

Fear of Failure and Entrepreneurial Behaviour among University Students: Do Gender and Financial Resources Matter?

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Keywords

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Abstract

Fear of failure is regarded as a negative emotion that forces aspiring entrepreneurs to abandon the start-up process or not follow through on their initial entrepreneurial intentions. As such, the objective of this study was to assess the relationship between fear of failure and entrepreneurial behaviour and if gender matters. Additionally, the study tested whether financial resources moderate the association between fear of failure and entrepreneurial behaviour. The study adopted a quantitative research method with a causal research design. Data was collected using a self-administered questionnaire from a sample of 303 university students from a South African University. The results showed that fear of failure negatively influences entrepreneurial behaviour among university students. It was also established that female students exhibit a higher fear of failure than males in fear dimensions such as the personal ability to manage a business and the potential of the idea to be accepted in the market. Interestingly, the findings showed that perceived access to financial resources moderates the relationship between fear of failure and entrepreneurial behaviour. The originality of this study is that it is one of its kind to understand the role of emotions such as fear of failure in the entrepreneurial process using a sample of university students from a developing country context. The findings culminate with practical and policy implications.

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1. Introduction

1.1. Background

The most important outcome and the heart of the entrepreneurship process is the creation of a venture (Kautonen, van Gelderen & Fink, 2015; Van Gelderen, Kauronen & Fink 2015; Shepherd, Souitaris & Gruber, 2020; Frese & Gielnik, 2023). A new business creation is the outcome of various activities (Duong, 2022). Accordingly, on the role played by entrepreneurial action in entrepreneurship, an individual engages in entrepreneurial action when they are driven to pursue and seize business possibilities (Gieure, Benavides-Espinosa & Roig-Bobon, 2020). The lack of action means potentially profitable entrepreneurial initiatives would not be realized (Van Gelderen et al., 2015; Frese & Gielnik, 2023). As such, entrepreneurial action is not only a prerequisite for business creation but is also vital in determining if an attempt to start a new venture will eventually be abandoned (Frese & Gielnik, 2023). Thus, the antecedents influencing start-up activities have become a vital research topic for academics, government and policymakers, given the significant role that entrepreneurial activities play in fostering innovation, fostering economic growth, and addressing employment problems (Zhao & Li, 2021; Asante et al., 2022; Duong, 2022).

Amongst the different antecedents influencing start-up activities, fear of failure has been identified as one of the main psychological barriers that prevent aspiring entrepreneurs from pursuing entrepreneurship, leading them to make decisions to abandon their start-up process or not follow through on their initial entrepreneurial intentions (Kollmann, Stockmann & Kensbock, 2017; Cacciotti, Hayton, Mitchell & Allen, 2020; Kong, Zhao & Tsai, 2020; Hussam Abdel-Fattah, Ferasso, Alshallaqi & Hassani, 2023; Gao, Wang, Lu, Chen & Morrin, 2024). Atkinson and Litwin (1973, p. 146) define fear of failure as a “disposition of becoming anxious about failure under achievement stress.” In entrepreneurship, Cacciotti et al. (2020, p. 2) define fear of failure as “a negative affective reaction drawn on cognitive appraisals of the possibility of failure in the performative environment of entrepreneurship.” Existing studies (Cacciotti et al., 2020; de Sousa-Filho et al., 2023) consider fear of failure as a negative emotional state that leads potential entrepreneurs to develop negative attitudes about entrepreneurial opportunities. Consequently, fear of failure acts as a negative catalyst for entrepreneurship, directly affecting entrepreneurial activities and decreasing the likelihood that entrepreneurial attitudes and intention will be translated into actual entrepreneurial action (Duong, 2022; Cacciotti et al., 2020). As such, several studies (Dutta & Sobel, 2021; Duong, 2022) have reported that entrepreneurial fear of failure adversely affects entrepreneurial activities. Even though the above studies enhanced our understanding of the role of fear of failure in the entrepreneurial process, some limitations in existing literature warrant further investigation. For example, Cacciotti and Hayton (2015)

noted that there has been confusion regarding how fear of failure has been measured and conceptualized. Some studies have used a single item to measure fear of failure (Hessels et al., 2011; Brixey et al., 2012) which can be limiting since fear of failure has several dimensions that may hinder entrepreneurial behaviour (Cacciotti & Hayton, 2015; Cacciotti et al., 2020). As such, this study addresses this novel research gap by adopting a multi-dimensional measure of fear of failure as recommended (Cacciotti et al., 2020).

Other studies also assert that fear of failure differs based on gender, with females displaying a higher fear of failure than their male counterparts (Sánchez Cañizares & Fuentes García, 2010; Shinnar, Giacomini & Janssen, 2012; Gao et al., 2024). Furthermore, there are several dimensions that can explain the fear of failure (see studies Cacciotti et al., 2020; Conroy, Willow & Metzler, 2002); however, these different dimensions of fear of failure are distinct from one another and may even conflict with each other as fear varies based on individual experiences. On this account, the literature has been silent on gender differences regarding the different dimensions of fear of failure (Guelich, 2022). Assuming that university students are a homogeneous group may mislead policymaking and delay progress in advancing student entrepreneurship. Thus, this study addresses this research gap by proposing to identify the specific type of fear of failure that university students encounter in the entrepreneurial process to put in place effective measures and if this differs based on gender.

