

Entrepreneurial Intentions: Analyzing Sociocultural and Perceptual Influences Using the Theory of Planned Behavior

Suchart Tripopsakul*

School of Entrepreneurship and Management, Bangkok University, Bangkok, Thailand. *Email: suchart.t@bu.ac.th

Received: 05 November 2024

Accepted: 18 February 2025

DOI: <https://doi.org/10.32479/irmm.17947>

ABSTRACT

This study examines how sociocultural and perceptual factors influence entrepreneurial intentions using the Theory of Planned Behavior (TPB). Based on 2,000 samples of Thai people aged between 18 and 64 years old from the Global Entrepreneurship Monitor (GEM) data in 2024, the study included a wide range of socio-cultural and perceptual factors related to entrepreneurship. Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to verify the proposed hypotheses about the factors influencing entrepreneurial intention. The result revealed that opportunity recognition, a desirable career choice, a high level of successful entrepreneurs' status, and self-confidence in their skills positively influence entrepreneurial intention. On the other hand, fear of failure negatively affects entrepreneurial intention. The results of the multi-group analysis show notable variations in the influence of fear of failure on entrepreneurial ambition among various demographic groups, particularly between genders and educational levels. This study enhances comprehension of how different circumstances and demographic traits influence entrepreneurial goals, offering significant insights for policymakers and educators seeking to promote entrepreneurial engagement.

Keywords: Entrepreneurial Intention, Global Entrepreneurship Monitor, Theory of Planned Behavior, Thailand

JEL Classifications: L26, M13, J24

1. INTRODUCTION

Entrepreneurs are essential for a nation's economic and social progress (Bosma et al., 2018). Research supports the positive relationship between entrepreneurship and economic growth (Wennekers and Thurik, 1999; Savrul, 2017). According to scholars, entrepreneurs are individuals or groups seeking new business opportunities and are willing to take risks, innovate, and solve problems. In Thailand, entrepreneurs, usually small or medium business owners, substantially influence the economy and society. Thailand had around 3.19 million micro, small, and medium-sized enterprises (MSMEs) 2022, representing 99.5% of all businesses. There were 2,727,186 microenterprises (85.6%), 416,628 small enterprises (13.1%), and 43,564 medium enterprises. MSMEs comprise 70% of Thailand's workforce (Office of Small and Medium Enterprises Promotion, 2023). Given the critical role of entrepreneurship in Thailand's economic structure, understanding

the dynamics that influence entrepreneurial intentions among its population can provide valuable insights. These insights can inform policymakers and educators about crafting strategies that promote entrepreneurship and ensure a supportive ecosystem for aspiring entrepreneurs.

Entrepreneurship is crucial for economic advancement and employment generation, particularly in developed nations. Our comprehension of the traits that promote entrepreneurship in developing nations is still lacking. Prior studies have sought to explore psychological aspects that impact entrepreneurial intention. Ajzen (1991) and Shapero and Sokol (1982) are widely acknowledged and frequently applied models in research on entrepreneurial intention. Entrepreneurial intention arises from the perceived feasibility and desire. The antecedents of Ajzen's Theory of Planned Behavior (1991) include personal attitude toward entrepreneurship (PA), subjective norms (SN), and perceived

behavioral control (PBC). Based on TPB, the perceived desirability of entrepreneurship is affected by personal attitudes and subjective norms, and perceived feasibility (i.e., perceived behavioral control) is the same as perceived behavioral control (PBC). Prior studies have shown that demographic characteristics such as gender inequalities and educational level impact entrepreneurship.

Motivations for entrepreneurial behavior have recently emerged as a key area of research in the increasingly globalized world economy in which entrepreneurship plays an important role in economic growth and innovation. It is, therefore, important to understand what motivates people in emerging economies to start their own businesses. This research investigates the multi-dimensional network of socio-cultural and perceptual factors that can influence entrepreneurial intention and applies them in Thailand. Intentions express a mental condition of possible action in the future, and entrepreneurial intention is the intention to start a new business. The Theory of Planned Behavior (TPB) is widely used in entrepreneurship research to investigate and explain the relationship between behavior and intention. The TPB argues that attitudes, subjective norms, and perceived behavioral control influence entrepreneurial behavior. Business research heavily relies on this framework because of its robust predictive capabilities and capacity to incorporate many psychological and social aspects. The research utilizes data from the Global Entrepreneurship Monitor (GEM) 2024, gathered from a sample of 2,000 individuals in Thailand aged between 18 and 64. This study seeks to confirm assumptions about how opportunity awareness, fear of failure, the public perception of successful entrepreneurs, and personal self-confidence influence individuals' entrepreneurial inclinations. The study examines how these effects fluctuate among various demographic groups, especially regarding gender and educational achievement, offering a detailed insight into the determinants influencing entrepreneurship in Thailand. The rest of this paper is organized as follows: Section 2 reviews the literature about the Theory of Planned Behavior (TPB), entrepreneurial intention, attitude towards a behavior, subjective norms, perceived behavior control, and the hypothesis's development. Section 3 describes the research methodology. Section 4 is the results of this study. Section 5 is the discussion. Section 6 is the conclusions. Section 7 is the limitation and future recommendation.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

This study applies the Theory of Planned Behavior (TPB) to investigate entrepreneurial intentions in initiating new businesses in Thailand. This theory is the fundamental framework for analyzing entrepreneurial views and intents to initiate a firm. Ajzen (1991) emphasized that the Theory of Planned Behavior (TPB) is recognized for its ability to predict and explain human behavior, especially by studying individuals' intentions to acquire specific attitudes. This literary domain provides a comprehensive elucidation of TPB. Along with reviewing relevant theory and literature, a new independent variable, the image of entrepreneurship, is introduced based on previous research (Rasli et al., 2013; Asimakopoulos et al., 2019; Laguía and Moriano, 2021).

