

Entrepreneurs and the Impostor Within: Impact on Financing Choices

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Abstract

While entrepreneurs are often perceived as highly confident, many contend with Impostor Phenomenon (IP), experiencing self-doubt despite demonstrable achievements. Despite its prevalence, IP in entrepreneurship remains an understudied paradox, an invisible barrier shaping financial choices in ways yet to be fully understood. This interdisciplinary study investigates the antecedents of IP, examining its influence on entrepreneurs' financial decision-making. Analysis of 229 entrepreneurs reveals that lower levels of education, experience, network size, and lack of incubation support contribute to IP, subsequently shaping financing behaviors. Significantly, 44% of entrepreneurs report frequent to intense IP, leading them to rely on personal savings over external funding sources. These findings highlight how impostor feelings can significantly hinder access to external finance, reinforcing the need to address psychological barriers in entrepreneurship systems.

Key Words

entrepreneurs, impostor phenomenon, human capital, social capital, finance

Introduction

“Most individuals, regardless of prior experience, step into the role of CEO without feeling entirely confident that they are fully qualified for the position. While they may not openly admit it, this is often the reality.” - Howard Schultz (American businessman and longtime CEO and chairman of Starbucks) (New York Times, 2010).

“Whenever I took a test, I was sure that I had performed badly. Yet, whenever I managed to avoid failure or even succeeded, I felt as though I had deceived everyone once again. I feared that, sooner or later, the truth would come out.” – Sheryl Sandberg (longtime COO of Meta Platforms and founder of LeanIn.org) (Sandberg, 2013)

The two quotes above are held by accomplished entrepreneurs who have achieved the highest level of success in their fields. They have openly expressed these feelings in interviews or on social media, underscoring that they, too, have battled with self-doubt and a sense of inadequacy. Despite their actual accomplishments and recognition, the feeling that their capabilities have been overstated and that they will someday be exposed as frauds and unable to internalise their success is called the Impostor Phenomenon (Clance & Imes, 1978).

Surveys reveal that they are not alone in experiencing IP. An International Journal of Behavioural Science study found that approximately 70% of high-achieving people experience impostor syndrome at some point in their lives (Gravois, 2007). According to a study in the US (Kajabi, 2020), nearly 84% of business owners are currently affected by the ailment known as the entrepreneurial impostor phenomenon making them feel that they are inadequate (Clance, 1985) and lack confidence even though they are officially regarded as capable and competent because of their educational or professional achievements and qualifications.

“Sometimes I’m afraid others will discover how much knowledge or ability I really lack.”

“I’m disappointed at times in my present accomplishments and think I should have accomplished much more.”

The statements above are based on items from the Clance IP Scale, introduced by P.R. Clance in 1985, reflecting the inner thoughts shared by these renowned celebrity entrepreneurs mentioned above. While the prevailing narrative around the impostor phenomenon tends to highlight its detrimental effects like low self-esteem, stress, depression (Clance & Imes,

1978), self-doubt (Chua & Bedford, 2016) and feelings of inadequacy (Oser & Volery, 2012), recent studies and discussions have sought to rebalance this perspective by recognizing potential positive outcomes like interpersonal relationships or interpersonal effectiveness (Tewfik, 2022).

After examining the contrasting perspectives on the impostor phenomenon, one that emphasizes its traditionally negative impact and another that highlights its potential benefits, there arises a need to explore how this psychological experience operates within the context of the innovation ecosystem. The innovation ecosystem, comprising human, social, and financial capital (Jackson, 2011), plays a pivotal role in shaping entrepreneurial outcomes (Becker, 1964; Bourdieu, 1985; Kahneman and Tversky's, 1979). This study explores the association of human, social, and financial capital with the impostor phenomenon, with a particular focus on the impostor phenomenon among entrepreneurs as key actors of this ecosystem. Entrepreneurship is often romanticized as a domain of confident risk-takers (Kerr et al., 2018). However, the entrepreneurial journey is fraught with uncertainties that can amplify self-doubt, especially among individuals who perceive themselves as falling short of societal or personal expectations (Vergauwe et al., 2015). Moreover, Indian society is characterized by a complex interplay of traditional values and modern influences, which often leads to a cautious approach towards risk-taking, especially among women. This is evident in the reluctance of female entrepreneurs to engage in monetary risks due to societal pressures and fears of social stigma (Narendran, 2012). Women in India are influenced by cultural norms that prioritize safety and stability over aggressive financial strategies (Kappal & Rastogi, 2020). These factors can exacerbate the impostor phenomenon, making individuals more prone to self-doubt. Therefore, we account for gender and risk-taking propensity as control variables when examining the influence of factors of innovation ecosystem on impostor phenomenon.