Existing literature indicates that fear of failure is not a stable emotion, and it can be mitigated by other factors, variables, and emotions over time (Cacciotti et al., 2020). Hence, we argue that the availability of financial resources can buffer the negative emotions caused by fear of failure so that university students with access to financial resources will still be motivated to engage in entrepreneurial activities. Financial resources are the most significant factors vital for starting, and growing the business (Hossain, 2020). Access to financial resources is necessary for achieving a business's objectives and implementing development and innovation activities (Neneh, 2016; Adomako & Ahsan, 2022). As such, students can depend on financial resources to address the different dimensions of fear of failure in the entrepreneurial process. Thus, we argue that access to financial resources moderates the relationship between fear of failure and entrepreneurial behaviour among university students.

The rest of this paper is structured as follows: first, the problem statement and research objective are presented. This is followed by a literature review, which includes the theoretical framework and hypothesis. Thereafter, the research methodology is presented, and the

results and findings are discussed. The paper concludes with a discussion of the managerial implications and conclusion.

1.2. Problem Statement

In many economies, fear of failure poses a significant barrier to business startups, with almost half of those who perceive entrepreneurial opportunities choosing not to act out of fear of failure (Bowmaker-Falconer, Meyer & Samsami, 2022/2023). This situation is also prevalent in South Africa, as the Global Entrepreneurship monitoring reports continually highlight that despite the fact that adults between the ages of 18 and 64 believe there are good opportunities in South Africa, they would not start a business because they are afraid of failing and would prevent them from starting up a business. Adults in South Africa experienced less fear of failing in 2022 (2021 53% - 2022 51,3%), despite this being higher than the average for the world (46,74%) and African countries (44,24%). Compared to men (50.4%), women in South Africa are more fearful of failing (53.6%). Consequently, although the GEM reports specifically highlight risk-taking as a dimension of fear of failure, research has yet to fully explore which specific dimension of failure would prevent university students from pursuing entrepreneurship and its impact on entrepreneurial behaviour. Moreover, it is important to investigate if there are any gender differences among the various dimensions of fear of failure using a sample of university students from a developing country. This becomes important as extant research (Lyu, Shepherd & Lee, 2023; Neneh & Dzomonda, 2024) has long recognised the importance of context in understanding entrepreneurial behaviour. This is particularly relevant in the South African context, which faces the triple challenge of unemployment (32.9%), youth unemployment (61%), and inequality and poverty, which has been persistent over the past decades (Trading Economics, 2024). Nevertheless, there are limited studies that have explored how fear of failure influences entrepreneurial behaviour among university students. Thus, the problem statement is stated as; How does fear of failure influence entrepreneurial behaviour among students, and do gender and financial resources matter in understanding this relationship?

1.3. Research objectives

The objective of this study was to assess the relationship between fear of failure and entrepreneurial behaviour and if gender matters. Additionally, the study tested whether financial resources moderate the association between fear of failure and entrepreneurial behaviour.

2. Literature Review

2.1 Theoretical framework

The current study is built on the tenets of three crucial theories: the Theory of planned behaviour (Ajzen, 1991), The Appraisal Theory of Emotions (Lazarus, 1991) and the Resource-based view (Barney, 1991). The theory of planned behaviour by Ajzen (1991) postulates that all behaviour is planned. In this case, the TPB uses three crucial variables, attitudes, subjective norms, and behavioural control, to explain how entrepreneurial intention and actual behaviour are formed. Attitude towards behaviour explains the perceived desirability of engaging in a certain behaviour, while subjective norms explain the influence of significant people around the individual about engaging in a particular behaviour (Ajzen, 1991). Lastly, perceived behavioural control explains the perception of the degree of difficulty expected in performing a specific behaviour. According to Ajzen (1991), these three variables predict entrepreneurial intention when they are positive. Entrepreneurial intention is defined as an individual's conviction that they will establish a business in future. According to the TPB, EI is a crucial determinant of entrepreneurial behaviour which is defined as the actual engagement in entrepreneurial activities (Ajzen, 1991).

This study adopted the Appraisal Theory of Emotions (Lazarus, 1991) to explain the role of fear of failure in the conceptual model of this study. The Appraisal Theory of Emotions (Lazarus, 1991) describes fear of failure as a negative emotion that emanates from the appraisal of perceived obstacles in the external environment. The proponents of this theory believe that the assessment of the threat from the external environment is shaped by a cognitive anticipation of the negative consequences of failure and affective perception associated with feelings such as anxiety from the anticipated failure (Lazarus, 1991; Conroy, 2001). Based on this view, fear of failure is considered a negative emotion that hinders goal attainment (Cacciotti et al., 2020; Cacciotti et al., 2016; Cacciotti & Hayton, 2015). As such, in this study, fear of failure is defined as a "temporary cognitive and emotional reaction towards environmental stimuli that are apprehended as threats in achievement contexts" (Cacciotti & Hayton, 2015, p.181). The state-based socially situated emotion approach recognizes that fear of failure is a temporally subjective experience; that is, an entrepreneur's fears may vary as they move through the different stages of the entrepreneurial process and encounter challenges. From this viewpoint, Cacciotti et al. (2016) discovered that failure of fear can be caused by a variety of distinct triggers experienced throughout the entrepreneurial process. These triggers include difficulties juggling work and personal obligations and a lack of ability to carry out entrepreneurial duties

(Hunter, Jenkin & Mark-Herbert, 2021). Hence, fear of failure is considered a psychological factor that prevents aspiring entrepreneurs from pursuing entrepreneurship.

