

Self-realization, fear of failure and entrepreneurial intention: the mediating role of grit and perceived opportunity recognition

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Abstract

Purpose – The underlying mechanisms through which entrepreneurial intention is actualized remain inconclusive. This study examines the effects of grit and perceived opportunity recognition in the relationship between self-realization, the fear of failure and entrepreneurial intention.

Design/methodology/approach – A survey research approach was adopted, and data were collected using an online Google Form questionnaire. The questionnaire was sent to the students' school emails, and 288 responses were valid for the study. SmartPLS and STATA statistical software were applied in the analysis.

Findings – The findings from the study indicate that self-realization directly and indirectly affects entrepreneurial intention through grit and perceived opportunity recognition. While the fear of failure shows a direct negative effect on entrepreneurial intention, a positive and significant relationship exists between the fear of failure and perceived opportunity recognition, advancing the debate on the dual nature of the fear of failure. Additionally, the relationship between fear of failure and entrepreneurial intention was mediated by perceived opportunity recognition.

Research limitations/implications – One of the limitations in this study is the treatment of grit as a stable or unchanging construct. Research has shown that grit could be developed over time with knowledge and experience. Future research can consider the effects of grit at different stages of development to advance the debate on the stability of grit.

Originality/value – This study extends the knowledge on cognitive and non-cognitive traits in entrepreneurship by examining the mediating role of grit and perceived opportunity recognition in the relationship between self-realization, the fear of failure and entrepreneurial intention. A model that is underexplored in academic literature.

Keywords Entrepreneurial intention, Fear of failure, Grit, Perceived opportunity recognition, Self-realization

Paper type Research article

1. Introduction

Entrepreneurship has increasingly been recognized as a pivotal force for job creation, economic development and long-term sustainability. Entrepreneurs are widely regarded as critical agents in initiating and sustaining new business ventures (Shepherd *et al.*, 2021). A growing body of literature suggests that the establishment of new ventures is often preceded by entrepreneurial intention, which serves as a primary antecedent to entrepreneurial behaviour (Maheshwari *et al.*, 2023; Parra *et al.*, 2023). Entrepreneurial intention refers to an individual's conscious decision and mental readiness to engage in the creation of a new business enterprise (Syed *et al.*, 2020). Given its predictive power, entrepreneurial intention has become one of the most investigated constructs within entrepreneurship research (Al-Mamary, 2025; Sharma *et al.*, 2024).

Among the various determinants of entrepreneurial intention, cognitive attributes are frequently cited as influential factors that guide individuals toward entrepreneurial pursuits



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(Bacq *et al.*, 2017; Yukongdi and Lopa, 2017). Numerous empirical and conceptual studies have validated the positive effects of cognitive constructs such as self-efficacy, creativity and perceived behavioural control on entrepreneurial intention (Altinay *et al.*, 2022; Adeniyi *et al.*, 2022; Douglas *et al.*, 2021; Ndofirepi, 2020; Schmutzler *et al.*, 2019; Hsu *et al.*, 2019; Neneh, 2019; Karabulut, 2016). However, other studies present conflicting evidence suggesting that the relationship between cognitive factors and entrepreneurial intention is not entirely consistent across contexts (Zhang *et al.*, 2014). This incongruity highlights the need for further investigation into specific cognitive traits and their influence on entrepreneurial intention.

One such cognitive construct is self-realization, which can be defined as the process through which individuals attain awareness and understanding of their personal potential, values and goals; factors that align closely with entrepreneurial commitment. Self-realization encapsulates an individual's motivation, passion and risk orientation, all of which are essential for sustained entrepreneurial engagement (Duong and Vu, 2025). It represents a heightened sense of self-awareness and goal congruence, elements which have been linked to entrepreneurial outcomes in recent studies (Bansal *et al.*, 2025; Stoliarchuk *et al.*, 2024). For instance, Ndofirepi (2020) highlights the role of entrepreneurial self-identity, a key component of self-realization, as a significant predictor of entrepreneurial goal intention among students. Similarly, Duong and Vu (2025) found that self-awareness mediates the effect of entrepreneurial education on entrepreneurial intention. Furthermore, Hueso *et al.* (2021) provide empirical evidence that personal values, an intrinsic part of self-realization, significantly affect entrepreneurial intention.

Despite the emerging evidence, the direct influence of self-realization on entrepreneurial intention remains underexplored and inconclusive. For example, a study conducted in Spain by Romero-Martinez and Milone (2016) found that self-realization is a motivational factor for entrepreneurship. In Portugal, Dieguez and Diogo (2025) investigated the entrepreneurial intentions and motivation of older adults and found that self-realization is a key driver of entrepreneurial intentions. Additionally, the study by Triyani *et al.* (2023) indicated that self-realization and participation significantly affect entrepreneurial intentions of university students from Indonesia. In contrast, Martin (2022) found that among all factors of motivation, only independence and innovation significantly affect entrepreneurial intentions, while self-realization did not show support for entrepreneurial intentions. The author argues that it is important to measure motivational factors of intentions individually rather than using an aggregated construct. To the best of our knowledge, research on self-realization as a single predictor of entrepreneurial intentions within the African context has yet to be conducted. Van Ewijk and Al Aomar (2016) argue that empirical studies have yet to adequately capture the full impact of self-realization on entrepreneurial motivation. In response to this gap, the present study aims to empirically examine the relationship between self-realization and entrepreneurial intention within the African context.

The entrepreneurial journey is inherently fraught with uncertainty, risk and potential failure. As such, non-cognitive factors, such as emotional resilience, become essential in sustaining entrepreneurial motivation. One such trait is grit, defined as the sustained perseverance and passion for long-term goals (Kwapisz *et al.*, 2022). Entrepreneurs often encounter adversity, and those with high levels of grit are more likely to persist despite difficulties, making grit a crucial mediating factor in entrepreneurial outcomes. Therefore, this study investigates whether grit mediates the relationship between self-realization and entrepreneurial intention, positing that individuals with higher grit are better equipped to translate self-realization into entrepreneurial action.

This study explores whether perception of economic opportunities such as funding and technical support from ideation through incubation can serve as a mediating mechanism in the relationship between self-realization and the intention to launch a new venture. Perception of opportunity is a cognitive phenomenon that is associated with an individual's willingness to start a business (Tsai *et al.*, 2016; Zali and Rezaei, 2025). Opportunity perception improves individuals' positive attitude towards entrepreneurship and further enhances entrepreneurial

intention (Tsai *et al.*, 2016). Previous research suggests that perceived entrepreneurial opportunities increase the intent to start a new business (Chen *et al.*, 2020; Duong *et al.*, 2024a). Based on this perspective, we assume that perceived economic opportunity (EOP) can act as a catalyst in the relationship between self-realization and entrepreneurial intention.