It is crucial to consider whether the intensity of the impostor phenomenon varies among individuals with differing levels of resources. Entrepreneurs with abundant resources, be it financial capital, social networks, or access to advanced human capital, might experience the impostor phenomenon differently compared to those with fewer resources. For those with limited resources, the impostor phenomenon could potentially exacerbate feelings of inadequacy, leading to higher stress levels and a greater fear of failure. On the other hand, individuals with more resources might use their impostor feelings as a driving force to leverage their advantages more effectively.

Another question which arises is: Does the impostor phenomenon affect their decision-making ability?

Thus, by examining the antecedents of IP in entrepreneurship, we address a critical gap in understanding how IP, despite tangible achievements, can shape strategic (financial) choices. In linking individual-level factors such as education, experience, and social capital access to financing decisions, we contribute to the broader discourse on psychological barriers for entrepreneurs. By doing so, we challenge the conventional view that financial decisions are primarily driven by risk appetite (Chen et al., 2009), emphasizing instead the role of cognitive and emotional factors. Our findings offer valuable insights for practitioners and policymakers by illustrating how strong social networks and accessible funding mechanisms can mitigate the adverse effects of IP. This underscores the need for targeted interventions that not only provide financial resources but also address the underlying psychological barriers that entrepreneurs face. The subsequent sections of this study present a review of relevant literature, detail the research methodology, analyze the findings from our sample of 229 entrepreneurs, and discuss the broader implications for theory and practice.

Entrepreneurial Impostor Phenomenon

Entrepreneurs often navigate systemic challenges such as high job demands, personal resource constraints (Dijkhuizen et al., 2016), cultural stigmas surrounding failure (Landier, 2005), and limited access to support (Kanchana et al., 2013). These challenges, coupled with societal expectations of success, create a fertile ground for impostorism. The impostor phenomenon stems from a persistent assumption that, despite external validation and examples of outstanding and frequently excellent work, one lacks the abilities, expertise, or ability to perform the job (Estacio, 2018). This psychological experience is not merely a fleeting feeling of insecurity; it is a deeply ingrained mindset that can have significant consequences. The prevalent view portrays the impostor phenomenon as destructive. For instance, early research by psychologists, who were the first to research it (Clance & Imes, 1978), discovered associations of impostor phenomenon with low self-esteem, stress, depression. Further research by Sverdlik et al. (2020) has expanded on these findings, showing that the impostor phenomenon is also linked to physical illness, anxiety, and self-doubt. Despite the negative framing of the phenomenon in much of the existing literature, recent studies highlight its complex nature, suggesting that it may have both detrimental and motivating effects. For example, Tewfik (2022) demonstrated that individuals experiencing impostor thoughts often adopt other-focused behaviors, enhancing interpersonal effectiveness. This finding challenges the traditional view that the phenomenon inevitably undermines professional outcomes. Instead, it may serve as a catalyst for behaviors that compensate for perceived inadequacies, such as over-preparation, enhanced effort (Rohrmann et al., 2016), and advice seeking. These compensatory behaviors like seeking advice and enhancing effort are particularly relevant in entrepreneurial settings, where resources such as human, social, and financial capital are critical for success (Shane & Venkataraman, 2000). For instance, over-preparation and effort may align with elements of human capital, such as

education, training, and entrepreneurial experience, enabling entrepreneurs to feel more confident and capable despite impostor thoughts. Similarly, advice seeking behaviors could strengthen social capital through frequent interactions with mentors, collaborations, and support networks, while also increasing the likelihood of seeking help from incubators or associations. Moreover, these compensatory behaviors may influence financial capital decisions, such as the ability to secure external financing, overcome discomfort with external funding, or diversify funding sources to manage risks. Building on these insights, the present study investigates how impostor phenomenon interacts with elements of human capital and social capital, its influence on financing decisions. The following sections situate these research objectives within the existing literature, highlighting both foundational theories and recent empirical contributions.

Hypothesis Development

Impostor Phenomenon and Human Capital

The concept of human capital has long been recognized as a critical determinant of productivity and income, as first emphasized by Becker (1964), who argued that investments in education, training, and skills directly contribute to an individual's economic potential. In more recent work, Villwock et al. (2016) noted an intriguing paradox: while professionals with extensive training and expertise are expected to be confident in their roles, many experience pervasive self-doubt, often feeling like “frauds” despite their accomplishments. This sense of inadequacy aligns with the impostor phenomenon, which Clance and Imes (1978) defined as the internal experience of doubting one's capabilities despite external success. Their work suggests that even individuals who possess significant achievements may still struggle with feelings of intellectual phoniness, fearing exposure as “impostors.” In professional settings that value degrees as a marker of competence, individuals without

higher education may feel unprepared or less credible, which amplifies their self-doubt and reinforces impostor thoughts (Clance & Imes, 1978; Gravois, 2007). And experience in professional roles provides individuals with the practical knowledge to manage uncertainty, make decisions, and develop confidence in their abilities (Bandura, 1997). Entrepreneurs with fewer years of experience may feel especially vulnerable to impostor thoughts (Opara et al., 2023) due to their limited ability to validate their competence through past achievements. While the links between human capital and entrepreneurial outcomes are well-documented, research specifically examining the impostor phenomenon among entrepreneurs remains limited.