2.1. Theory of Planned Behavior (TPB)

The Theory of Reasoned Action is a widely utilized intention-based theory that elucidates intention by integrating subjective norms of influential individuals and personal attitudes towards the activity as elements that impact intention. The Theory of Planned Behavior (TPB) is an enhanced iteration of the Theory of Reasoned Action, incorporating the supplementary factor of perceived behavioral control (PBC) (Ajzen, 1991). The Theory of Planned Behavior (TPB) is extensively used in other academic disciplines besides entrepreneurship studies and has great potential for further investigation in this sector. The TPB is a commonly utilized theory across various fields to anticipate and explain behavior in certain settings (Ajzen, 1991; Sabah, 2016). The entrepreneurship study is also based on the idea that being an entrepreneur is a deliberate action, where intention is considered a cognitive state. Decisions faced by entrepreneurs are believed to be more difficult than those faced by employees and, therefore, are expected to involve more deliberate cognitive processes. Cognition may be more directly related to behavior than personal traits or even demographic studies (Sabah, 2016; Agu, 2021). The findings from our earlier study suggest that the theory of planned behavior provides a good framework for entrepreneurship research. Intention-focused entrepreneurship studies are becoming increasingly popular.

2.2. Entrepreneurial Intention, Attitude towards a Behavior, Subjective Norms, and Perceived Behavior Control

Bandura (2001) recognizes intentionality and forethought as fundamental characteristics of human beings. The intention is a representation of a future course of action. It influences a person's decisions and regulates their actions. Previous research in several fields, such as health-related behavior, voting behavior, spare-time activity, and job hunting, has shown that purpose strongly influences behavior. Entrepreneurial intention is the deliberate mental state that comes before acting and focuses on a goal, like initiating a new firm (Krueger and Carsrud, 1993). The initial stage in creating a new business endeavor is consciously pursuing an entrepreneurial career (Gartner et al., 1994). Various models attempt to elucidate entrepreneurial goals, including the Entrepreneurial Event Model by Shapero and Sokol (1982) and the Maximization of the Expected Utility by Douglas and Shepherd (2002). But despite providing an important step forward in research on entrepreneurial behavior, these models have not resulted in an enduring position of influence comparable to the TPB (Moriano et al., 2012). Accordingly, TPB affords a comprehensive and widely applicable theoretical framework for understanding and predicting entrepreneurial intention by examining human and social factors (Al-Mamary et al., 2020; Robledo et al., 2015). Personal history, qualities, talents, and social setting (social support and culture) can influence individuals' entrepreneurial intentions. Only the three components of the TPB - attitude toward behavior, subjective standards, and perceived behavioral control - directly predict behavioral intentions, according to the TPB. All other elements are believed to impact intent through these three components.

Attitude towards a behavior is the extent to which a person has a positive or negative evaluation of the activity being considered (Ajzen, 1991). Within entrepreneurship, the attitude toward

self-employment is characterized as the variance in views regarding the appeal of pursuing self-employment vs. traditional employment within a company (Souitaris et al., 2007). Liñán and Chen (2009) define attitude toward start-ups as the individual's positive or negative personal appraisal of being an entrepreneur. Theorists have proposed differentiation between two aspects of attitude: affective/experiential attitude, which involves emotions and motivations related to behavior, and instrumental/cognitive attitude, which involves beliefs, thoughts, and rational reasoning (Vamvaka et al., 2020). Individuals with optimistic personal attitudes are more inclined to have more entrepreneurial intent than those with a pessimistic view. Elements such as individual personalities, abilities, competencies, demography, and the social and external environment can influence positive or negative attitudes (Krueger Jr. et al., 2000). The fear of failure emerges over time through the examination of achievement motivation. People have an innate tendency to avoid failure. Fear of failure is defined as an individual's internal apprehension when they believe they may not attain a specific goal (Kong et al., 2020). The fear of failure is the antithesis of the desire for success and the drive to evade the consequences of failure. Many individuals find that the dread of failure is inevitable. Fear of failure frequently influences people, leading them to postpone pursuing goals if they cannot guarantee success (Ajzen, 1991). Uncertainty and a tendency to avoid risks strongly correlate with the fear of failure. Lipshitz and Strauss (1997) suggest that uncertainty is a form of sensory doubt that might impede or postpone behavior. Uncertainties in business can cause hesitancy and procrastination, harming entrepreneurial action. Risk aversion can also stem from a fear of failure. The more risk-averse a person is, the more fearful they are of failing. Entrepreneurs tend to prefer engaging in activities involving moderate or less risk. Liu et al. (2021) contended that several prospective entrepreneurs refrain from initiating a firm due to apprehension of the many risks associated with business failure. Entrepreneurship requires securing cash, human resources, and equipment during the preparatory phase while simultaneously encountering many hurdles and crises at any given moment. Depending on their capabilities and the potential risk of failure, the number of individuals initiating a business venture may significantly decrease. This study puts forth the following hypotheses:

- H₁: Perception of opportunity recognition is positively correlated with entrepreneurial intention.
 H₂: Fear of failure is negatively correlated with entrepreneurial intention.