Another critical psychological barrier is the fear of failure. This refers to the apprehension that one may not succeed in achieving a goal (Cacciotti *et al.*, 2020). According to Ajzen's (1991) theory of planned behaviour, such affective beliefs can significantly inhibit behavioural intention. Individuals who experience high levels of fear often exhibit risk aversion, especially in contexts characterized by uncertainty or low perceived likelihood of success. Several studies have reported that the fear of failure negatively correlates with entrepreneurial intention (Boudreaux *et al.*, 2019; Cacciotti *et al.*, 2016; Kong *et al.*, 2020). However, emerging evidence also suggests a dual role for the fear of failure, with some individuals channelling this fear into motivation to succeed (Cacciotti *et al.*, 2020).

Despite extensive research, the fear of failure remains a global concern. The Global Entrepreneurship Monitor's (GEM) Adult Population Survey (2024/2025) reports an increase in fear-driven entrepreneurial avoidance: the percentage of individuals across 51 countries who refrained from starting a business due to fear of failure rose from 44% in 2019 to 49% in 2024 (GEM, 2024/2025). This rise reflects a growing psychological barrier to entrepreneurial activity, with implications for global unemployment and economic stagnation.

Given these insights, there is a pressing need to examine how cognitive and non-cognitive factors can act as the underlying mechanisms to actualize fear of failure as a motivation for intention to launch a new business. In this regard, this study introduces perceived economic opportunities as a mediating mechanism in the relationship between fear of failure and the intention to launch a new venture. From the foregoing, the following objectives are stated.

- (1) To examine the influence of self-realization on entrepreneurial intention.
- (2) To determine the mediating role of grit in the relationship between self-realization and entrepreneurial intention.
- (3) To examine the relationship between fear of failure and entrepreneurial intention.
- (4) To determine the mediating role of grit in the relationship between fear of failure and entrepreneurial intention.
- (5) To examine the mediating effects of perceived opportunity recognition in the relationship between fear of failure and entrepreneurial intention.
- (6) To examine the mediating effects of perceived opportunity recognition in the relationship between self-realization and entrepreneurial intention.

This study makes three key contributions to entrepreneurship theory. To begin with, it extends the knowledge on non-cognitive traits in entrepreneurship by examining the mediating role of grit in the relationship between self-realization and entrepreneurial intention. Perceived opportunity recognition was also adopted as a mediator in the relationship between fear of failure and entrepreneurial intention. Additionally, this study advances the understanding of the dual nature of fear of failure as an inhibitor or motivator towards entrepreneurial initiatives. Furthermore, this study advances knowledge on cognitive and non-cognitive fields of entrepreneurship in a developing context such as South Africa, where necessity-driven entrepreneurship is predominant, with limited institutional entrepreneurial support (GEM, 2024/2025). By focussing on such an emerging entrepreneurial ecosystem, this study provides deeper insights into the nuanced understanding of the universality of psychological (self-realization and fear of failure) and social attributes (grit and economic opportunities) towards entrepreneurial pursuits.

2. Theoretical framework

We use the self-determination theory (SDT) to underscore the concept of self-realization, fear of failure and entrepreneurial intention. The SDT posits that self-determination is an individual's ability to make the decision to self-develop or pursue purpose independently (Deci *et al.*, 2017). It refers to one's own desire for independence and autonomy in a coordinated engagement with the environment, while observing its conditions, rules and laws (Borzova and Plotnikova, 2021). The SDT suggests that an individual's motivation, performance and wellness are affected by three factors, which include autonomy, competence and relatedness (Ryan and Deci, 2020). Autonomy concerns the activity in relation to one's own self-identity as opposed to being controlled by external rewards or forces (Deci *et al.*, 2017). The need for relatedness involves an individual's desire to feel connected to others and have a sense of belonging, while competence refers to the need to feel effective and capable in one's activities (Ryan and Deci, 2020). The satisfaction of these needs is based on intrinsic (driven by internal rewards) and extrinsic (driven by external satisfaction) motivation. These needs are essential for self-determined behaviour such as entrepreneurship. According to the SDT, intrinsic motivation is the most autonomous driver of entrepreneurial intention during uncertain times (Al-Qadasi *et al.*, 2024; Bandhu *et al.*, 2024). In the SDT, self-realization aligns closely with intrinsic goals such as self-fulfilment. Intrinsically motivated individuals are more likely to sustain their intention to start a new business, driven by internal goals (Duong, 2025). Entrepreneurship offers self-realization as it enables individuals to express autonomy and develop competence through challenges and innovation (Bandhu *et al.*, 2024). Moreover, when individuals perceive autonomy and competence in entrepreneurial contexts, they are more likely to form intentions to pursue entrepreneurial careers (Deci *et al.*, 2017).

Conversely, when these needs are impeded, maladaptive outcomes such as the fear of failure, avoidance motivation and suppressed well-being may occur (Ryan and Deci, 2000). The SDT views the fear of failure as a form of controlled motivation, where behaviour is regulated by external or internal pressures such as shame, loss of self-worth and fear of judgement (Vansteenkiste and Ryan, 2013). The SDT indicates that when the fear of failure is dominant as a result of self-doubt and avoidance, it can hamper entrepreneurial intention, especially when motivation is ego-involved or controlled externally (Muis and Hamid, 2024). The SDT suggests that to overcome this, individuals need supportive environments that reduce external pressures and enhance emotional safety (Deci *et al.*, 2017). The SDT posits that self-realization acts as an intrinsic motivator that drives entrepreneurial behaviour, while the fear of failure acts as a demotivation by undermining autonomy and competence. Entrepreneurial intention is the outcome of a motivational process shaped by whether basic psychological needs are supported or impeded.

We further adopt the self-regulation theory to include grit as a mediating variable in the conceptual model. Grit has emerged as a pivotal self-regulatory trait within the field of entrepreneurship, influencing an individual's capacity to persist through challenges inherent in entrepreneurial ventures (Mueller *et al.*, 2017; Butz *et al.*, 2018; Asante *et al.*, 2023). Conceptualized by Duckworth *et al.* (2007) as "perseverance and passion for long-term goals" (p. 1087), grit is understood to encompass two interrelated dimensions: perseverance of effort and consistency of interest. Perseverance of effort refers to an individual's ability to remain resilient and maintain a sustained effort in the face of adversity or failure (Datu *et al.*, 2017). This trait is particularly relevant in entrepreneurial contexts where uncertainty and setbacks are commonplace. The second dimension, consistency of interest, pertains to the sustained maintenance of long-term goals without frequent changes in direction or interest (Duckworth *et al.*, 2021; Asante *et al.*, 2023). Together, these dimensions capture a stable motivational orientation toward long-term achievement.