Objective 1: To identify the elements of human capital which can influence IP.

H1a: Impostor phenomenon varies across different educational backgrounds.

H1b: Impostor phenomenon varies across different levels of higher education.

H1c: Impostor phenomenon varies based on whether entrepreneurs have received training or not.

H1d: Impostor phenomenon varies across different levels of total work experience.

Impostor Phenomenon and Social Capital

Another element of innovation ecosystem is social capital. Social capital theory emphasizes the importance of networks in accessing resources and translating social relationships into power and economic gain (Bourdieu, 1985) and the author argued that social networks play a pivotal role in mobilizing resources, enabling individuals to leverage connections for economic and professional advantages. Expanding on this idea, Granovetter's (1973) "strength of weak ties" theory posits that diverse and expansive networks create broader opportunities. In the entrepreneurial context, social network characteristics such as support services, access to mentors, and role models have been shown to shape leaders' experiences

(Aparna & Menon, 2020). Incubators provide an ecosystem of mentorship, resources, and networking opportunities, which help entrepreneurs navigate the entrepreneurial journey with confidence. Incubators connect entrepreneurs with experienced mentors, peers, and industry experts who offer both instrumental and psychological support (Pauwels et al., 2016). Without access to these ecosystems, entrepreneurs often face isolation, limited validation, and reduced access to collaborative opportunities, all of which are key drivers of impostor phenomenon (Hausberg & Korreck, 2020). Entrepreneurs operating outside incubation systems may also struggle with accessing critical resources like funding and mentorship, which not only hinders their performance but also intensifies their self-doubt and feelings of being unworthy of success (Masutha & Rogerson, 2015).

Intellectual property support plays a crucial role in fostering innovation among entrepreneurs by providing a structured framework for protecting and validating their innovations. In this study, we have included intellectual property support as a key variable, focusing on technology-driven entrepreneurs who have secured at least one patent. Entrepreneurs often struggle with self-doubt, questioning the uniqueness or value of their creations, which can exacerbate impostor feelings (Clance & Imes, 1978). Furthermore, the lack of experienced mentors, be it an incubator or intellectual property support, to guide entrepreneurs through complex intellectual property processes can exacerbate uncertainty (Sullivan, 2009) and reinforce impostor feelings, as they may feel ill-equipped to manage these critical aspects of their business enhancing their confidence in managing intellectual assets.

Although research has established a link between social capital and entrepreneurial success, few studies have explored the direct relationship between social capital and impostor feelings in entrepreneurs.

Objective 2 - To identify the elements of social capital which can influence IP.

H2a: Impostor phenomenon varies across different network sizes of entrepreneurs.

H2b: Impostor phenomenon varies based on whether entrepreneurs are incubation-based or not.

H2c: Impostor phenomenon varies depending on whether entrepreneurs receive intellectual property support.

Impostor Phenomenon and Financial Capital

Behavioral finance provides valuable insights into the risk preferences and decision-making biases of entrepreneurs, especially under uncertainty. Kahneman and Tversky's (1979) prospect theory suggests that individuals, including entrepreneurs, tend to make risk-averse financial choices when faced with ambiguity, often prioritizing security over potential gain. This risk aversion may be amplified in entrepreneurs experiencing impostor feelings, as they may have lower self-efficacy and heightened doubts about their financial competence, leading them to avoid external financing in favor of personal savings (Zafar, 2022). The impostor phenomenon can also create difficulties in securing external funding, as entrepreneurs may feel inadequate or doubt their abilities (Ewing et al., 1996) limiting their confidence in pursuing financial resources. Although behavioral finance literature has addressed general financial decision-making biases among entrepreneurs, the specific link between impostorism and financing challenges such as reluctance to seek venture capital or other forms of external funding remains under-explored. This study aims to address this gap by examining how impostor phenomenon experiences impact entrepreneurs' financial choices, particularly in relation to external funding, thereby adding depth to the understanding of psychological factors influencing entrepreneurial finance.

Objective 3: To identify if IP influences the financing decisions of an entrepreneur.

H3a: Entrepreneurs with higher levels of impostor tendencies are more likely to face greater difficulty in securing external funding.

H3b: Entrepreneurs with higher levels of impostor tendencies are more likely to prefer personal funding over external sources of finance.

Proposed Research Model

The proposed research framework for this study is presented in Figure 1. The model examines whether a lack of human capital (education, work experience, training) and social capital (incubator association, network size, intellectual property support) contributes to the presence and intensity of IP among entrepreneurs. The study further explores how IP influences financial decision-making, particularly in terms of difficulty in securing external funding and the preference for personal savings over external financing.