The Theory of Planned Behaviors' second element is the subjective norm, an individual's perception of societal expectations influencing decision-making in behavior. This indicator focuses on individuals' involvement in entrepreneurial activity and their perceptions of social groupings, including family, friends, and others. A social group's influence to encourage or discourage entrepreneurial action is the subjective norm (Paranata et al., 2023). Subjective norms refer to a person's perception of the opinions of social reference groups about whether they should start a business (Ajzen, 1991). According to the TPB model, experts suggest that when a person's reference group holds a positive perspective of entrepreneurship, the person is more likely

to obtain support from this group, leading to a greater ambition to start a firm. Many empirical studies have examined the linkage between subjective norms and entrepreneurial intention (Pham et al., 2023). Subjective norms positively influence entrepreneurial intention (Heuer and Liñán, 2013; Santos and Liguori, 2020). In addition, several scholars proposed that the relationship between subjective norms and the intention to establish a business is not straightforward, as some intervening elements play a mediating or moderating role in this relationship (Liñán et al., 2011; Shahab et al., 2019). Drawing from this premise, we propose the following hypotheses:

- H₃: High status and respect of successful entrepreneurs are positively correlated with entrepreneurial intention.
 H₄: Considering starting a new business, a desirable career choice positively correlates with entrepreneurial intention.

Perceived behavior control is influenced by human capital, encompassing the individual's professional skills, entrepreneurial skills, experience, and personality qualities (Ajzen, 1991). Entrepreneurial ability refers to the necessary knowledge and abilities for entrepreneurship, including management, negotiation, marketing, finance, and law. Practical experience pertains to an individual's hands-on expertise in an industry, entrepreneurship, or commercial endeavors. Perceived Behavioral Control (PBC) refers to an individual's belief in their ability to perform a behavior (Ajzen, 1991). In the context of entrepreneurship, it involves the belief in one's ability to start and manage a business. The TPB posits that an individual's behavior is driven by behavioral intentions, which are a function of the individual's attitude towards the behavior, subjective norms, and perceived behavioral control. In entrepreneurship, perceived behavioral control can directly influence the intention to engage in entrepreneurial activities. Ajzen (2002) first viewed PBC as a one-dimensional concept, closely resembling Bandura's (1982) social learning theory of self-efficacy, which refers to an individual's belief in their ability to perform actions needed to handle future events. Several researchers have replaced PBC with self-efficacy in their studies because they believe they are comparable variables. Drawing from this premise, we propose the following hypotheses:

- H₅: Self-confidence of skill is positively correlated with entrepreneurial intention.

2.3. Gender and Education

An extensive study has been conducted on the relationship between education and entrepreneurial activity, but further investigation is needed to understand the effect of education on entrepreneurial perceptions (İlhan Ertuna, and Gurel, 2011). Some studies argue that formal education reduces an individual's entrepreneurial drive, such as Ahn and Winters (2023), while others contend that people's entrepreneurial aspirations grow with education, such as Davidsson (1995). Goedhuys and Sleuwaegen (2000) found that, whereas primary education does not strongly influence the likelihood of becoming an entrepreneur, this influence grows more pronounced with higher levels of education and eventually becomes significant. Davidsson and Honig (2003) assert that the education level's impact is inconsistent. Individuals with primary education show a negative deviation, but university education has a beneficial influence. Advanced business education appears

to enhance an individual's inclination toward entrepreneurship. Enhancing individuals' learning abilities through formal education also boosts entrepreneurial effectiveness and the successful expansion of firms. Robinson and Sexton (1994) found a correlation between higher levels of formal education and a higher likelihood of self-employment. Wu and Wu (2008) found that individuals with a diploma and undergraduate degree are more interested in starting a business than those with a postgraduate degree. Researchers suggest that people with higher levels of education may possess superior external opportunities, leading to reduced interest in entrepreneurship. Kirby and Ibrahim (2011) argue that universities and business schools must significantly shift their intellectual and instructional emphasis to cultivate entrepreneurs. Differences in entrepreneurial attitudes, intentions, and behavior between men and women stem from variations in social orientation and behavioral drive (Koellinger et al., 2013). Males expected to exhibit agentic traits, may rely more on their beliefs when developing entrepreneurial intentions. In contrast, females expected to exhibit communal traits may rely less on their own judgments and instead consider the opinions of their families and other significant individuals when deciding to start a new business. Therefore, according to the Theory of Planned Behavior (TPB), subjective norms, representing perceived social pressure, are likely to be more influential in predicting behavioral intentions in women compared to men. On the other hand, personal attitudes, reflecting instrumental outcomes associated with being an entrepreneur, are expected to be more significant predictors of behavioral intentions in men than in women. Men may exhibit a more favorable disposition towards entrepreneurship than women, possibly influenced by societal norms and gender stereotypes. This could result in a more pronounced connection between men's attitudes towards entrepreneurship and their inclination to pursue it (Langowitz and Minniti, 2007). Social and familial expectations, influenced by societal norms and pressures, impact women's entrepreneurial ambitions when they pursue entrepreneurship (Gupta et al., 2009). Women may need a greater perceived level of behavioral control to overcome obstacles and societal norms in order to participate in entrepreneurship, leading to a potentially larger connection between perceived behavioral control and entrepreneurial intention in women compared to men (Verheul et al., 2005). We propose the following hypotheses based on this premise.