Fear of failure has been conceptualised differently in existing literature. This study adopted Cacciotti et al.'s (2020) six dimensions that can explain the fear of failure. These include (1) lack of ability to generate or attract funds for the venture, (2) fear about the true potential of the idea or opportunity on which the venture is based, (3) fear about the threat to social esteem in the case where the entrepreneur makes a mistake or even fails entirely, (4) fear about the opportunity costs associated with spending time and resources to develop a venture that might not be successful, (5) fear about the personal ability of the entrepreneur or team to perform the activities necessary for success and (6) fear about the financial security of the entrepreneur's livelihood and saved wealth if the venture fail (Cacciotti et al., 2020). The Appraisal Theory of Emotions is a robust theory that has enhanced the understanding of fear of failure especially in the entrepreneurial domain. On this account, it has been used to inform the measures of fear of failure by several scholars (Cacciotti & Hayton, 2015; Cacciotti et al., 2020).

The Resource based view theory (Barney, 1991) originates from organizational studies where it was used to explain the usefulness of unique resources in enhancing competitive advantage of firms. Nevertheless, some authors believe that the RBV theory can be applied to the entrepreneurship domain to understand how different resources, such as human capital and access to financial resources can positively influence nascent entrepreneurs' decisions to consider venturing into new venture creation (Colombo et al., 2024). In this case, the proponents of the RBV theory in the entrepreneurship domain argue that nascent entrepreneurs who have access to resources such as start capital are likely to successfully launch a new venture than those without (Kellermanns et al., 2016; Colombo et al., 2024). Financial resources play a crucial role in aiding nascent entrepreneurs in bringing together other resources required during the new venture creation process (Cassar, 2004). Given that a financing problem exists for the youth in most developing countries, the RBV theory is useful for this study because it emphasises the importance of resource endowments to achieve the desired goals. The RBV theory has also been widely adopted and applied in the entrepreneurship domain (Kellermanns et al., 2016; Colombo et al., 2024), making it a sound theory in this study in providing a theoretical justification for the role of financial resources in the conceptual model.