The study considers IP as an influencing psychological factor that shapes financial behaviors. Entrepreneurs experiencing high levels of IP may doubt their abilities, leading to greater difficulty in securing external funding due to a lack of confidence in their business

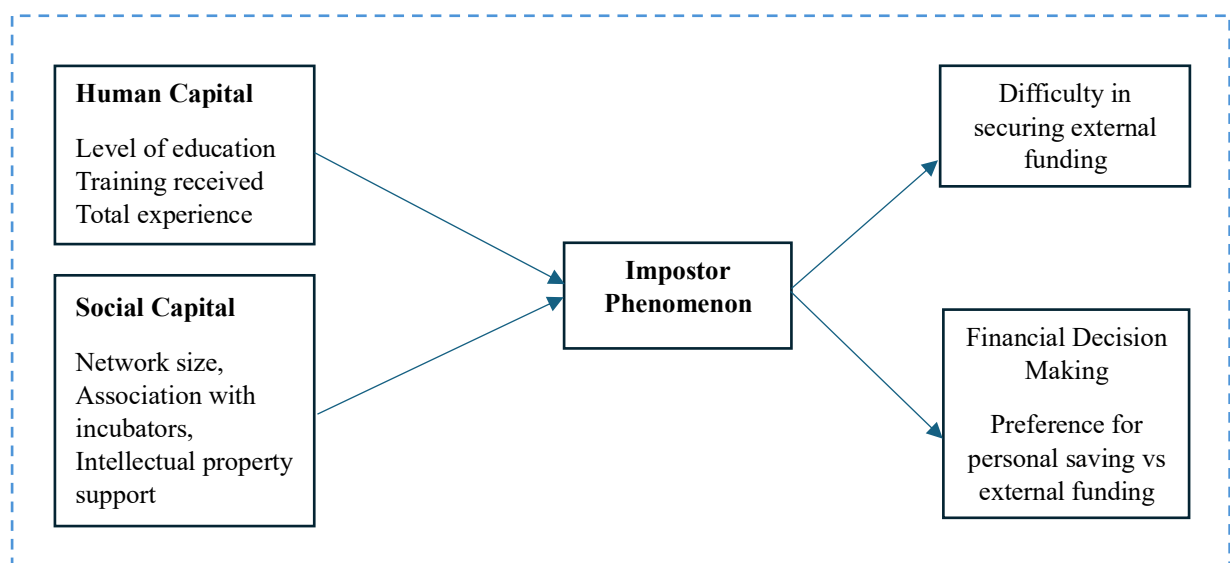


Figure 1 The Research Model

potential. IP also results in a stronger reliance on personal savings rather than seeking external investments.

Data and Methods

Sample

We created a sample of 229 entrepreneurs working in diverse areas. Specifically, participants come from sectors including Artificial Intelligence (AI) and Deep Technology, Biotechnology and Agri-tech, Sustainability and Renewable Energy, Manufacturing and Industrial Technology, and Wearable Technology. This range of industries captures the unique pressures and dynamics that entrepreneurs face across different technological and innovation-intensive fields. The research aims to encompass the regional diversity of the innovation landscape by drawing participants from a variety of locations within India. Indian regions included Maharashtra, Karnataka, Orissa, Kerala, Tamil Nadu, Delhi NCR, Rajasthan, Uttar Pradesh, Himachal Pradesh, Gujarat, and Madhya Pradesh. To ensure a well-rounded and representative sample, data was sourced from multiple databases tailored to innovation and entrepreneurship. These databases include the BeST Cluster Bengaluru, which serves as a network hub for technology and innovation stakeholders in Bengaluru, and the Bengaluru Tech Summit Directory, a directory from an annual technology summit that gathers industry leaders. Additional sources include Zaubacorp, a corporate database for information on Indian businesses; Startup India, a government-backed initiative supporting Indian startups; and LinkedIn, used to identify and reach out to entrepreneurs by sector and expertise. Using these resources helped to secure a diverse sample of participants relevant to the study's focus.

Data was collected through a combination of structured surveys and semi-structured interviews to achieve both quantitative and qualitative insights from entrepreneurs. Surveys offered a quantifiable foundation to measure variables, while interviews allowed for a more

nuanced understanding of personal experiences and contextual factors. This mixed-method approach was applied over a four-month period, from May 2024 to November 2024, providing an ample timeframe to gather comprehensive data.

We created a preliminary questionnaire based on the inputs gathered from prior literature. Therefore, a detailed list of the variables and how they are measured is provided in Table 1. To minimize potential biases associated with the survey instrument, we explicitly stated at the beginning of the questionnaire, as well as in all accompanying emails sent to the founders, that no personally identifiable information would be collected. We also clarified that the data would be used solely in aggregated form for analysis.