Empirical research has highlighted the combined influence of both perseverance and consistency as more predictive of long-term success than either component alone (Duckworth *et al.*, 2007). Within entrepreneurial settings, this suggests that individuals who are both

persistent and consistently motivated are more likely to pursue and attain entrepreneurial goals despite external obstacles (Butz *et al.*, 2018; Mueller *et al.*, 2017). The relationship between grit and entrepreneurial success aligns closely with the self-regulation theoretical perspective, which posits that an effective goal pursuit is facilitated by sustained effort and strategic persistence over time. In this context, grit functions as a key self-regulatory mechanism, enabling individuals to remain committed to long-term entrepreneurial objectives and resist distractions or the urge to abandon difficult pursuits (Duckworth *et al.*, 2007; Asante *et al.*, 2023).

Given its regulatory function in goal-directed behaviour, grit is not only a predictor of entrepreneurial intention and performance but also a critical construct in understanding how entrepreneurs navigate prolonged periods of effort under uncertain conditions. Thus, the Self-Regulation Theory provides a suitable theoretical foundation for conceptualizing the role of grit in entrepreneurial research.

2.1 Hypotheses development

2.1.1 Self-realization and entrepreneurial intention. Self-realization is described as a state of fulfilling the purpose of one's unique positive nature and understanding the underlying potential embedded within (Tønnesvang, 2006; Huntington, 2022). It also refers to the process of discovering and experiencing one's utmost potential as a human being (Ryan and Deci, 2001). While self-realization may occur at a particular stage or as a process, Martela and Pessi (2018) suggest that it can occur in any sphere of individuals' lives because satisfaction derived from a career can bring about self-realization (Patil, 2025). Self-realization has been found to be among the most important reasons for venturing into a business career (Martin, 2022; Triyani *et al.*, 2023). Previous research finds that self-realization is important for facilitating a sustainable entrepreneurial career by enabling entrepreneurs to persist in their entrepreneurial journey (Shir *et al.*, 2019; Shir and Ryff, 2021; Stephan *et al.*, 2020). Self-realization involves the fulfilment of psychological needs such as autonomy and personal goals. The attainment of these needs can lead to fostering a stronger entrepreneurial intention to launch a new business (Hueso *et al.*, 2021) or work performance (de Dieu Randrianasolo *et al.*, 2022). Extant research further indicates that increased self-realization positively supports transitioning to entrepreneurship, thereby fostering late-career entrepreneurship (Kautonen *et al.*, 2023). Based on the above baseline discussions, we hypothesize that:

H1a. Self-realization will positively and significantly affect entrepreneurial intention.

2.1.2 The mediating role of grit. Grit is conceptualized as the ability to persevere in endeavour and passion for long-term goals (Duckworth, 2019). It is the commitment to long-term initiatives towards becoming an expert (Boyer *et al.*, 2020). Gritty individuals approach challenges as an advantage (stamina) to stay the course, while people without grit withdraw from any initiative when challenges or uncertainty set in (Zali and Rezaei, 2025). Entrepreneurial activities are often related to many challenges and obstacles, and even successful entrepreneurs are usually faced with setbacks along their entrepreneurial journey (Murnieks and Cardon, 2023). There is a likelihood that people who overcome barriers in entrepreneurial activities exercise perseverance and consistency of interest, which are dimensions of grit. This is because grit is positively associated with active involvement and not pleasure (Tran *et al.*, 2024). The role of grit in the entrepreneurial process is critical. Available evidence suggests that grit directly affects entrepreneurial behaviour, and gritty individuals who show little satisfaction with their financial incomes are more likely to be interested in becoming entrepreneurs compared to gritty people with high satisfaction with their financial status (Arco-Tirado *et al.*, 2019). Prior research also considers dimensions of grit as a mediating variable. For instance, Butz *et al.* (2018)'s study found that grit fully mediated the predictive effect of conscientiousness and neuroticism on a student's entrepreneurial intent. Grit was also found to predict venture success among entrepreneurs (Mooradian *et al.*, 2016). Perseverance of effort and consistency of interest

significantly mediate the relationship between entrepreneurial orientation and success (Al Issa, 2020). A study by Özhan (2021) revealed that grit mediated the relationship between academic self-efficacy and school burnout, suggesting that grit helps to reduce academic exhaustion and cynicism. Additionally, Çınar-Tanrıverdi and Karabacak-Çelik (2023) found that grit mediates the relationship between basic psychological needs (autonomy, competence, relatedness) and academic stress. The effects of risk-taking and proactiveness on entrepreneurial resilience were also found to be mediated by grit (Mediouni, 2025). On the contrary, the study by Boyer *et al.* (2020) found that grit did not significantly predict the relationship between individual entrepreneurial orientations and the loyalty of students. It was further argued that grit is not relevant for entrepreneurial intention (Martínez-Martínez *et al.*, 2025), suggesting further empirical investigations on entrepreneurial intention antecedents. Despite the growing body of research, there exists a gap in understanding the nuanced mechanism through which grit influences the relationship between self-realization and entrepreneurial intention. In this regard, we hypothesize that:

H1b. Grit will positively and significantly mediate the relationship between Self-realization and entrepreneurial intention.

2.1.3 The fear of failure and entrepreneurial intention. In recent years, there has been a growing interest in understanding the role of the fear of failure in entrepreneurship. Some scholars define it as a negative emotional condition that triggers a less positive reaction in entrepreneurs towards starting a venture (Ng and Jenkins, 2018; Suchart, 2017). Others have treated it as a dispositional trait that discourages individuals from starting a business (Boudreaux *et al.*, 2019; Minniti and Nardone, 2007). Other scholars have examined the fear of failure as it is experienced by entrepreneurs (Cacciotti *et al.*, 2016; Mitchell and Shepherd, 2011). The fear of failure refers to inner dispositions of people when they perceive that they may not accomplish a specific goal (Kong *et al.*, 2020). If an individual fears that the achievement of a goal is not guaranteed, such an individual often adopts an avoidance behaviour towards achieving such a goal (Ajzen, 1991). The fear of failure is viewed as one of the primary reasons for some individuals being reluctant to pursue entrepreneurship (Dutta and Sobel, 2021). Previous studies also indicate that the fear of failing in business can adversely affect perceptions of entrepreneurship as a valuable substitute for employment in an economy (Tubadji *et al.*, 2021). The fear of failure can negatively affect the identification of a business opportunity, entrepreneurial intention and consequently impede the emergence of early-stage entrepreneurship (Amorós *et al.*, 2021).