2.2 Hypothesis development and conceptual framework

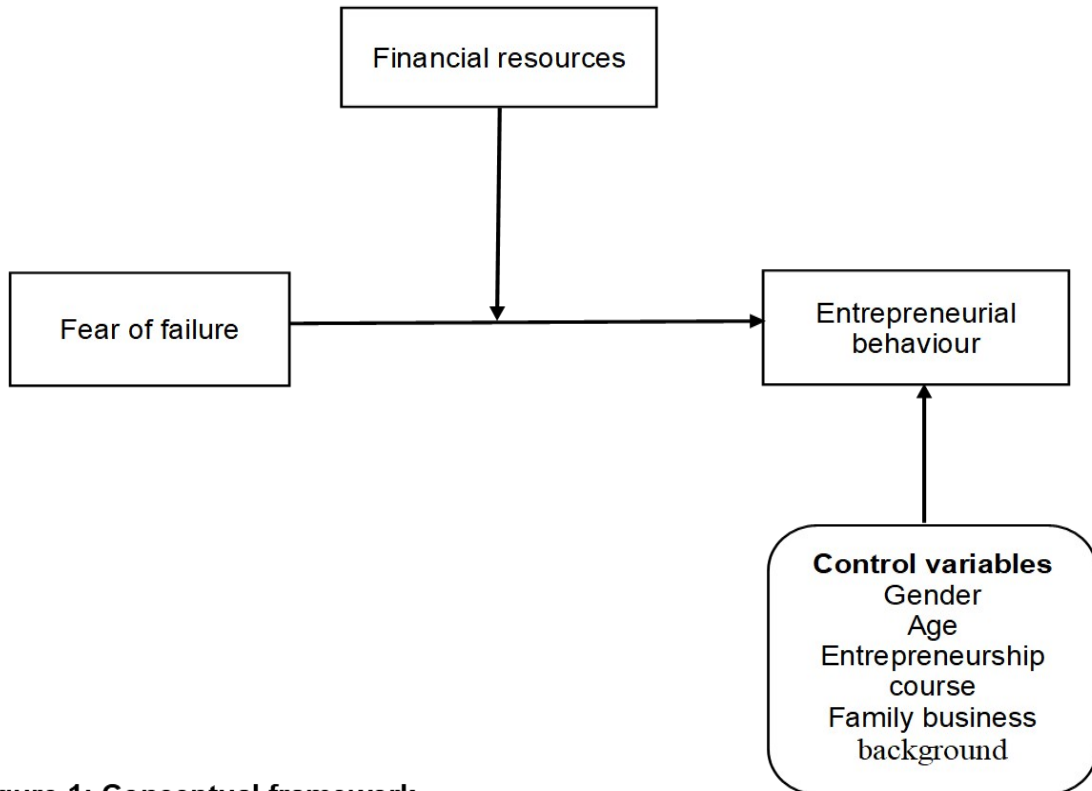


Figure 1: Conceptual framework

2.2.1 Relationship between fear of failure and entrepreneurial behaviour

There has been growing interest in studying the role of fear of failure in the entrepreneurial process (Cacciotti et al., 2020; de Sousa-Filho et al., 2023; Duong & Vu, 2023; Gao et al., 2024). This is because entrepreneurship is an emotional career associated with uncertainty and risk. Aspiring entrepreneurs usually encounter both excitement and fear when starting and developing their new ventures as they have to deal with a variety of tasks that could succeed or fail (Van Gelderen, Kautonen & Fink, 2015). These tasks include introducing new goods and services, securing capital, fostering relationships with important customers, aiming to achieve the margins needed for long-term profitability (Cacciotti & Hayton, 2015; Cacciotti et al., 2020). The different dimensions of fear of failure act as a significant barrier to entrepreneurial activities and prevent the translation of entrepreneurial ideas, entrepreneurial attitudes and intentions into actual start-up behaviour (Cacciotti et al., 2020; Kong et al., 2020; Duong, 2022). In support, existing studies (Van Gelderen et al., 2015; de Sousa-Filho et al., 2023) noted that fear of failure forces aspiring individuals to postpone acting on their intentions or to negatively evaluate an opportunity, resulting in delayed action. Applying the

Appraisal Theory of Emotions (Lazarus, 1991) to entrepreneurship, it is evident that potential entrepreneurs assess the fear of failure by not solely looking at the external risks but also how they perceive and appraise the risk of venturing into entrepreneurship. As such, when aspiring entrepreneurs negatively appraise the external environment in which the entrepreneurial activities will take place, this negative emotion can significantly impact their decision to continue or abandon their start-up process or not follow through on their initial entrepreneurial intentions. This fear leads to a decreased likelihood of translating initial plans and intentions into actual startup behaviours. This view is supported by extant research (Kollmann et al., 2017; Kong et al., 2020; Dutta & Sobel, 2021; Duong, 2022) that has reported a negative association between fear of failure and entrepreneurial activities. Following the aforementioned discussion, this study hypothesises that

H1: Fear of failure negatively influences entrepreneurial behaviour among university students.

2.2.2 Gender and fear of failure

Gender plays a crucial role in the entrepreneurial process (Duong & Vu, 2023). This also applies to factors that influence the entrepreneurial process, such as fear of failure (Guelich, 2022). Even though existing studies enhanced our understanding of fear of failure in the entrepreneurial domain, the literature has been silent on gender differences regarding fear of failure (Guelich, 2022). Assuming that university students are a homogeneous group may mislead policy making and delay progress in advancing student entrepreneurship. There is evidence of gender differences among university students regarding fear of failure (Shinnar, Giacomini & Janssen, 2012; Gao et al., 2024). Existing studies show that female students tend to exhibit a higher fear of failure than their male counterparts, inhibiting them from starting a business (Sánchez Cañizares & Fuentes García, 2010). Other scholars suggest that women tend to be less risky taking than males. Consequently, since the entrepreneurship career is associated with uncertainty, female students tend to be pessimistic about the entrepreneurship career. A study by Gao et al. (2024) asserts that the gender differences in fear of failure align with cultural stereotypes that associate entrepreneurship with masculinity traits. As such, Shinnar, Giacomini and Janssen (2012, p. 469) argue that “women may experience a heightened fear of failure when starting a business because doing so would constitute the pursuit of a career which is socially discouraged for women.” Based on the above discussion, the hypothesis is stated as;

H2: There are gender differences in fear of failure among university students.

2.2.3 The moderating role of financial resources

Financial resources are the most significant resources vital for starting and growing the business (Neneh, 2016; Hossain, 2020; Adomako & Ahsan, 2022). Financial resources are fundamental in transforming potential resources into tangible business assets. Following

Cacciotti et al. (2020) dimension of fear of failure, the availability of financial resources eliminates fear of failure among university students by providing the necessary capital to conduct market research and product development, enabling potential entrepreneurs to test and refine their ideas to validate the potential of the idea and provide the means to acquire the necessary equipment, machinery and infrastructure (Hossain, 2020). Additionally, access to financial resources eliminates fear of failure among aspiring entrepreneurs by assuring them that they will be able to afford hiring skilled employees; facilitating growth and innovation by funding research and development activities and business expansion (Neneh, 2016; Hossain, 2020; Adomako & Ahsan, 2022). Essentially access to financial resources acts as a buffer against unforeseen challenges and risks which in turn enables potential entrepreneurs to take calculated risks and pursue opportunities (Owusu et al., 2021). Additionally, access to financial resources would enable potential entrepreneurs to have access to mentorship programs and advisory services, which would offer direction and lessen the possibility of making critical mistakes. Access to financial resources in the form of grants or low-interest loans (Nengomasha, Neneh & Dzomonda, 2022) would ensure that the potential entrepreneur's personal income is not depleted reducing stress and allowing them to focus on the business. This is particularly important as potential entrepreneurs depend on informal sources of finance, such as personal savings, family and friends, due to the difficulties they often encounter in when accessing formal sources of finance (Neneh, 2016; Owusu et al., 2021; Adomako & Ahsan, 2022). Thus, university students with access to financial resources are more likely to engage in entrepreneurial activities than those who perceive that it can be challenging to access startup funding (Rusu et al., 2022). This is particularly important for students from a developing country, where access to finance is one of the stumbling blocks to the creation of new ventures (Urban & Ratsimanetrimanana, 2019). Applying the RBV theory to entrepreneurship, this study argues that access to financial resources reduces fear of failure among potential entrepreneurs by enabling them to engage in entrepreneurial activities such as seeking mentorship programs and building networks compared to those without access to funding. These resources would also act as a buffer against potential setbacks and boost the potential entrepreneur's confidence in their ability to succeed. The above arguments are supported by existing studies that assert that financial resources are crucial in the entrepreneurial process (Urban & Ratsimanetrimanana, 2019; Nengomasha et al., 2022; Rusu et al., 2022). On this account, the hypothesis is stated as;

H3: Financial resources moderate the relationship between fear of failure and entrepreneurial behaviour among university students.