Dependent and Independent Variables

In this research, the innovation ecosystem variables are categorized into dependent and independent variables across three domains: human capital, social capital and financial capital. The dependent variables include Impostor Phenomenon (IP) measured through six statements taken from Clance IP Scale (Clance 1985), rated on a Likert scale from 1 (low) to 5 (high), capturing varying degrees of impostor feelings, and Source of Finance (FS) which indicates whether funding is personal or external and Difficulty in Securing External Funds (DF) which assesses the challenges faced in obtaining financial support.

Among the independent variables, human capital includes factors like Highest Education Level (HE), Total Experience (TE), and Training Received (TR). HE ranges from undergraduate to postdoctoral levels. TE is a continuous variable, while TR is a binary variable indicating whether training was received.

Social capital factors comprise Network Size (NS), Incubator-Based (IB) status, Intellectual Property Support (IPRS). NS is a continuous variable indicating network size, while IB and IPRS are binary variables, indicating the presence or absence of incubator

affiliation and IPRS, respectively. IP also functions as an independent variable when assessing its impact on financial decision-making.

This structured variable framework allows for a comprehensive examination of factors influencing the impostor phenomenon and financial decision-making among entrepreneurs.

Table 1 *List of Variables*

Variables	Definition	Measurement
Dependent variables		
IP	Impostor phenomenon	6 statements, Equal to the value indicated on a Likert scale measurement where 1 indicates low and 5 indicates high
FS	Source of finance	Equal to 1 if the business is funded by personal savings, 0 otherwise
DF	Difficulty in securing external funding	Equal to 1 if the entrepreneur faces difficulty in securing external finance, 0 otherwise
Independent variables		
Human Capital		
HE	Higher education	Equal to 1 if UG, 2 if PG, 3 if PhD, 4 if Postdoc, 5 for professional course
TR	Training received	Equal to 1 if training received, 0 otherwise
TE	Total experience	Continuous variable
Social Capital		
NS	Network size	Continuous variable
IB	Incubation-based	Equal to 1 if the business is incubation-based, 0 otherwise
IPRS	Intellectual property support	Equal to 1 if intellectual property support received, 0 otherwise
IP	Impostor phenomenon	6 statements, Equal to the value indicated on a Likert scale measurement where 1

		indicates low and 5 indicates high
Control Variables		
FE	Founding Experience	In years
RT	Risk Tolerance	3 statements, Equal to the value indicated on a Likert scale measurement where 1 indicates low and 5 indicates high
SF	Firm Size	1 if micro, 2 if small, 3 if medium, 4 if large
GR	Growth	0 if decreasing sales, 1 if constant, 2 if increasing sales
PR	Profitability	0 if unprofitable, 1 if break even, 2 if profitable
FA	Firm Age	In years

Control Variables

To account for factors that could influence an entrepreneur's choice of financial source (personal savings or external), we controlled for a set of variables that capture differences in entrepreneurs' and firms' characteristics. We included founding experience of entrepreneur (in years) (Storey, 2016), risk tolerance of entrepreneur (measured using 3 statements (Wiklund et al., 2003) on likert scale) (Vereshchagina & Hopenhayn, 2009), firm size (1 = micro, 2 = small, 3 = medium, 4 = large) (Berger & Udell, 1998), firm age (in years) (Berger & Udell, 1998), growth status of firm (0 = decreasing sales, 1 = constant, 2 = increasing sales) (Ou & Haynes, 2006), and profitability status of the firm (0 = unprofitable, 1 = break-even, 2 = profitable) (Robb & Robinson, 2014). Since these factors can significantly impact financing decisions, controlling for them allowed us to isolate the effect of the impostor phenomenon on financial choices.

Descriptive Statistics

Table 2 categorizes IP scores among entrepreneurs, highlighting the distribution across four intensity levels. A small portion of entrepreneurs, 10.92%, exhibit minimal impostor feelings (0-40%), while the largest group, at 44.54%, experiences a moderate level of IP (41-60%).

This suggests that many entrepreneurs occasionally deal with impostor feelings but not at an overwhelming intensity. Additionally, 30.57% of entrepreneurs report frequent IP (61-80%).

A smaller segment, 13.54%, falls within the intense category (81-100%), showing a persistent and deep-seated experience of impostorism. This distribution reveals that most entrepreneurs experience IP to some degree, with moderate to frequent levels being especially prevalent.

Understanding these variations can guide the design of support mechanisms tailored to the different levels of impostor experiences among entrepreneurs.

The sample of 229 entrepreneurs included 150 males and 78 females, reflecting the male-dominated nature of the profession. The average age of respondents was 39.82 years. A majority (66.38%) fell within the 31-50 age range, with 33.62% aged between 31-40 years and 32.75% between 41-50 years. This age distribution suggests that entrepreneurship is most common among individuals in mid-career stages. We did not find any significant differences in IP across gender and age groups.

Table 3 reports the bivariate correlations of the variables used in the analysis.