Although the fear of failure is predominantly assumed to be a barrier in entrepreneurship literature, it may also function as a motivation for entrepreneurial entry. For example, Lee *et al.*'s (2021) study found that the fear of failure has positive effects on entrepreneurship emphasizing on distinct stages of entrepreneurship. Accordingly, Mestwerdt *et al.* (2025) found that while the fear of failure shows a negative support for the emergence of entrepreneurial intention and opportunity-searching behaviour, it is positively related to entrepreneurial activity in the later stages of growth and innovation achievement. Considering the dual nature and behavioural mechanism triggered by the fear of failure, it is suggested that it can be a friend as much as a foe (Cacciotti *et al.*, 2020; Martin and Marsh, 2003). Due to the continuous increase in the level of fear of failing in business, as indicated in the 2024/2025 GEM report from 50 to 51 countries and following the report that South Africa is characterized by a high youth unemployment rate, limited infrastructural facilities, internal market burdens and inaccessible financial opportunity (Bowmaker-Falconer *et al.*, 2023), we propose that the fear of failure will trigger an avoidance behaviour towards entrepreneurial intention. Judging from the influential effect of grit in achieving entrepreneurial goal, we also believe that grit will mediate the relationship between fear of failure and entrepreneurial intention.

H2a. The fear of failure will negatively influence entrepreneurial intention.

H2b. Grit will positively and significantly mediate the relationship between the fear of failure and entrepreneurial intention.

2.1.4 The mediating role of perceived opportunity recognition. We introduce the concept of perceived opportunity as a mediating mechanism between the fear of failure and entrepreneurial intention. Empirical report indicates that perceived opportunity recognition partially mediates the relationship between pull factors of motivation and university students' entrepreneurial intention (Martínez-Cañas *et al.*, 2023). Additionally, perceived opportunity recognition serially mediated the interlink between entrepreneurship education and intention (Bui *et al.*, 2025). The study by Bapoo *et al.* (2022) shows that sustainability orientation dimensions did not significantly support the sustainability entrepreneurial intentions of business students, but the relationship was significantly mediated by entrepreneurial opportunity recognition. Furthermore, opportunity recognition was also found to be an underlying mechanism between entrepreneurship education and business management students' entrepreneurial intentions (Otache *et al.*, 2024). In this regard, we propose that perceived opportunity recognition can help to translate the negative effect of the fear of failure to entrepreneurial initiatives. We also propose that individuals in a state of self-realization can trigger entrepreneurial initiatives when they perceive opportunity recognition.

- H3a.* Perceived opportunity recognition will positively and significantly mediate the relationship between the fear of failure and entrepreneurial intention.
- H3b.* Perceived opportunity recognition will positively and significantly mediate the relationship between self-realization and entrepreneurial intention.

3. Methods

3.1 Sample and data collection

The research sample was made up of undergraduate students from a South African university. We found students at the university suitable for this study because most of the studies from different contexts on entrepreneurship research have been validated using student samples (Kong *et al.*, 2020; Syed *et al.*, 2020; Adeniyi, 2023; Ntshangase and Ezeuduiji, 2023). We used undergraduate university students to understand the volitional stage of the new business start-up by investigating how grit and perceived EOP can translate the negative effect of the fear of failure into intention to launch a business. Butz *et al.* (2018) argue that gritty people are more likely to pursue entrepreneurial goals despite external challenges. Moreover, grit has been found to be closely related to entrepreneurial success (Arco-Tirado *et al.*, 2019). Given the significant contribution of students' entrepreneurship to the economy, understanding their profiles in relation to self-realization, fear of failure and entrepreneurial intention is of critical importance. Data were collected using a self-administered questionnaire. The respondents were conveniently recruited based on their availability and willingness to participate in the survey. A total of 300 questionnaires were distributed, and from these, 288 questionnaires were duly completed, resulting in a 96% response rate. Accordingly, 288 students became the sample size for this study.

3.2 Measures of variables

3.2.1 Entrepreneurial intention. Entrepreneurial intention was the dependent variable in this study. It was measured using six items adopted from Liñán and Chen (2009). Considering our sample being students, four items from Rueda *et al.* (2015) were adopted because they measure the perceived likelihood of an individual to choose an entrepreneurial career. Some sample items include "I have strong intention to start my own business" and "My long-term goal is to become an entrepreneur." All the 10 items were evaluated on a 5-point Likert scale ranging from (1) Strongly disagree to (5) Strongly agree.

3.2.2 Self-realization. Self-realization is an independent variable and was measured with four items adapted from Hyde *et al.* (2003). Sample items includes, "I feel satisfied to take

advantage of my creative needs” and “I feel fulfil achieving my dream”. Each item was measured on a 7-point Likert-style ranging from (1) completely right and (7) completely wrong.

3.2.3 *The fear of failure.* In this study, the fear of failure is an independent variable and was measured using two items adapted from [Cacciotti et al. \(2020\)](#). This is because our sample was made up of mainly potential entrepreneurs, thus we need to avoid questions that are specific to established entrepreneurs ([Cacciotti et al., 2020](#)). The included items are “The thought of taking steps to start my intended business scares me” and “I was afraid that my intended business will make a loss”. The questionnaire items were based on a 5-point Likert scale ranging from (1) Totally agree to (5) Totally disagree.

3.2.4 *Grit.* Grit was the mediating variable, and the short grit scale developed by [Duckworth et al. \(2007\)](#) and validated by [Duckworth and Quinn \(2009\)](#) was adopted in this study. The grit scale consists of 12 items, with six items measuring consistency of interest and six questions measuring perseverance of effort. Some of the sample items included “I finish whatever I begin” and “Setbacks don’t discourage me”. In this study, grit was measured as a combined scale consistent with other existing studies ([Butz et al., 2018](#); [Arco-Tirado et al., 2019](#)). These items were measured on a 5-point Likert scale ranging from (1) Strongly disagree to (5) Strongly agree.

3.2.5 *Perceived opportunity recognition.* Being the mediating variable, perceived opportunity recognition was measured using adapted questions that measure access to financial and non-financial resources from similar existing studies ([Nicholls-Nixon et al. \(2022\)](#)). Some of the questions include “financial support will create additional income for my business”. “Facility support will increase the profit level of my business”. The items were measured on a 7-point Likert style ranging from (1) Completely right to (7) Completely wrong.

3.2.6 *Common method bias/Variance.* A common method bias is likely to be present in a study, especially when dealing with perceptual measures such as psychological traits ([Cooper et al., 2020](#)). First, we addressed this concern by adopting different variations of Likert scales, including “completely right/completely wrong”, “strongly agree/strongly disagree”. Second, we adopted a temporal separation approach by collecting data at two time points of four-week intervals. Data on the independent and dependent variables were collected in the first wave, while data on the mediating variables were gathered four weeks after the first wave to prevent type 1 errors ([Podsakoff et al., 2024](#)). Further, we conducted Harman’s single-factor test to check for common method variance (CMV) ([Harman, 1976](#)). Through dimension reduction, we applied a post hoc test, which resulted in 26.70%, indicating that CMV was not an issue.

4. Demographic information

The result shows that most of the participants (63%) were females and their male counterparts were 37%. The highest age group (56%) was between 21 and 25 years, followed by those within 18–20 years (28%). The age distribution was expected since the study focused on undergraduate students.

The result of the descriptive statistics and correlation matrix is shown in [Table 1](#) below.

