficacy can stem from difficulties students encounter in learning communication and emotional skills, which in turn can lead to feelings of fraudulence. On the other hand, high self-esteem and self-efficacy serve to mitigate the adverse effects of fraudulence among students. Thus, measures to enhance students' self-belief can indirectly improve their critical soft skills.

6. Theoretical and Conceptual Framework: Impostor Syndrome, Self-esteem, Academic Self-efficacy and Soft Skills

Impostor syndrome involves the belief that one will be discovered as inept despite having achieved success. Individuals with leanings towards impostor syndrome question their success and ascribe it to external causes. This relates to two types of self-perceptions: self-esteem and academic efficacy. Self-esteem is described as global self-worth. As impostor feelings take precedence, confidence in one's value and contribution declines. This is consistent with findings that impostor feelings are inversely correlated with self-esteem across student groups (Sonakk & Towell, 2001; Clance & Imes, 1978). Academic self-efficacy refers to a person's belief in their ability to complete academic tasks. Impostor syndrome impairs this belief. Students with high self-efficacy are more effective in participating in group assignments, presentations, and leadership roles (Bandura, 1997; Lane & Lane, 2001). Self-esteem and academic self-efficacy mediate the link between impostor experiences and soft skills. Low levels impair communication, teamwork, leadership, and adaptability. Evidence confirms that impostor experiences inhibit social and professional development by limiting participation in teamwork (Bothello & Roulet, 2019; Haghighi & Ghorbali, 2022). By contrast, high self-beliefs reinforce these skills, increasing job-market readiness and leadership potential among graduates (Bowen & Botha, 2023).

The model also recognises context. Supportive mentoring, inclusive climates, and empathetic supervision can mitigate the pathways between impostor syndrome and negative self-beliefs. By contrast, identity-based variables, such as gender or first-generation status, can reinforce pathways to impostor syndrome (Feenstra et al., 2020; Slimi et al., 2024).

The framework can be abstracted to four propositions:

- Impostor syndrome diminishes one's self-esteem and academic self-efficacy.
- Developing self-esteem and academic self-efficacy contributes to creating soft skills.
- These self-beliefs mediate the effects of Impostor Syndrome on soft skills.
- Relationships between variables can be moderated or influenced by mentoring and demographics.

This conceptual framework provides a sound basis for empirical testing using established measures, such as the Clance Impostor Phenomenon Scale, the Rosenberg Self-Esteem Scale, and task-based measures of self-efficacy. It also highlights the role of peer mentoring and supervisor training in preserving self-esteem and improving graduate status.

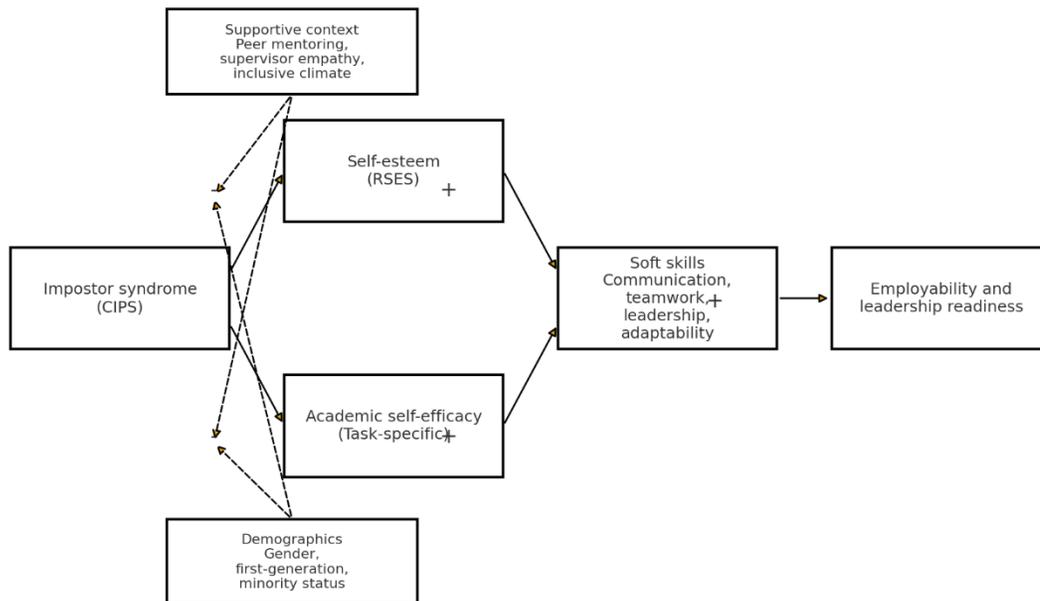Conceptual framework: Impostor syndrome, self-beliefs, and soft skills