Table 2 *Intensity Levels of IP Among Entrepreneurs*

IP Score (in %)	Impostor Phenomenon	Entrepreneurs
0-40	Few	10.92%
41-60	Moderate	44.54%
61-80	Frequent	30.57%
81-100	Intense	13.54%

Measures

For measuring IP, we adapted 6 statements as outlined by Simon and Choi (2017), out of 20 statements of Clance Impostor Phenomenon Scale (Clance, 1985), targeting specific aspects of impostor-related perceptions. According to Simon and Choi (2017), IP is explained through three dimensions: luck, fake, and discount.

Table 3 *Correlation matrix*

	IP	Age	HE	TE	TR	IPRS	IB	NS	SF	FA	FE	FS	PR	GR	RT	DF
IP	1															
Age	- 0.03	1														
HE	- .28**	.21**	1													
TE	- .37**	.32**	.21**	1												
TR	- 0.01	0.07	0.04	0.04	1											
IPRS	- 0.02	0.05	0.12	0.08	.16*	1										
IB	- .27**	0.08	- 0.07	.22**	0.02	.25**	1									
NS	- .40**	0.12	0.06	.26**	0.07	0.06	.17*	1								
SF	- 0.12	0.03	0.11	0.12	0.06	0.05	- 0.01	0.11	1							
FA	- 0.10	- 0.02	0.10	0.09	- 0.02	0.07	- 0.00	.19**	.69**	1						
FE	- .25**	0.11	.15*	.34**	- 0.03	0.07	0.06	.26**	.54**	.66**	1					
FS	.19**	- 0.06	- 0.01	- 0.06	- 0.08	-0.09	- 0.13	- .29**	- .38**	- .41**	- .33**	1				
PR	- 0.11	- 0.03	0.01	0.02	- 0.06	-0.01	- 0.06	.26**	.39**	.48**	.41**	- .36**	1			
GR	-.15* 0.02	- 0.02	0.04	0.03	0.01	0.00	- 0.06	.18**	.43**	.61**	.46**	- .41**	.40**	1		
RT	0.05	- 0.05	0.04	0.07	- 0.06	-0.08	0.06	0.07	- 0.11	- 0.03	- 0.08	0.08	- 0.02	- 0.09	1	
DF	.39**	- 0.06	- 0.01	- .21**	- 0.09	-0.03	- 0.12	- .20**	- 0.10	- 0.08	-14* .22**	.22**	- 0.10	- 0.07	.16*	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

For our study, items 5 and 11 measure the concept of “luck,” capturing the belief that achievements result from external factors rather than personal ability. Items 13 and 2 (replacing item 6 in Simon and Choi’s model) assess the “fake” dimension, reflecting a fear of being perceived as more competent than one actually feels. Items 15 and 19 address the “discount” aspect, where individuals undermine or devalue their accomplishments. The

substitution of item 2 instead of item 6 offers a slightly different angle on the “fake” dimension, focusing on self-presentation and perceived competence, which may align closely with entrepreneurial contexts. This adapted scale allows for a nuanced examination of impostor tendencies relevant to our research context, maintaining the original dimensions while reflecting unique implications for perceived competence and achievement. One example is “I feel my achievements have been due to some kind of luck.”

For measuring risk propensity, we adapted 3 items scale from Wiklund et al., 2016 which assessed the entrepreneur's inclination toward bold decision-making and a high-risk, high-return approach compared to a low-risk, low-return strategy. An example is “I believe bold and wide-ranging acts are necessary to achieve the firm’s objectives”

Statistical Analysis and Results

We conducted principal component factor analysis with a varimax rotation. Table 4 provides factor loadings and “Alpha if item deleted” values for items measuring the impostor phenomenon. The overall cronbach's alpha for the IP scale is 0.68, indicating acceptable internal consistency. The factor analysis explains 58.46% of the variance, with a Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy of 0.79, suggesting that the sample size is sufficient for factor analysis. Additionally, Bartlett’s test of sphericity is significant, indicating that the correlation matrix is suitable for factor analysis.

Examining individual items, all factor loadings are relatively high, ranging from 0.62 to 0.75, except for IP6, which has a loading of 0.02. This low loading suggests that IP6 does not correlate well with the underlying construct of impostor phenomenon compared to the other items. Furthermore, removing IP6 is increasing Cronbach’s alpha to 0.75, strengthening the internal consistency of the scale. Based on these results, we deleted IP6 from the scale to improve both the reliability and construct validity of the measure.

To examine any issues about multicollinearity related to all the variables under consideration, we used the variance inflation factor (VIF). The VIF values for all the variables were found to be less than 1.31, suggesting that multicollinearity is not a significant concern (Hair et al., 2010).