- H₆: Gender moderates the effects of attitudes towards behavior, subjective norms, and perceived behavioral control on entrepreneurial intentions.
- H₇: Education moderates the effects of attitudes towards behavior, subjective norms, and perceived behavioral control on entrepreneurial intentions.

The conceptual framework of this study is illustrated in Figure 1.

3. RESEARCH METHODOLOGY

The data for this study was obtained from the Global Entrepreneurship Monitor (GEM) in 2024. The Adult Population Survey (APS), conducted by the GEM, is an extensive research tool used to analyze the characteristics, motivations, and ambitions of individuals engaging in entrepreneurship. This research utilized

survey data from a sample population of 2,000 working-age Thais (18-64 years) involved in entrepreneurial activities. It drew on data from the Global Entrepreneurship Monitor (GEM) 2024, with Bangkok University participating as a Thai member since 2011, allowing access to data for academic purposes in Thailand. The project aimed to study and assess entrepreneurial levels globally and societal entrepreneurship in countries, focusing on entrepreneurs' attitudes, activities, and aspirations. The Adult Population Survey (APS) employed questionnaires and the SMART PLS program for statistical analysis. The GEM's APS used multi-stage sampling, dividing Thailand into urban and rural areas, further segmented into the North, Northeast, East, and South regions. Data collection in urban areas was done through telephone and face-to-face interviews in rural areas. Proportional stratified random sampling determined sample sizes, reflecting the population distribution.

The Global Entrepreneurship Monitor (GEM) survey includes sections that inquire about attitudes on various topics, which can be used to analyze entrepreneurial intention (Reynolds, 2017). Table 1 illustrates the variables used in this study.

4. RESULTS

4.1. Sample Profile

As stated earlier, this study's data are derived from GEM Thai APS Individual-Level data in 2024. The brief demographic profile of the sample is represented in Table 2.

4.2. Hypotheses Testing

Partial Least Squares Structural Equation Modeling (PLS-SEM) tests the proposed hypotheses. Partial Least Squares Structural Equation Modeling (PLS-SEM) has been a widely used statistical method recently. The rising popularity of the method is attributed to its capacity to facilitate the creation of concise predictive research models. Partial Least Squares Structural Equation Modeling (PLS-SEM) employs a variance-based approach and relaxes requirements regarding sample size, number of indicators, and data normality. PLS-SEM enables theory creation that is both possible and applicable across many study environments (Hair Jr. et al., 2014). Utilizing single-item constructs in a study can streamline the measurement process and may alleviate the need to address traditional reliability and validity issues typically associated with multi-item constructs since all our study variables contain only single-item constructs. The reliability and validity issues are achieved and proceed to the structural model evaluation.

Before evaluating the structural model, it is crucial to confirm the absence of collinearity in the inner model of the research. Table 3 displays the results of the collinearity test for the model. The VIF values below 5.0 for each construct indicate that collinearity is not an issue (Diamantopoulos and Siguaw, 2006).

The structural model indicates the causal relationships among the constructs in the model, which include the estimates of the path coefficients and the R² value, which determine the model's predictive power. Compiling the R² and path coefficients shows how well the data supports the hypothesized model. Table 4 shows the