Figure 1. Conceptual framework

7. Gaps in Past Research

Despite numerous studies on the relationship between self-esteem and academic self-efficacy, no studies have examined their influence on overall soft skills development. While many studies have been conducted to date, they have focused on educational outcomes such as grades or academic performance (Haghighi & Ghorbali, 2022) rather than behaviourally related skills that are highly valuable for post-graduate job prospects (Chatterjee & 2023). The way in which impostor syndrome negatively influences the acquisition of soft skills, such as communication and leadership, has not been considered in theoretical studies to date. This conceptual gap highlights the unclear influence of internal psychological factors, such as impostor syndrome, on the restriction of increasingly in-demand employer skills (Bowen & Botha, 2023).

It is crucial to recognise that psychological barriers play a role in students' readjustment to the workforce. Impostor syndrome adversely affects self-confidence, discourages initiative, and reduces receptivity to team or leadership roles (Clance & Imes, 1978; Bothello & Roulet, 2019). Moreover, psychological obstacles are characterised by self-criticism and ineffective attribution styles, which inhibit the behavioural manifestation of soft skills. Academic self-efficacy and self-esteem play a vital role as protective factors, shielding against intrapersonal disturbances that affect self-perception and interpersonal relations by promoting a positive orientation and assertiveness (Bandura, 1997; Luthans et al., 2007). However, there is no comprehensive explanation of the mediating processes linking academic self-efficacy and self-esteem.

This is particularly pertinent to the South African higher education landscape, where universities continue to contend with structural and socio-economic inequalities that adversely affect student development and postgraduate outcomes. The problem of youth unemployment remains a challenge, while employers complain about a lack of relevant skills. Impostor syndrome is contributing to this situation, particularly among historically disadvantaged student groups (Abdelaal, 2020; Bates et al., 2024).

Employers identify emotional intelligence, critical thinking, and teamwork as vital to success in work environments. The affected group comprises those with impostor syndrome. This conceptual paper informs educational systems worldwide on how to address the psychological and behavioural aspects inherent to graduate readiness.

8. Conclusion

This paper presented a conceptual framework to deepen understanding of the experience of impostor syndrome and its effects on graduate-level soft skills, with self-esteem and academic self-efficacy as central mediating factors. This issue is vital to current theories because it integrates psychological and behavioural dimensions, which are often excluded or alienated from discussions of employability (Chatterjee, 2023; Clance & Imes, 1978). This framework is also of theoretical importance because it establishes a correlation between cognitive and behavioural activities related to skills acquisition and the internal psychological barriers posed by impostor syndrome (Bowen & Botha, 2023). It further emphasises the need for support programs that engage with psychological factors to enhance self-esteem and resilience, thereby fostering interconnectedness. These points are crucial for applying soft skills (Haghighi & Ghorbali, 2022; Abdelaal, 2020). Higher education recognises the need to focus on graduate readiness—not only in what students learn in education or training, but also in how individuals perceive their role relative to their potential. Empirically testing these beliefs would yield more data and deepen understanding of impostor self-perceptions and occupational performance in relation to soft skills and labour market readiness.

This article is conceptual; therefore, it offers no empirical test of whether impostor syndrome shapes graduate soft skills through self-esteem and academic self-efficacy, nor can it confirm causal direction. It focuses on two mediators and gives limited attention to wider contextual influences, such as institutional climate, programme design, labour market exposure, and unequal development opportunities in South Africa. It also treats soft skills broadly, leaving unresolved issues with precise operationalisation, the gap between perceived and observed competence, and self-report bias. Future research should test the model with multi-institutional and cross-disciplinary samples, employ longitudinal designs in early employment, and apply robust mediation and moderation analyses. Studies should triangulate measurement with validated scales, behavioural, and workplace performance indicators, and evaluate interventions such as mentoring and skills-focused curricula using both psychological and performance outcomes.

Data sharing statement

No additional data are available.

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