Table 4 *Factor Analysis and Reliability*

Impostor Phenomenon	Factor Loadings	Alpha if item deleted
IP1	.747	.603
IP2	.621	.629
IP3	.680	.621
IP4	.709	.588
IP5	.749	.596
IP6	.024	.745

Empirical Analysis

Hypothesis 1 predicted that elements of human capital would significantly influence the impostor phenomenon. Specifically, it examined the relationships between training, higher education, and total experience as independent variables, and impostor phenomenon as dependent variable. ANOVA results revealed a statistically significant effect of higher education levels on impostor phenomenon ($F = 11.432$, $p < 0.01$), indicating significant variations in impostor feelings across education levels. Post hoc Tukey's HSD analysis showed that entrepreneurs with lower education levels reported significantly higher impostor feelings compared to those with advanced educational qualifications. Furthermore, correlation analysis demonstrated a strong negative relationship between total experience and impostor phenomenon ($r = -0.369$, $p < 0.01$), suggesting that greater professional experience

is associated with reduced impostor feelings. However, no significant relationships were found between the phenomenon and training (see Table 5).

Hypothesis 2 posited that social capital elements would impact impostor phenomenon. Correlation and t-test analyses were conducted to evaluate the relationships between the number of connections, incubation-based status, intellectual property support, and impostor phenomenon. Network size showed a significant negative correlation with the phenomenon ($r = -0.270$, $p < 0.01$), indicating that entrepreneurs with broader networks experienced lower impostor feelings. T-tests further revealed significant differences in impostor phenomenon based on incubation status, with incubated entrepreneurs reporting significantly lower impostor scores ($t = 4.219$, $p < 0.01$) compared to their non-incubated counterparts, with a mean difference of 2.19. Conversely, receiving intellectual property support does not significantly impact entrepreneurs' impostor scores (see Table 5).

Table 5: Hypothesis Testing

Variables	t/Anova/correlation	Sig.
Training	.08 (t)	.93
Higher Education	11.43 (ANOVA)	.00
Experience	$r = -.37$	.00
Network Size	$r = -.27$	.00
Incubation Based	4.22	.00
Intellectual Property Support	.32	.75

Hypothesis 3 examined whether impostor phenomenon influenced financing decisions among entrepreneurs. First, a t-test was used to compare impostor levels between entrepreneurs facing difficulty in securing external funding and those without such difficulty. The results indicated a significant difference ($t = -6440$, $p < 0.001$), with entrepreneurs experiencing higher impostor feelings reported more difficulties in obtaining external funding

(mean difference = -3.25). We also performed binary logistic regression to test if entrepreneurs with higher levels of impostor tendencies are more likely to face greater difficulty in securing external funding. The analysis reveals that impostor phenomenon is a significant predictor of difficulty in securing external funding ($B = 1.19$, $SE = 0.21$, $Wald = 30.30$, $p < 0.01$). For each unit increase in the impostor phenomenon, the odds of encountering difficulty in securing funding increase by 3.30 times indicating that entrepreneurs experiencing stronger impostor feelings are much more likely to face challenges in obtaining external financial support. Second, a binary logistic regression was again employed to test the hypothesis that higher impostor levels would lead entrepreneurs to prefer personal savings over external funding sources. We controlled this model for the founding experience of entrepreneurs, their risk tolerance, and the firm's profitability, growth, age, and size to account for differences in entrepreneurs' backgrounds and firms' financial conditions, which may influence financing decisions (see table 6). Results revealed that impostor phenomenon significantly influenced financing preferences ($B = .407$, $SE = 0.20$, $Wald = 4.13$, $p < 0.05$), with an odds ratio ($\text{Exp}(B)$) of 1.50. This indicates that entrepreneurs with higher IP are 1.5 times more likely to rely on personal savings rather than external funding. The summary of our hypothesis outcomes is presented in Table 8.

Robustness check

To ensure robustness, we conducted a linear regression analysis to examine the relationship between impostor phenomenon and all variables of human and social capital with gender and risk tolerance as control variables. The results presented in Table 7 are consistent with our hypothesis testing results.

Table 6 *Regression Analysis*

	B	S.E.	Wald	df	Sig.	Exp(B)
IP	0.407	0.200	4.132	1	0.042*	1.503
FE	-0.030	0.056	0.284	1	0.594	0.971
PR	-0.465	0.205	5.151	1	0.023*	0.628
GR	-0.491	0.243	4.090	1	0.043*	0.612
RT	0.136	0.209	0.425	1	0.514	1.146
FA	-0.075	0.084	0.808	1	0.369	0.927
SF	-0.463	0.336	1.897	1	0.168	0.629
Constant	0.708	1.027	0.476	1	0.490	2.030

*Significant at 0.05 level

Table 7: *Robustness Check*

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	3.755890	0.244870	15.338	< 2e-16 ***
TR	0.054183	0.101964	0.531	0.595688
HE	-0.204169	0.046061	-4.433	1.47e-05 ***
IPRS	0.176268	0.098013	1.798	0.073487
IB	-0.373232	0.097473	-3.829	0.000168 ***
NS	-0.111948	0.020996	-5.332	2.42e-07 ***
TE	-0.016222	0.004701	-3.451	0.000671 ***
Gen	0.024718	0.031813	0.777	0.438010
Risk	0.129302	0.062129	2.081	0.038579 *