Figure 1: Conceptual framework of this study

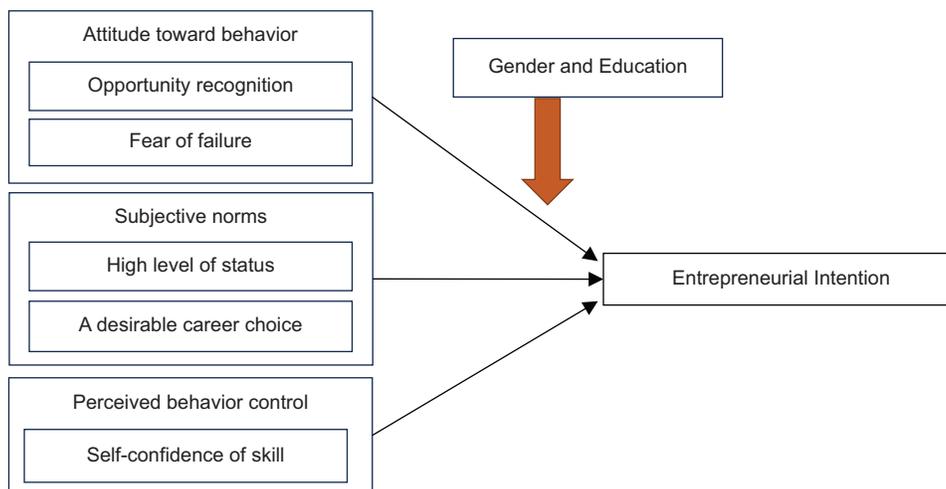


Table 1: Data and research variables

Name	Type	GEM source	Definition
Dependent variable			
Entrepreneurial intention	Dichotomous	FUTSUP23	Are you, alone or with others, expecting to start a new business, including any self-employment, within the next three years? (0=No, 1=Yes)
Independent variables			
Opportunity recognition	Continuous	OpportL	In the next six months, there will be good opportunities for starting a business in the area where you live. (1=strongly disagree, 5=Strongly agree)
Fear of failure	Continuous	FearfailL	You would not start a business for fear it might fail. (1=strongly disagree, 5=Strongly agree)
High level of status	Continuous	NbstatusL	In my country, those successful at starting a new business have high status and respect. (1=strongly disagree, 5=Strongly agree)
A desirable career choice	Continuous	NbgoodcL	In my country, most people consider starting a new business a desirable career choice. (1=strongly disagree, 5=Strongly agree)
Self-confidence of skill	Continuous	SuskillL	You have the knowledge, skill, and experience required to start a new business. (1=strongly disagree, 5=Strongly agree)
Moderating variables			
Gender	Dichotomous	Gender	What is your gender? (1=Male, 2=Female)
Education	Categorical	GEMEDUC	GEM harmonized educational attainment (Some Secondary, Secondary Degree, Post Secondary, Grad Exp)

Table 2: Demographics of samples in this study

Item	n	%
Gender		
Male	987	49.4
Female	1,013	50.6
Ages		
18-24	260	13.0
25-34	433	21.7
35-44	443	22.2
45-54	466	23.3
55-64	398	19.9
Family members		
1-2	250	12.5
3-4	1,029	51.5
5-6	614	30.7
More than 6	107	5.4
Education		
None	223	11.2
Some Secondary	285	14.2
Secondary Degree	495	24.8
Post-secondary	948	47.4
Grad Exp	49	2.5

Missing data were not included and calculated percentages

Table 3: Collinearity assessment

Variables	Indicators	VIF
Opportunity recognition	OpportL	1.121
Fear of failure	FearfailL	1.119
High level of status	NbstatusL	1.130
A desirable career choice	NbgoodcL	1.108
Self-confidence of skill	SuskillL	1.023

results of testing the hypotheses, which indicated significance for all hypotheses. Opportunity recognition (OR) has a positive effect on entrepreneurial intention (EI) (H_1 ; $\beta = 0.095$, t -value = 9.741, $\text{sig} < 0.001$). Fear of failure (FF) harms entrepreneurial intention (EI) (H_2 ; $\beta = -0.073$, t -value = 6.600, $\text{sig} < 0.001$). A high level of status (HS) has a positive effect on entrepreneurial intention (EI) (H_3 ; $\beta = 0.035$, t -value = 3.041, $\text{sig} < 0.01$). A desirable career choice (DC) has a positive effect on entrepreneurial intention (EI) (H_4 ; $\beta = 0.054$, t -value = 3.158, $\text{sig} < 0.01$). Self-confidence of skill (SS) has a positive effect on entrepreneurial intention (EI) (H_5 ; $\beta = 0.119$, t -value = 11.220, $\text{sig} < 0.001$). Therefore, H_1 - H_5 are supported.

To test the moderation effect of gender and education on the relationships among antecedent variables (opportunity recognition [OR], fear of failure [FF], high level of status [HS], a desirable career choice [DC], and self-confidence of skill [SS]) to entrepreneurial intention (EI), the moderating variables of education were initially converted into binary variables by the authors (high vs. low education level). No education attainment, some secondary and secondary degrees received a low classification. On the one hand, we classified post-secondary and graduate experience as high.

The multi-group analysis using MGA-PLS detects a statistically significant difference between males and females (Diff Male vs. Female = -0.129, $P < 0.01$) in the relationship of fear of failure (FF) to entrepreneurial intention (EI) and a statistically significant difference between high and low education attainment (Diff High vs. Low = -0.217, $P < 0.001$) in the relationship of fear of failure (FF) to entrepreneurial intention (EI). That is to say, the effect of fear of failure on entrepreneurial intention seems to be statistically significantly lower for males than females, and the high education attainment group possesses a statistically significantly lower level of fear of failure than the low education attainment group. Table 5 details these results. Therefore, H6 and H7 are partially supported.