4.1 Assessment of the measurement model

Reliability analysis is crucial in assessing the consistency and stability of measurement constructs within a study. In this analysis, cross-loadings, Cronbach’s alpha (CA), composite reliability (CR) and average variance extracted (AVE) were used to evaluate the internal consistency of the constructs. The results of these reliability metrics are summarized in [Table 2](#) below.

Table 1. Mean, standard deviation and correlation matrix of constructs

	Mean	Std. dev	1	2	3	4	5
1. Self-realization	6.30	1.001	1				
2. Fear of failure	3.16	1.184	−0.012	1			
3. Grit	3.45	0.518	0.149*	0.168**	1		
4. Perceived opportunity	6.05	1.108	0.538**	0.147*	0.062	1	
5. Entrepreneurial intention	4.10	0.799	0.463**	−0.063	0.160**	0.415**	1

Note(s): ** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed)

The reliability analysis in Table 2 above demonstrates that all constructs exhibit strong internal consistency. The CR values range from 0.866 to 0.947, exceeding the recommended threshold of 0.7, which confirms construct reliability. Similarly, the AVE values range from 0.520 to 0.822, surpassing the threshold of 0.5, indicating satisfactory convergent validity. CA values range from 0.814 to 0.936, which are above the minimum threshold of 0.7, further

Table 2. Measurements and reliability results

Constructs	λ	CA	CR	AVE
<i>Self-realization</i>				
SR1	0.872			
SR2	0.823			
SR3	0.875			
SR4	0.842	0.876	0.914	0.728
<i>Fear of failure</i>				
FoF1	0.921			
FoF2	0.892	0.785	0.902	0.822
Grit				
GRT10	0.777			
GRT11	0.786			
GRT12	0.710			
GRT3	0.699			
GRT4	0.723			
GRT9	0.620	0.814	0.866	0.520
<i>Perceived opportunity recognition</i>				
POR1	0.825			
POR2	0.884			
POR3	0.815	0.794	0.879	0.709
<i>Entrepreneurial intention</i>				
EI1	0.824			
EI10	0.814			
EI2	0.824			
EI3	0.768			
EI4	0.844			
EI5	0.906			
EI6	0.881			
EI7	0.879			
EI9	0.571	0.936	0.947	0.669

Note(s): EI = Entrepreneurial Intention; POR=Perceived Opportunity; FoF=Fear of Failure; GRT = Grit; SR=Self-realization

supporting internal consistency. Following [Hair et al. \(2019\)](#), the model was refined by removing measurement items with factor loadings below 0.70, ensuring that only reliable indicators were retained.

4.2 Cross-loadings

Cross-loadings are used to assess the discriminant validity of measurement items, ensuring that each item is more strongly associated with its intended construct than with other constructs. [Table 2](#) also depicts the cross-loadings for the constructs FoF, EI, POR, GRT and SR, providing insights into how well each item measures its assigned factor while maintaining low correlations with other factors.

The cross-loading results in [Table 2](#) demonstrate strong discriminant validity for all constructs. Each item loads highest on its intended construct, with minimal cross-loadings on other constructs. For instance, entrepreneurial intention items load strongly on entrepreneurial intention (ranging from 0.571 to 0.906), while their loadings on other constructs are comparatively lower. Similarly, POR items load highest on POR (0.815–0.884), FoF items load strongly on FoF (0.892–0.921), GRT items load highest on GRT (0.620–0.786), and SR items load strongly on SR (0.823–0.875). Overall, the results confirm that the measurement model has strong discriminant validity, with items clearly associated with their respective constructs.

4.3 Discriminant validity

The Fornell-Larcker criterion is a widely used method for evaluating discriminant validity in measurement models. It ensures that each construct’s square root of the AVE is greater than its correlation with any other construct. [Table 3](#) below presents the Fornell-Larcker criterion results for the constructs FoF, EI, POR, GRT and SR.

The Fornell-Larcker criterion results in [Table 3](#) above confirm strong discriminant validity for the model. The diagonal values (in italics) represent the square roots of the AVE for each construct, and they are consistently higher than the off-diagonal correlation values. For instance, the square root of AVE for FoF (0.907) is greater than its correlations with entrepreneurial intention (–0.052), POR (0.150), GRT (–0.102) and SR (–0.004). This pattern is consistent across all constructs, indicating that each construct shares more variance with its own indicators than with any other construct, confirming a clear discriminant validity.

4.4 Heterotrait-Monotrait (HTMT)

The discriminant validity was assessed using the HTMT ratio. The results are shown in [Table 4](#) below.

Table 3. Fornell-Larcker criterion results

	EI	POR	FoF	GRT	SR
EI	<i>0.818</i>				
POR	0.425	<i>0.842</i>			
FoF	–0.052	0.150	<i>0.907</i>		
GRT	0.300	0.088	–0.102	<i>0.721</i>	
SR	0.478	0.548	–0.004	0.243	<i>0.853</i>

Note(s): The number in italics is the square root of AVE
EI = Entrepreneurial Intention; POR = Perceived Opportunity Recognition; FoF = Fear of Failure; GRT = Grit; SR = Self-realization

Table 4. Heterotrait-Monotrait (HTMT) ratio

Constructs	EI	POR	FoF	GRT	SR
EI					
EOP	0.488				
FoF	0.084	0.187			
GRT	0.335	0.109	0.143		
SR	0.516	0.646	0.060	0.283	

Note(s): EI = Entrepreneurial Intention; POR=Perceived Opportunity Recognition; FoF=Fear of Failure; GRT = Grit; SR=Self-realization

The results indicate that all HTMT values are below the recommended threshold of 0.85, with the highest value being 0.646. This confirms that the constructs are empirically distinct and that discriminant validity is established.

4.5 Structural model assessment

Table 5 below summarizes the structural model results, reporting the coefficient of determination (R^2), predictive relevance (Q^2) and effect sizes (f^2) for the endogenous constructs and their corresponding relationships.

The results in **Table 5** above show that all R^2 and Q^2 values are above zero, indicating that the model is predictively relevant as suggested by [Briones-Penalver et al. \(2018\)](#). Specifically, the R^2 values for entrepreneurial intention (0.311), POR (0.323), and GRT (0.011) demonstrate that the model explains a moderate proportion of the variance in these constructs. The Q^2 values for these variables also exceed zero, further supporting predictive relevance.

The effect size (f^2) results show that SR has a large effect on POR ($f^2 = 0.444$). In contrast, the effects of POR, GRT, and SR on entrepreneurial intention are small, as are the effects of FoF on entrepreneurial intention, POR, and GRT, indicating a limited practical significance for these relationships.

4.6 Structural model

Smart-PLS software was used to analyze the data and apply the partial least squares (PLS) approach to discover the correlations between the measurement elements. **Table 6** below presents the PLS results for the structural model.