3. Research Methodology

This study was quantitative in nature since as the authors intended to collect and analyse numerical data to achieve the research objectives. A causal research design was adopted for the study and the study was cross-sectional since data was collected over a fixed time. The population was all university students at a South African university. Data was collected using a self-administered questionnaire. A random sampling technique was used to recruit the participants. Out of the 500 questionnaires distributed, 303 were correctly completed and became the valid sample for the study. This resulted in a response rate of 61%.

3.1 Measures

3.1.1 Fear of failure

Fear of failure was measured using 21 items that measure 6 types of fear of failure such as F=Ability to fund the venture; PI=Potential of the idea; TSE=Threat to social esteem; OC=Opportunity costs; PA=Personal ability; FS=Financial Security. The questionnaire to measure fear of failure was adapted from Cacciotti et al. (2020). Some of the sample items included "Over the past few months, I have been afraid of not being able to get the required funding for the business", "Over the past few months, I have been afraid of not being able to manage the business effectively", and "Over the past few months, I have been afraid of losing all investments in the business/business activities." The questionnaire items were based on a 5-point Likert scale ranging from (1) Strongly disagree to (5) Strongly agree.

3.1.2 Entrepreneurial behaviour

Entrepreneurial behaviour was measured using 9 items consistent with other existing studies (Shirokova et al., 2016; Neneh, 2019). Some of the sample items included "I have written a business plan" and "I have discussed product or business idea with potential customers." The question items were based on an index ranging from 0 to 1. A score of 0 indicated that the participant had not yet engaged in any entrepreneurial activity while 1 showed that the individual had completed all the 9 entrepreneurial activities. The number of start-up activities a student completed divided by the total number of start-up activities on the list was used to calculate the cumulative index that determined the scope of the start-up activities variable.

3.1.3 Access to financial resources

Access to financial resources was measured using questions that measure financial knowledge and skills from similar existing studies (Mazanai & Fatoki, 2011; Padiaychee, 2016). Some of the sample items included "If I were to start my own business, I know of sources of funding available to support entrepreneurs" and "If I were to start my own business, I know a lot about government agencies and the sources of funding they have available to support entrepreneurs." The questionnaire items were based on a 5-point Likert scale ranging from (1) Strongly disagree to (5) Strongly agree.

3.2 Control variables

In this study, factors such as gender, age, family business background, and previous entrepreneurship attendance were considered control variables. These variables offer an alternative explanation to the main variables tested in this study; hence, they should be controlled.

3.3 Data analysis

A combination of SPSS and structural equation modeling (SMART PLS 4) software were used to analyse the data. The SPSS software was used for descriptive statistics such as frequencies, mean, standard deviation, and independent samples t-tests for gender differences on fear of failure. On the other hand, SMART PLS 4 was used to test the hypothesised relationships in the model for the study. The SMART PLS 4 was adopted for its suitability to estimate statistical inferences from complex models that incorporate moderation (Hair et al., 2019).

3.4 Ethics

Ethical clearance was obtained from the University of the Free State General/Human Research Ethics Committee (GHREC) with ethical clearance number (UFS HSD2021/0770/21).

4. Results and Findings

4.1 Demographic characteristics

The findings showed that 58% of the participants were females while males constituted 42%. Majority of the participants were between the age group of 21-25 years (53%). This age distribution was expected since the study focused on undergraduate students. Regarding race, 88% of the participants identified themselves as black, followed by white (7%), coloured (3%) and Indian (2%). In terms of family business history, 53% of student indicated that they do not come from a family with a business background while 47% of the participants agreed that they come from a family with a business background.

4.2 Descriptive statistics

Table 1: Mean and standard deviation of key variables

Statements	Mean	Std. Deviation
TSE	3.43	1.276
PA	3.17	1.298
PI	3.03	1.221
OC	4.01	0.917
FS	4.10	0.945
F	4.18	0.837
FR	2.21	1.192
EB	0.37	0.483

Key

F=Ability to fund the venture; PI=Potential of the idea; TSE=Threat to social esteem; OC=Opportunity costs; PA=Personal ability; FS=Financial Security

Table 1 presents findings on the mean and standard deviation of key variables. The findings show that fear of failure dimensions such as the ability to fund the venture (mean, 4.18; SD, 0.837), financial Security (mean, 4.10; SD, 0.945) and opportunity costs (mean, 4.01; SD, 0.917), respectively, are the dimensions of fear that are encountered by the surveyed participants. The results also show that the participants experience problems in accessing finance as shown by a low mean of financial resources (mean, 2.21; SD, 1.192). The findings also show a low actual behaviour among the participants (mean, 0.37; SD, 0.483) suggesting that the students are not actively engaging in entrepreneurial activities required to start a business.