5. DISCUSSION

This study aims to investigate the factors that influence entrepreneurial inclination and how gender disparities and educational achievement moderate these effects. Based on the samples of 2,000 Thai people obtained from the Adult Population Survey (APS) data from the Global Entrepreneurship Monitors

(GEM) project in 2024, the PLS-SEM was used to verify our proposed hypotheses. The results revealed that the range of sociological and perception factors toward entrepreneurship are significant antecedents for predicting the degree of entrepreneurial intention. The positive and significant relationship suggests that recognizing opportunities strongly predicts entrepreneurial intention. This finding supports the notion that individuals who perceive viable opportunities are more likely to intend to engage in entrepreneurial activities (Hu et al., 2018; Yan et al., 2018). High level status of successful entrepreneurs also significantly affects entrepreneurial intention. It supports the idea that individuals who value status may see entrepreneurship to achieve or maintain their social standing. This finding is consistent with previous studies by Heuer and Liñán (2013) and Santos and Liguori (2020) that subjective norms positively influence entrepreneurial intention. The social status of successful entrepreneurs can significantly influence others' intentions to engage in entrepreneurship. High-status individuals often serve as role models, demonstrating the potential rewards of entrepreneurial success and motivating others to pursue similar paths.

The positive coefficient of desirable career choice confirms that viewing entrepreneurship as a desirable career influences individuals' intention to become entrepreneurs. This result aligns with the study of Liguori et al. (2020) and Yildiz (2018) that perceiving entrepreneurship as a desirable career significantly influences individuals' intentions to embark on entrepreneurial ventures. The most substantial positive relationship was between self-confidence in skills and entrepreneurial intention, emphasizing the importance of self-efficacy. Individuals confident in their skills are more likely to aspire to engage in entrepreneurial activities. This finding is consistent with prior studies by Gelaidan and Abdullateef (2017) and Garaika et al. (2019) that found that self-efficacy influences entrepreneurial intention. Self-efficacy is a pivotal factor in entrepreneurial intention, suggesting that individuals who perceive themselves as competent are more likely to consider and pursue entrepreneurial activities. This correlation can be partly explained by the fact that confident individuals tend to set higher goals, remain committed to their objectives, and persevere longer under challenging circumstances, all essential for entrepreneurial success. The negative effect of fear of failure indicates that fear of failure decreases entrepreneurial intention. This is consistent with existing literature suggesting that the fear of potential failure can deter individuals from pursuing entrepreneurial ventures. Fear of facing societal repercussions due to failure may hinder self-assured aspiring entrepreneurs from pursuing their goals (Ng and Jenkins, 2018). It diminishes entrepreneurial aspirations, indicating that this feeling is a barrier that stops future entrepreneurs from pursuing their entrepreneurial goals (de Sousa-Filho et al., 2023).

The results of the multi-group study conducted indicate notable variations in the influence of fear of failure on entrepreneurial ambition among various demographic groups, particularly between genders and educational levels. These distinctions are essential for comprehending the fundamental psychological obstacles to entrepreneurship and can guide specific remedies. The greater sensitivity to fear of failure reported in females compared to males

Table 4: Path coefficient assessment

H	Relationship	Estimate (b)	Result
H ₁	Opportunity recognition (OR) → Entrepreneurial intention (EI)	0.095***	Supported
H ₂	Fear of failure (FF) → Entrepreneurial intention (EI)	-0.073***	Supported
H ₃	High level of status (HS) → Entrepreneurial intention (EI)	0.035**	Supported
H ₄	A desirable career choice (DC) → Entrepreneurial intention (EI)	0.054**	Supported
H ₅	Self-confidence of skill (SS) → Entrepreneurial intention (EI)	0.119***	Supported

Table 5: Results of MGA-PLS across types

Relationships	Diff male versus female	Result	Diff high versus low	Result
OR → EI	0.025 ^{ns}	Not supported	0.013 ^{ns}	Not supported
FF → EI	-0.129**	Supported	-0.217***	Supported
HS → EI	0.072 ^{ns}	Not supported	-0.051 ^{ns}	Not supported
DC → EI	-0.029 ^{ns}	Not supported	0.026 ^{ns}	Not supported
SS → EI	0.035 ^{ns}	Not supported	-0.042 ^{ns}	Not supported

*** $P < 0.001$; ** $P < 0.01$; * $P < 0.05$; ns: Non-significant

regarding gender implies that societal, cultural, or biological variables may impact women's views and responses to probable entrepreneurial failure. This heightened fear may dissuade women from engaging in entrepreneurial endeavors despite possessing comparable qualities and opportunities to males. To tackle this difficulty, customized educational and support initiatives should be implemented to enhance confidence and resilience, targeting women who aspire to be entrepreneurs. Initiatives may include mentorship programs, networking opportunities, and workshops to cultivate a growth attitude and resilience. The evidence implies that those with greater education levels may have better cognitive abilities to manage risk and failure, leading to decreased fear of failure. This may be due to the problem-solving abilities, critical thinking, and potential exposure to entrepreneurial concepts that are typically offered by higher education. Improving access to high-quality education and integrating entrepreneurial training into the curriculum are important tactics for decreasing the fear of failure among aspiring entrepreneurs.