The results in **Table 6** above show that SR positively and significantly influences entrepreneurial intention ($\beta = 0.287$, $t = 4.031$, $p < 0.001$) confirming [H1a](#). SR also significantly supports POR ($\beta = 0.548$, $t = 6.003$, $p < 0.001$) and GRT ($\beta = 0.243$, $t = 4.277$, $p < 0.001$). GRT also significantly affects EI ($\beta = 0.200$, $t = 3.780$, $p < 0.001$). FoF

Table 5. Structural model results (R^2 , Q^2 and f^2 Effect Sizes)

Endogenous variable	R^2	Q^2	Predictor → outcome	f^2
EI	0.311	0.210	POR → EI	0.067
			FoF → EI	0.007
			GRT → EI	0.054
			SR → EI	0.079
POR	0.323	0.307	FoF → POR	0.034
			SR → POR	0.444
GRT	0.069	0.044	FoF → GRT	0.011
			SR → GRT	0.063

Table 6. Structural model's PLS results

Relationship	Std beta	SE	T	p-values	Decision
POR → EI	0.260	0.059	4.398	<0.001	Supported
FoF → EI	−0.070	0.048	1.454	0.146	Supported
FoF → POR	0.152	0.047	3.229	0.001	Supported
FoF → GRT	−0.101	0.060	1.693	0.091	Unsupported
GRT → EI	0.200	0.053	3.780	<0.001	Supported
SR → EI	0.287	0.071	4.031	<0.001	Supported
SR → POR	0.548	0.091	6.003	<0.001	Supported
SR → GRT	0.243	0.057	4.262	<0.001	Supported

Note(s): EI = Entrepreneurial Intention; POR=Perceived Opportunity Recognition; FoF=Fear of Failure; GRT = Grit; SR=Self-realization

significantly and positively affects POR ($\beta = 0.152, t = 3.229, p = 0.001$). Similarly, POR positively and significantly affects entrepreneurial intention ($\beta = 0.260, t = 4.398, p < 0.001$). However, FoF has an insignificant negative effect on EI ($\beta = -0.070, t = 1.454, p = 0.146$), indicating that [H2a](#) is supported. A negative relationship ($\beta = -0.101, p = 0.091$) was also found between FoF and GRT. These results suggest that FoF does not directly influence entrepreneurial intention, but may exert its influence indirectly through POR.

4.7 Mediation analysis

The mediation analysis was conducted using SmartPLS, employing 5,000 bootstrapping samples and a 95% confidence interval (CI) to test the mediation hypotheses rigorously. This method assessed whether SR and FoF indirectly influence entrepreneurial intention through GRT and POR, respectively. The use of extensive bootstrapping and a 95% CI enhanced the robustness and reliability of the findings.

The mediation analysis, as shown in [Table 7](#) indicates that FoF has a significant indirect effect on entrepreneurial intention through POR ($\beta = 0.040, p = 0.006$), despite its direct effect on entrepreneurial intention being non-significant ($\beta = -0.070, p = 0.142$). This suggests full mediation, meaning that FoF influences entrepreneurial intention only through POR confirming [H3a](#). Similarly, SR shows a significant indirect effect on EI through POR ($\beta = 0.143, p = 0.002$) confirming [H3b](#). Considering the significant direct effect ($\beta = 0.287, p < 0.001$) of SR on entrepreneurial intention, this result indicates a partial mediation. This implies that SR influences entrepreneurial intention both directly and indirectly via POR. In addition, SR demonstrates a significant indirect effect on entrepreneurial intention through GRT ($\beta = 0.049, p = 0.001$), indicating a partial mediation and confirming [H1b](#).

Table 7. Mediating effects

Relationship	Direct effect (β)	Indirect effect (β)	Total effect (β)	p-value (indirect)	Mediation type
FoF → EI (via POR)	−0.070 (ns)	0.040	−0.050 (ns)	0.006	Full mediation
SR → EI (via POR)	0.287***	0.143	0.478***	0.002	Partial mediation
FoF → EI (via GRT)	−0.070 (ns)	−0.020	−0.050 (ns)	0.139	No mediation
SR → EI (via GRT)	0.287***	0.049	0.478***	0.001	Partial mediation

Note(s): *** $p < 0.01$, ns = not significant. EI = Entrepreneurial Intention; POR=Perceived Opportunity Recognition; FoF=Fear of Failure; GRT = Grit; SR=Self-realization

However, FoF does not exhibit a significant indirect effect on entrepreneurial intention through GRT ($\beta = -0.020, p = 0.139$), and its total effect on entrepreneurial intention remains non-significant ($\beta = -0.050, p = 0.142$). This suggests that GRT does not mediate the relationship between FoF and entrepreneurial intention, thus H2b is rejected. Overall, the results indicate that POR plays a key mediating role in the relationships between FoF and SR with EI, while GRT only mediates the relationship between SR and entrepreneurial intention, but did not mediate the relationship between FoF and entrepreneurial intention. This highlights the importance of these mediating pathways in the model. These results suggest that the structural model supports most hypothesized relationships except for H2a and H2b.

4.7.1 Predictive relevance assessment (PLS-predict analysis). Table 8 presents the PLS-predict results used to assess the structural model's out-of-sample predictive power. The analysis includes the coefficient of prediction accuracy (Q^2_{predict}) and prediction error measures (root mean squared error (RMSE) and mean absolute error (MAE)) for both the PLS-SEM model and the linear model (LM) benchmark. This comparison provides an evaluation of the model's predictive performance across all reflective indicators of the endogenous constructs.

The PLS-predict results provide an assessment of the model's out-of-sample predictive power. The Q^2_{predict} values show that most indicators of POR and EI exhibit positive predictive relevance, while a few GRT indicators show values close to or slightly below zero, indicating weak predictive relevance for those specific items.

In terms of prediction error, the comparison between PLS-SEM and LM results shows that PLS-SEM RMSE and MAE values are generally comparable to or slightly lower than LM values for several indicators, particularly within the EI and POR constructs. This indicates that the PLS-SEM model demonstrates acceptable predictive performance.

However, for the GRT construct, the differences between PLS-SEM and LM errors are minimal, suggesting weak predictive improvement over the benchmark model. Overall, the model demonstrates moderate predictive power, with stronger performance for EI and POR compared to GRT.

Figure 1 is a summary of the fitted model containing coefficients and factor loadings.