Sig. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.679 on 219 degrees of freedom

Multiple R-squared: 0.3656, Adjusted R-squared: 0.3424

F-statistic: 15.77 on 8 and 219 DF, p-value: < 2.2e-16

Table 8 *Hypotheses Outcomes*

Hypothesis	Hypothesis Outcome
Human Capital	
H1a: Impostor phenomenon varies based on whether entrepreneurs have received training or not.	Not Supported
H1b: Impostor phenomenon varies across different levels of higher education.	Supported
H1c: Impostor phenomenon varies across different levels of total work experience.	Supported
Social Capital	
H2a: Impostor phenomenon varies across different network sizes of entrepreneurs.	Supported
H2b: Impostor phenomenon varies based on whether entrepreneurs are incubation-based or not.	Supported
H2c: Impostor phenomenon varies depending on whether entrepreneurs receive intellectual property support.	Not Supported
Financial Capital	
H3a: Entrepreneurs with higher levels of impostor tendencies are more likely to face greater difficulty in securing external funding.	Supported
H3b: Entrepreneurs with higher levels of impostor tendencies are more likely to prefer personal funding over external sources of finance.	Supported

Discussion and Conclusion

In providing an institutional foundation for understanding the impostor phenomenon among entrepreneurs, we go beyond individual psychological explanations (Clance & Imes, 1978; Tewfik, 2022) and examine broader structural factors within the entrepreneurial ecosystem. Exploring heterogeneity across entrepreneurs' access to human, social, and financial capital allows us to theorize about impostor tendencies of varying intensity instead of seeing IP as a universal and fixed psychological trait. Furthermore, we link macrolevel ecosystem factors with microlevel entrepreneurial choices. We highlight that disparities in education,

experience, networks, and financing accessibility influence key entrepreneurial decisions and thereby amplify or mitigate the effects of IP on financial behaviors. Specifically, we show that lower levels of education and work experience, limited networking opportunities, and lack of incubation support contribute to heightened impostor tendencies. These tendencies, in turn, compel entrepreneurs to avoid external funding in favor of personal savings and reduce their participation in high-stakes financial negotiations, both of which reinforce financial constraints and hinder business scalability. These findings have important implications for research on entrepreneurial psychology and for practitioners seeking to create more inclusive entrepreneurial support systems.

Managerial Implications

The results indicate that nearly half of the surveyed entrepreneurs experience frequent or intense IP, which affects their willingness to seek external funding. Instead, many entrepreneurs with high IP rely on personal savings, potentially limiting their growth opportunities. Given this, entrepreneurial support organizations, incubators, and policymakers must recognize the psychological barriers that hinder access to external finance and work towards mitigating them. Providing structured mentorship programs and financial literacy workshops that specifically address self-doubt and confidence issues can help entrepreneurs feel more equipped to engage with investors and lenders. Additionally, targeted interventions such as networking events, where entrepreneurs can interact with peers and successful business leaders, could serve as a platform to build social capital and reduce feelings of impostorism.

Moreover, financial institutions and investors should consider incorporating psychological insights into their funding assessments. Entrepreneurs with high IP may hesitate to approach investors or downplay their achievements, leading to self-imposed financial constraints. To counteract this, banks and venture capital firms can design outreach programs that encourage

underrepresented entrepreneurs to apply for funding and provide additional guidance throughout the application process. Furthermore, government initiatives that offer funding specifically for first-time entrepreneurs or those struggling with self-confidence could bridge the financing gap caused by IP. By fostering a more inclusive funding environment, stakeholders in the innovation ecosystem can ensure that promising business ventures are not stifled due to psychological barriers, ultimately leading to a stronger and more resilient entrepreneurial landscape.

Limitations and Directions for Future Research

While this study provides valuable insights into the relationship between IP and entrepreneurial decision-making, several limitations must be acknowledged. First, the sample size, though representative of various industries and regions in India, remains relatively small (n=229). Future research should expand the sample to include a broader set of entrepreneurs, particularly those operating in international markets, to assess whether cultural and economic factors influence the prevalence and impact of IP. Additionally, the study primarily relies on self-reported data, which may be subject to bias, particularly in assessing psychological constructs like IP. Future studies could incorporate longitudinal designs or behavioral experiments to validate findings through observed decision-making patterns rather than solely relying on self-assessments.

Another key area for future exploration is the role of gender and intersectionality in shaping impostor experiences. While this study did not find significant gender-based differences in IP, prior research suggests that women and marginalized entrepreneurs may experience impostorism differently due to societal expectations and structural barriers. Future research could examine these nuances more deeply, considering how mentorship, industry type, and social capital influence IP experiences across diverse demographic groups. Additionally, investigating potential interventions such as structured confidence-building

programs could offer practical solutions to mitigate its impact. These future directions will help refine theoretical understanding and inform more effective managerial and policy interventions.

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