6. CONCLUSIONS, LIMITATION AND FUTURE RECOMMENDATION

This study's findings have important implications for politicians and educators seeking to promote entrepreneurial activity. Educational and training programs should aim to boost self-efficacy and skills confidence in aspiring entrepreneurs. Engaging in practical, hands-on experiences to test and improve entrepreneurship abilities can be highly successful. These programs can alleviate the fear of failure by creating a supportive setting that sees failure as a chance to learn rather than a hindrance. Promoting successful entrepreneurial role models may be an effective tactic due to the influence of societal status and view of entrepreneurship as a desired career choice. Policymakers should implement programs that emphasize the accomplishments of various entrepreneurs, demonstrating entrepreneurship as an attainable and respected career choice for a broad range of people, especially those from marginalized communities. Recognizing that gender gaps and educational attainment can influence entrepreneurial goals highlights the necessity for specific support. Specialized programs targeting obstacles encountered by women and other marginalized communities could assist in equalizing opportunities in entrepreneurship. This could include providing mentorship opportunities, organizing networking events, and granting access to financing designed expressly for these groups. The detrimental impact of fear of failure on entrepreneurial intention emphasizes the necessity for a cultural change in the perception of failure within the entrepreneurial ecosystem. Encouraging a culture that promotes risk-taking and sees failure as a natural part of the learning process might help reduce this obstacle. Public discourse, media, and educational reforms can promote the importance of tenacity and learn from mistakes in entrepreneurship. These findings indicate that a comprehensive strategy incorporating education, cultural shifts, and supportive policies can greatly improve the entrepreneurial environment, motivating more people to pursue entrepreneurial endeavors with assurance and perseverance.

This study has certain limitations. Firstly, it includes its reliance on self-reported data from the Global Entrepreneurship Monitor (GEM), which may introduce response biases. The cross-sectional design also limits the ability to establish causality between the factors studied and entrepreneurial intentions. Secondly, the findings, focused solely on Thai participants, might not be generalizable to other cultural or economic contexts. Future research could benefit from longitudinal studies to track changes in entrepreneurial intentions over time and the use of qualitative methods to gain deeper insights into individual motivations and experiences. Expanding the research to different cultural settings and using experimental designs to test specific interventions could also enhance understanding and provide more robust data for developing effective entrepreneurial support programs. Examining other demographic variables could offer further insights into the diverse factors influencing entrepreneurship across different population segments.

REFERENCES

- Agu, A.G. (2021), A survey of business and science students' intentions to engage in sustainable entrepreneurship. *Small Enterprise Research*, 28(2), 206-227.
- Ahn, K., Winters, J.V. (2023), Does education enhance entrepreneurship? *Small Business Economics*, 61(2), 717-743.
- Ajzen, I. (1991), The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Ajzen, I. (2002), Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1. *Journal of Applied Social Psychology*, 32(4), 665-683.
- Al-Mamary, Y.H.S., Abdulrab, M., Alwaheeb, M.A., Alshammari, N.G.M. (2020), Factors impacting entrepreneurial intentions among university students in Saudi Arabia: Testing an integrated model of TPB and EO. *Education Training*, 62(7/8), 779-803.
- Asimakopoulos, G., Hernández, V., Peña Miguel, J. (2019), Entrepreneurial intention of engineering students: The role of social norms and entrepreneurial self-efficacy. *Sustainability*, 11(16), 4314.
- Bandura, A. (1982), The assessment and predictive generality of self-percepts of efficacy. *Journal of Behavior Therapy and Experimental Psychiatry*, 13(3), 195-199.
- Bandura, A. (2001), Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), 1-26.
- Bosma, N., Content, J., Sanders, M., Stam, E. (2018), Institutions, entrepreneurship, and economic growth in Europe. *Small Business Economics*, 51, 483-499.
- Davidsson, P. (1995), Culture, structure and regional levels of entrepreneurship. *Entrepreneurship and Regional Development*, 7(1), 41-62.
- Davidsson, P., Honig, B. (2003), The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301-331.
- De Sousa-Filho, J.M., De Souza Lessa, B., Garcia-Salirrosas, E.E., De Carvalho Castro, J.L. (2023), The role of fear of failure on students' entrepreneurial intentions in Latin America. *The International Journal of Management Education*, 21(3), 100880.
- Diamantopoulos, A., Siguaw, J.A. (2006), Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management*, 17(4), 263-282.
- Douglas, E.J., Shepherd, D.A. (2002), Self-employment as a career choice: Attitudes, entrepreneurial intentions, and utility maximization.