Table 8. PLS-predict results (out-of-sample prediction)

Indicator	Q^2_{predict}	PLS-SEM RMSE	PLS-SEM MAE	LM RMSE	LM MAE	IA RMSE	IA MAE
POR1	0.201	1.186	0.856	1.192	0.861	1.327	0.935
POR2	0.256	1.07	0.74	1.059	0.721	1.241	0.857
POR3	0.18	1.259	0.964	1.261	0.954	1.39	1.026
GRT10	0.017	0.86	0.723	0.867	0.731	0.868	0.733
GRT11	0.037	0.749	0.633	0.76	0.644	0.763	0.659
GRT12	0.015	1.022	0.858	1.031	0.865	1.03	0.852
GRT3	0.027	0.962	0.745	0.975	0.764	0.976	0.746
GRT4	0.024	0.926	0.759	0.934	0.761	0.938	0.769
GRT9	0.02	1.205	1.004	1.223	1.021	1.217	1.025
EI1	0.13	0.908	0.762	0.915	0.772	0.974	0.814
EI10	0.147	0.966	0.784	0.974	0.781	1.045	0.871
EI2	0.137	0.95	0.796	0.931	0.772	1.023	0.867
EI3	0.191	0.784	0.639	0.755	0.591	0.872	0.716
EI4	0.123	1.033	0.871	1.027	0.858	1.103	0.907
EI5	0.152	0.926	0.762	0.913	0.748	1.006	0.849
EI6	0.157	0.862	0.673	0.855	0.661	0.939	0.756
EI7	0.146	0.823	0.657	0.831	0.663	0.891	0.732
EI9	0.049	1.246	1.072	1.27	1.088	1.278	1.116

Note(s): LM = linear model; MAE = mean absolute error; RMSE = root mean squared error; IA = index of agreement

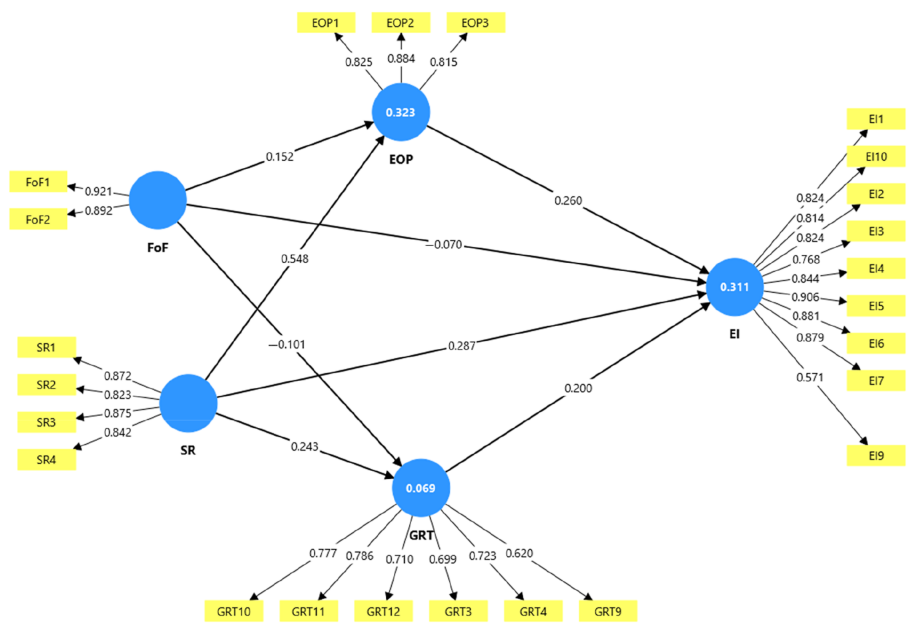


Figure 1. SEM with coefficients

All factor loadings are above 0.50, indicating good convergent validity. According to the results displayed in Figure 1, GRT, SR, FoF, and POR explained 31.1% of the total variability in entrepreneurial intention 32.3% of the total variability in POR, and 6.9% of the total variability in GRT. Figure 2 also shows all the factor loadings below 0.5 and above for the purpose of clarity.

5. Discussion

This study examines the mediating role of grit in the relationship between self-realization and entrepreneurial intention. Additionally, perceived opportunity recognition in terms of financial and technical support was tested to moderate the relationship between fear of failure and entrepreneurial intention. For the first hypothesis (H1a), the direct relationship between self-realization and entrepreneurial intention was evaluated. The path coefficient shows that self-realization positively and significantly predicts entrepreneurial intention. Self-realization is often conceptualized through the lens of self-actualization and personal fulfilment, which significantly contributes to entrepreneurial drive. Previous research asserts that self-realized individuals exhibit a stronger entrepreneurial personality profile, especially in terms of autonomy, locus of control and self-efficacy (Obschonka and Stuetzer, 2017). This aligns with the SDT, where people that exhibit personal growth are more motivated to pursue difficult tasks like entrepreneurship. We further hypothesize that grit mediates the relationship between self-realization and entrepreneurial intention. The result shows that grit significantly mediates the self-realization–entrepreneurial intention relationship, supporting H1b. This also suggests that self-realization indirectly predicts entrepreneurial intention through grit. This result aligns with previous research, wherein grit mediates the impact of psychological elements by sustaining entrepreneurial engagement through the challenges of entrepreneurial journey (Özhan, 2021; Al Issa, 2020).

Our study also found that a positive and significant relationship exists between the fear of failure and perceived opportunity recognition, but a direct negative relationship with

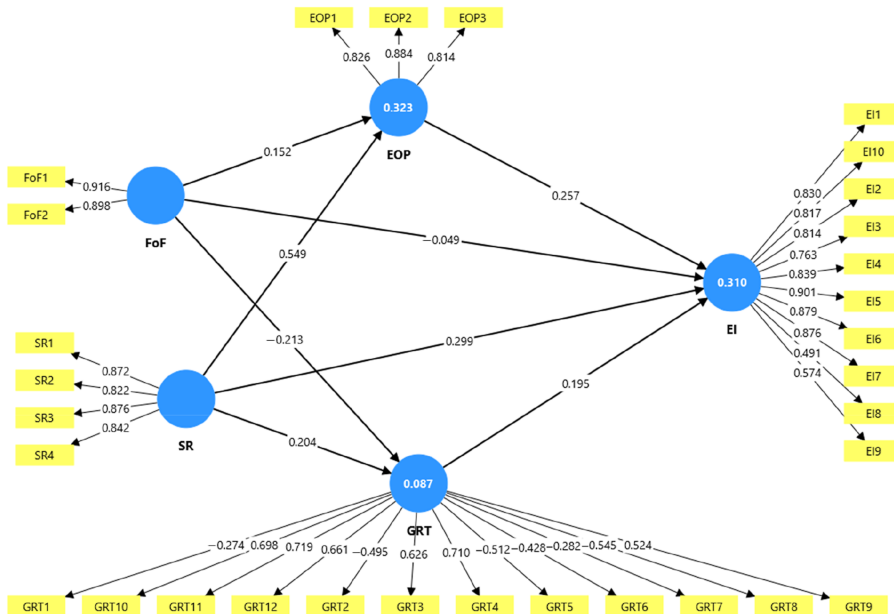


Figure 2. SEM with coefficients

entrepreneurial intention, confirming H2a. This result affirms the dual nature of the fear of failure as a motivator or inhibitor. Cacciotti and Hayton (2015) argue that the fear of failure, a core component of action fear, can act as a motivator and inhibitor. This suggests that fear may reinforce awareness but reduce the probability of acting. This nuanced relationship indicates that fear-based emotions may increase alertness to opportunities but can hinder actual entrepreneurial commitment.