4.2 Gender differences in fear of failure

Table 2: Gender differences in fear of failure

Variables	Mean score		t	DF	sig	Decision
	Male	Female				
TSE	10.37	10.22	0.513	296	0.304	Reject
PA	5.86	6.61	-2.662	288	0.004	Accept
PI	8.50	9.38	-2.300	286	0.011	Accept
OC	11.88	11.82	0.238	285	0.406	Reject
FS	12.57	12.11	1.650	285	0.06	Reject
F	12.39	12.59	-0.775	287	0.220	Reject

Key

F=Ability to fund the venture; PI=Potential of the idea; TSE=Threat to social esteem; OC=Opportunity costs; PA=Personal ability; FS=Financial Security

Table 2 presents findings on gender differences in fear of failure among university students. The findings show gender differences in fear of failure types, such as the personal ability to run and manage a business and the potential of the idea. Specifically, the findings show that female students display a higher fear of failure than males regarding the ability or confidence to manage and run a business. Females also fear failure more than males regarding the potential of their ideas to be accepted in the market. Nevertheless, there are no gender differences in fear of failure types such as ability to fund the venture, threat to social esteem, opportunity costs, and financial security.

4.3 Measurement model evaluation

Table 2: Reliability and validity

Variables	Items	Outer loadings	CA	CR	AVE
FOF	FOF1	0.761	0.845	0.844	0.684
	FOF2	0.835			
	FOF3	0.873			
	FOF4	0.836			
FR	FR1	0.915	0.912	0.951	0.849
	FR2	0.920			
	FR3	0.928			
EB	(index)	-	-	-	-

Table 2 presents the results of the quality criteria where the measurement model was evaluated in terms of reliability and validity as recommended by Hair et al. (2019). As shown in Table 2, all the factor loadings are above 0.7 and thus considered acceptable. In this study, Cronbach's alpha and composite reliability were used to assess the reliability of the constructs. The findings show that the constructs were reliable since Cronbach's alpha and composite reliability values were all above the acceptable threshold of 0.7 and above (Hair et al., 2019). Convergent validity was assessed by evaluating the Average Variance Extracted (AVE). According to Hair et al. (2019), an AVE >0.50 shows an acceptable level of convergent validity. As shown in Table 2, convergent validity was attained since the AVE values ranges from 0.684-0.849 all above the cut-off threshold of an AVE >0.50.

4.2.1 Discriminant validity

Table 3: Discriminant validity

Constructs	EB	FOF	FR
EB	0,582		
FOF	-0,324	0,827	
FR	0,108	0,129	0,921

The Fornell–Larcker criterion was used to assess discriminant validity. As shown in Table 3, discriminant validity was attained since the diagonal values in bold are all greater than the correlations of each construct (Fornell & Larcker, 1981).

4.4 Structural model assessment

Once the measurement model satisfied the quality criteria, the next step was to evaluate the structural model. The model was assessed to ensure no collinearity issues exist in the model. In this case, the Variance Inflation Factors (VIFs) for each construct were evaluated. The VIF for FOF, FR and EB were 1.019, 1.024 and 1.569, respectively. All the VIFs for the constructs are <3 suggesting that there are no collinearity issues in the model. The model R² accounted for 18% of the variance in actual behaviour. The bootstrapping function with 5000 samples in Smart PLS 4 was used to test the significance of the hypothesised relationships. As presented in Table 4, the findings showed that fear of failure negatively influences entrepreneurial behaviour ($\beta = -0.114$; $p = 0.000$). Based on this finding, hypothesis 1 which stated that fear of failure negatively predicts entrepreneurial behaviour was accepted.

Table 4: Direct effects

Hypotheses	β	t statistics	p value	Decision
FOF -> EB	-0.114	4.800	0.000	Accept
FR -> EB	0.052	2.062	0.020	
Control variables				
Gender -> EB	0,019	0,896	0,185	
Age -> EB	0.064	2.600	0.005	
ECOURSE -> EB	0.069	1.517	0.065	
FBH -> EB	0.106	2.504	0.006	

Scale

FOF= fear of failure, EB= entrepreneurial behaviour, FR= financial resources, ECOURSE= entrepreneurship course, FBH= family business history

4.5 Moderation analysis

The moderation analysis was performed using the product indicator in Smart PLS 4. As shown in Table 5, the interaction effect results ($\beta = 0.082$; $p = 0.004$) show that financial resources positively moderate the relationship between fear of failure and entrepreneurial behaviour. This led to the decision to accept hypothesis 3 which stated that ***H3 Financial resources moderate the relationship between fear of failure and entrepreneurial behaviour among university students.***