Furthermore, we test the mediating effect of perceived opportunity recognition or EOP in the relationship between the fear of failure and entrepreneurial intention. The result shows that perception of opportunities significantly and positively mediates the relationship between the fear of failure and entrepreneurial intention, confirming H3a. Previous studies such as Shirokova *et al.* (2016) and Nabi *et al.* (2017) buttress the idea that opportunity perception often serves as a mediator between personality and entrepreneurial intent. This suggests that having the perception of opportunity is a crucial determinant of entrepreneurial intention. Additionally, we validate the mediating role of perceived opportunity support between self-realization and entrepreneurial intention. The result shows that perception of opportunities positively and significantly mediates the relationship between self-realization and entrepreneurial intention, thus supporting H3b. This outcome is consistent with empirical evidence in research. For instance, perceived opportunity recognition mediates the relationship between pull factors of motivation and university students' entrepreneurial intention (Martínez-Cañas *et al.*, 2023). Perceived opportunity recognition also mediated the relationship between entrepreneurship education and intention (Bui *et al.*, 2025). A study by Bapoo *et al.* (2022) shows that entrepreneurial opportunity recognition significantly mediated the relationship between sustainability orientation dimensions and sustainability entrepreneurial intentions of business students. The structural model illustrates that self-realization plays a foundational role in shaping both direct and indirect pathways to entrepreneurial intention. Through its influence on grit and EOP, self-realization emerges as a central construct in entrepreneurial motivation. While grit and fear contribute nuanced effects, the clarity of opportunity perception remains a key determinant of entrepreneurial intention.

6. Theoretical implications

Our study contributes to knowledge in entrepreneurial cognition. It advances a theoretical understanding in entrepreneurial cognition by integrating self-realization and the fear of failure as the foundational psychological traits that directly and indirectly influence entrepreneurial intention. The significant path from self-realization to entrepreneurial intention supports the notion that individuals who have a strong sense of identity and personal purpose are more inclined to pursue entrepreneurial ventures. This assertion is affirmed in the SDT that self-realization fosters autonomous regulation, which is a strong predictor of intentional behaviour such as starting a business (Deci and Ryan, 2000). The mediating role of grit between self-realization and entrepreneurial intention strengthens the idea that psychological resilience and long-term perseverance (Duckworth *et al.*, 2007) are critical to bridging personal aspirations and actual entrepreneurial action. This supports the integration of the non-cognitive trait in entrepreneurship research, a domain historically dominated by cognitive and personality trait models (Credé *et al.*, 2017).

Our model adds complexity to the dual nature of the fear of failure. The finding that the fear of failure positively affects EOP perception but negatively affects entrepreneurial intention, underscores the ambivalent nature of fear. This aligns with the dual-path framework propounded by Cacciotti *et al.* (2016). Fear may increase vigilance and opportunity awareness but simultaneously undermine the confidence to act, depending on other mediating traits like grit or self-efficacy. Findings from our study also confirm the crucial intermediary role played by EOP perception between psychological traits and entrepreneurial intention. It establishes EOP perception as a translational mechanism through which affective and psychological traits manifest in behavioural intention.

7. Practical implications

Practically, findings from our study suggest that enhancing self-realization through reflective, value-based training can significantly influence entrepreneurial interest. Practical interventions such as self-awareness workshops, purpose-driven entrepreneurial awareness boot camps, and vision and personal goal building should encourage identity development as well as personal visioning to help individuals align entrepreneurial goals with their deeper sense of purpose. Given the mediating role of grit, incubators and business accelerators should offer resilience training, and grit development programs. These initiatives can help aspiring entrepreneurs to develop the persistence necessary to navigate entrepreneurial uncertainty.

The negative effect of fear of failure on entrepreneurial intention implies a need for psychological interventions that reduce the fear of failure. Entrepreneurial support programs should integrate elements such as failure management workshops, cognitive behavioural coaching and experiential failure simulations to minimize risks. This is particularly relevant in regions with the fewest innovative entrepreneurs per capita, high unemployment rates, where entrepreneurship could dominate and high rates in business failure could be more deeply entrenched (GEM, 2024/2025; Madzikanda *et al.*, 2022). Since opportunity perception significantly predicts entrepreneurial intention, policymakers and institutions should focus on funding platforms for ideation-to-incubation pipelines and public-private partnerships should support youth-led innovation.

8. Limitations and future research

One of the limitations in this study is the treatment of grit as a stable or unchanging construct. Research has shown that grit could be developed over time with knowledge and experience (Park *et al.*, 2018). Future research can consider the effects of grit at different stages of development in order to advance the debate on the stability of grit. The influence of psychological traits such as self-realization may vary greatly across economic and cultural contexts and as such, findings in one country may not be generalizable to others due to social norms and economic constraints. Investigations in other contexts is suggested for future research.

8. Conclusion

Self-realization positively influences entrepreneurial intention because it activates intrinsic motivation, which satisfies basic psychological needs. The interaction between the fear of failure, perception of opportunities and entrepreneurial intention advances the debate on the dual nature of the fear of failure. This study highlights the nuanced and interdependent relationships between psychological capital, emotional responses and cognitive perceptions in determining entrepreneurial intentions. Theoretically, it validates an integrated view that combines self-realization, grit, fear and opportunity cognition. Practically, it informs actionable strategies for educators, policymakers and entrepreneurial ecosystem builders aiming to foster sustainable and purpose-driven entrepreneurship.

Appendix Questionnaire

Constructs

Self-realization

- (1) I feel satisfied to create something new
- (2) I feel satisfied to take advantage of my creative needs
- (3) I feel fulfil achieving my dreams
- (4) I feel that the future looks good for me

Fear of failure

- (1) The thought of taking steps to start my intended business scares me
- (2) I was afraid that my intended business will make a loss

Grit

- (1) I finish whatever I begin
- (2) Setbacks don't discourage me
- (3) I am diligent
- (4) I have achieved a goal that took years of work
- (5) I have overcome setbacks to conquer an important challenge
- (6) I am a hardworker

Perceived opportunity recognition

- (1) Financial support will create additional income for my business
- (2) Facility support will increase the profit level of my business
- (3) Technical and peer network support will help my business to grow

Entrepreneurial intention

- (1) I am ready to do anything to be an entrepreneur
- (2) My long-term goal is to become an entrepreneur
- (3) My professional aim is to have my own business

- (4) I will make every effort to start and run my own business
- (5) I am determined to create a firm in the future
- (6) I have a very seriously thought about starting a business
- (7) My career goal is to have my own business
- (8) I have the firm intention to start a firm someday
- (9) It is likely that someday I will create a new business
- (10) I am willing to make every effort to become an entrepreneur

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