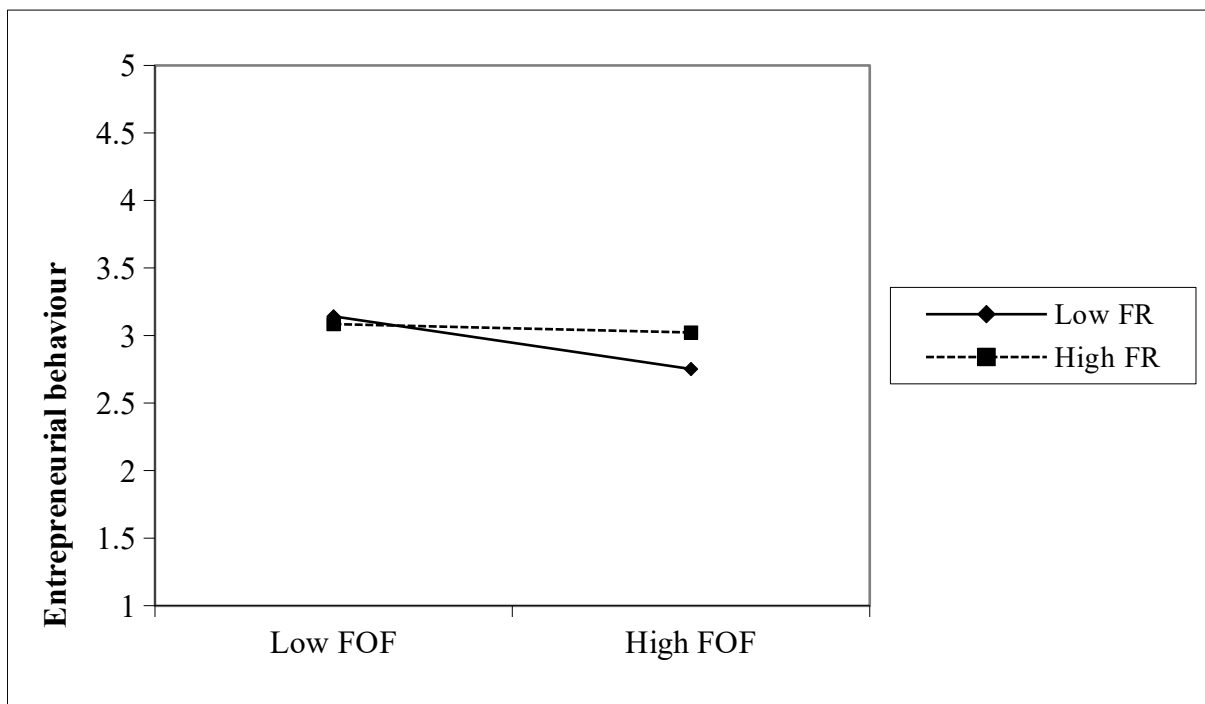
Table 5: Moderation analysis

Hypothesis	Beta	t statistics	P values	Decision
FR x FOF -> EB	0.082	2.642	0.004	Accept

4.5.1 Probing the FOF–EB link at different levels of financial resources

We further probed the FOF–EB link at different levels of financial resources as shown in Figure 2. The results show that the FOF-EB link was stronger for students with high access to financial resources, compared to those with low access to financial resources. The implication of the results is that access to financial resources buffers the negative effect of fear of failure on entrepreneurial behaviour.

Figure 2: Probing the FOF–EB link at different levels of financial resources



4.5 Discussion

This study examined the relationship between fear of failure and entrepreneurial behaviour among university students in South Africa. Additionally, the study tested whether gender differences existed in the different types of fear of failure. Lastly, the study evaluated whether financial resources moderate the relationship between fear of failure and entrepreneurial behaviour among university students in South Africa. The results showed that fear of failure negatively influences entrepreneurial behaviour among university students in South Africa. This confirms that fear of failure is a negative emotion that prevents the translation of entrepreneurial ideas, entrepreneurial attitudes and intentions into actual start-

up behaviour among university students. The current findings are corroborated by other existing findings. For example, existing studies (Cacciotti et al., 2020; Gao et al., 2024) noted that fear of failure forces aspiring individuals to postpone acting on their intentions or to negatively evaluate an opportunity resulting in delayed action. It was also established that female students exhibit a higher fear of failure than males in fear dimensions such as the personal ability to manage a business and potential of the idea to be accepted in the market. This is consistent with other existing findings that have noted that there are gender differences among university students where females tend to exhibit high fear of failure than males (GEM, 2024; Gao et al., 2024). The findings also showed that financial resources positively moderate the association between fear of failure and entrepreneurial behaviour. In this case, it was found that the link between fear of failure and entrepreneurial behaviour was stronger in students with high access to financial resources than those without. This implies that access to financial resources buffers the negative emotions caused by fear of failure on entrepreneurial behaviour. The findings of the current study are supported by other existing studies in other contexts. Existing studies show that financial resources play a crucial role in shaping the entrepreneurial behaviour of university students (Rusu et al., 2022). This is particularly important for university students in developing countries where most youth come from disadvantaged backgrounds (Urban & Ratsimanetrimanana, 2019). Thus, having access to financial resources eliminates fear and ignites their interest in engaging in entrepreneurial activities (Urban & Ratsimanetrimanana, 2019; Rusu et al., 2022). Having access to funding such as government grants and bank loans makes individuals interested in pursuing entrepreneurship since there is a guarantee that they will be able to cover the operating costs of their business (Svotwa et al., 2022).

5. Managerial Implications

This study offers significant theoretical, managerial/practical and policy implications. From a theoretical perspective, the study utilises a combination of the TPB, RBV, and Appraisal Theory of Emotions to provide a new lens for understanding the fear of failure and entrepreneurial behaviour among university students. By integrating these three theories, the study contributes to the growing body of literature on entrepreneurial behaviour by explaining how fear of failure impacts behaviour and how financial resources can buffer against fear of failure.

The TPB explains how attitudes, subjective norms, and perceived behavioural control shape entrepreneurial intentions and subsequent behaviour (Ajzen 1991). The RBV underscores the importance of resources, including financial capital and other critical resources, in overcoming the challenges associated with starting and growing a business (Kellermanns et al., 2016; Colombo et al., 2024). The Appraisal Theory of Emotions explains how individuals'

perceptions and emotional responses to risk and fear of failure affect their entrepreneurial decisions and subsequent entrepreneurial behaviour (Lazarus, 1991; Cacciotti et al., 2020). Also, extant research has conceptualised the fear of failure from a trait-based approach, capturing a risk aversion (Arenius & Minniti, 2005; Bowmaker-Falconer, et al., 2022/2023); dispositional trait capturing loss aversion (Morgan & Sisak, 2016); as a state-based socially situated cognition (Cacciotti et al., 2016, 2020), a latent disposition representing a 'capacity for experiencing shame or humiliation as a consequence of failure' (Atkinson, 1966, p. 13) caused by fear-eliciting events (Stroe, Sirén, Shepherd & Joakim, 2020) or activated in reaction to obstacles or challenges (Kollmann et al., 2017) and threat and coping appraisal (Hunter et al., 2021) to understand why some people are less likely to start a business. In this study, fear of failure was conceptualised as a key emotion-based approach, suggesting this emotion is a mechanism that prevents potential entrepreneurs from acting on their entrepreneurial intentions and translating them into entrepreneurial action. Hence, this study contributes to the Appraisal Theory of Emotions by reinforcing the understanding of fear as an influencing emotion in entrepreneurship.

Regarding the practical and managerial implications, first, given that fear of failure is a negative emotion that prevents potential entrepreneurs from translating their intentions into actions, entrepreneurship educators and practitioners should include emotional regulation and fail-safe strategies as part of their curriculum. This should entail having an open discussion about the fear of failure by focusing on the positive side of fear and incorporating strategies to manage anxiety and stress, such as relaxation techniques, visualization practices, deep breathing exercises, and resilience tools to bounce back from setbacks, such as reframing failures as learning opportunities and fostering a growth mindset. Potential entrepreneurs should also conduct self-awareness exercises to identify their personal triggers for fear and develop coping mechanisms. Mindfulness exercises, identifying negative thought patterns, and journaling can be beneficial in this regard. By incorporating these strategies, entrepreneurship educators and practitioners can better prepare students to handle the emotional challenges of starting and running a business, ultimately increasing their chances of translating their entrepreneurial intentions into actions.

Second, given that this study revealed that women experience a greater fear of failure in terms of their personal ability to manage a business and potential of the idea, entrepreneurship educators and practitioners should include idea validation boot camps as part of their curriculum. Also, an idea refinement support group specifically targeting women should be developed. This will allow women to share ideas, receive feedback, and refine their business concepts.

The policy implications are twofold. First, given that financial resources are vital for starting and growing the business, policymakers can create grant and subsidy programs for potential

entrepreneurs who have passed the idea validation stage and provide them with grants and subsidies to start their businesses. This would help to reduce the fear of financial failure as they will be able to start the business without incurring the additional burden of repayment. Second, the government and policymakers should adopt the Quadruple Helix model, which involves collaboration between academia, industry, government, and civil society, as it can significantly facilitate access to resources for potential entrepreneurs. This approach would enable academic institutions to provide training research, and development while the private sector provides funding, mentorship, and market access to potential and existing entrepreneurs. Government policies should foster a supportive entrepreneurial environment, and civil society should provide community support. This view is echoed by Etzkowitz (2003, p. 295) which stated that “industry operates in the Triple helix as the locus of production; government as the source of contractual relations that guarantee stable interactions and exchange; the university as a source of new knowledge and technology, the generative principle of knowledge-based economies”.

6. Conclusions, Limitations and Future Research

This study offers new insights into the role of fear of failure in the entrepreneurial process. Also, the study offers insight into the role financial resources play in the association between fear of failure and entrepreneurial behaviour. Building on the theory of planned behaviour, resource-based view and the appraisal theory of emotions, the results showed that while fear of failure negatively influences entrepreneurial behaviour among university students, financial resources moderate this relationship. Also, it was established that women experience a greater fear of failure in terms of their personal ability to manage a business and potential for the idea. These findings offer theoretical, managerial and policy implications to entrepreneurship educators and practitioners, policymakers and the South African government on ways to foster entrepreneurial action and mitigate fear of failure. This study also presents some limitations which create a platform for future research. First, the study uses cross-sectional data amongst university students, and thus, future research could use longitudinal data amongst student entrepreneurs who are already running businesses to examine if the fear of failure decreases with an increase in financial resources over time and whether the type of fear of failure they experience changes over time. Second, this study conceptualised that fear of failure has a negative association with entrepreneurial action, future research should also explore the positive effect of fear of failure amongst students and student entrepreneurs. Third, future studies should include other moderators and mediators on the fear of failure and entrepreneurial action nexus considering that fear of failure is continuously highlighted in South Africa and nationwide as one of the key impediments to entrepreneurial behaviour.

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