- Entrepreneurship Theory and Practice, 26(3), 81-90.
- Garaika, G., Margahana, H. M., & Negara, S. T. (2019). Self efficacy, self personality and self confidence on entrepreneurial intention: study on young enterprises. *Journal of Entrepreneurship Education*, 22(1), 1-12.
- Gartner, W.B., Shaver, K.G., Gatewood, E., Katz, J.A. (1994), Finding the entrepreneur in entrepreneurship. *Entrepreneurship Theory and Practice*, 18(3), 5-9.
- Gelaidan, H. M., & Abdullateef, A. O. (2017). Entrepreneurial intentions of business students in Malaysia: The role of self-confidence, educational and relation support. *Journal of small business and Enterprise Development*, 24(1), 54-67.
- Goedhuys, M., Sleuwaegen, L. (2000), Entrepreneurship and growth of entrepreneurial firms in Côte d'Ivoire. *The Journal of Development Studies*, 36(3), 123-145.
- Gupta, V. K., Turban, D. B., Wasti, S. A., & Sikdar, A. (2009). The role of gender stereotypes in perceptions of entrepreneurs and intentions to become an entrepreneur. *Entrepreneurship theory and practice*, 33(2), 397-417.
- Hair, J.F. Jr., Sarstedt, M., Hopkins, L., Kuppelwieser, V.G. (2014), Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106-121.
- Heuer, A., Liñán, F. (2013), Testing alternative measures of subjective norms in entrepreneurial intention models. *International Journal of Entrepreneurship and Small Business*, 19(1), 35-50.
- Hu, R., Wang, L., Zhang, W., Bin, P. (2018), Creativity, proactive personality, and entrepreneurial intention: The role of entrepreneurial alertness. *Frontiers in Psychology*, 9, 951.
- İlhan Ertuna, Z., & Gurel, E. (2011). The moderating role of higher education on entrepreneurship. *Education+ training*, 53(5), 387-402.
- Kirby, D. A., & Ibrahim, N. (2011). Entrepreneurship education and the creation of an enterprise culture: Provisional Results from an experiment in Egypt. *International Entrepreneurship and Management Journal*, 7, 181-193.
- Koellinger, P., Minniti, M., Schade, C. (2013), Gender differences in entrepreneurial propensity. *Oxford Bulletin of Economics and Statistics*, 75(2), 213-234.
- Kong, F., Zhao, L., Tsai, C.H. (2020), The relationship between entrepreneurial intention and action: The effects of fear of failure and role model. *Frontiers in Psychology*, 11, 229.
- Krueger, N.F. Jr., Reilly, M.D., Carsrud, A.L. (2000), Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5-6), 411-432.
- Krueger, N.F., Carsrud, A.L. (1993), Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship Regional Development*, 5(4), 315-330.
- Laguía, A., & Moriano, J. A. (2021). Perceived representation of entrepreneurship in the mass media and entrepreneurial intention. *International entrepreneurship and management journal*, 17(1), 401-421.
- Langowitz, N., Minniti, M. (2007), The entrepreneurial propensity of women. *Entrepreneurship Theory and Practice*, 31(3), 341-364.
- Liguori, E., Winkler, C., Vanevenhoven, J., Winkel, D., James, M. (2020), Entrepreneurship as a career choice: Intentions, attitudes, and outcome expectations. *Journal of Small Business and Entrepreneurship*, 32(4), 311-331.
- Liñán, F., Chen, Y.W. (2009), Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617.
- Liñán, F., Rodríguez-Cohard, J.C., Rueda-Cantuche, J.M. (2011), Factors affecting entrepreneurial intention levels: A role for education. *International Entrepreneurship and Management Journal*, 7, 195-218.
- Lipshitz, R., Strauss, O. (1997), Coping with uncertainty: A naturalistic decision-making analysis. *Organizational Behavior and Human Decision Processes*, 69(2), 149-163.
- Liu, X., Zhang, Y., Fan, L. (2021), What prevent you from stepping into the entrepreneurship? Evidence from Chinese makers. *Chinese Management Studies*, 15(1), 68-85.
- Moriano, J. A., Gorgievski, M., Laguna, M., Stephan, U., & Zarafshani, K. (2012). A cross-cultural approach to understanding entrepreneurial intention. *Journal of career development*, 39(2), 162-185.
- Ng, L., Jenkins, A.S. (2018), Motivated but not starting: How fear of failure impacts entrepreneurial intentions. *Small Enterprise Research*, 25(2), 152-167.
- Office of Small and Medium Enterprises Promotion. (2023), Situation Report of MSMEs in 2023. Available from: https://old.sme.go.th/upload/mod_download/download-20230904173524.pdf
- Paranata, A., Muzayyanah, S., Trinh, T.H. (2023), Identification of factors influencing entrepreneurial behavior: Unveiling start-up business initiatives in Indonesia. *Humanities and Social Sciences Communications*, 10(1), 407.
- Pham, V.H., Nguyen, T.K.C., Nguyen, T.B.L., Tran, T.T.T., Nguyen, T.V.N. (2023), Subjective norms and entrepreneurial intention: A moderated-serial mediation model. *Journal of Entrepreneurship, Management and Innovation*, 19(1), 113-140.
- Rasli, A., Khan, S. U. R., Malekifar, S., & Jabeen, S. (2013). Factors affecting entrepreneurial intention among graduate students of Universiti Teknologi Malaysia. *International Journal of business and social science*, 4(2).
- Reynolds, P.D. (2017), Global Entrepreneurship Monitor (GEM) Program: Development, Focus, and Impact. In: *Oxford Research Encyclopedia of Business and Management*. Oxford: Oxford University Press.
- Robinson, P.B., Sexton, E.A. (1994), The effect of education and experience on self-employment success. *Journal of Business Venturing*, 9(2), 141-156.
- Robledo, J. L. R., Arán, M. V., Sanchez, V. M., & Molina, M. Á. R. (2015). The moderating role of gender on entrepreneurial intentions: A TPB perspective. *Intangible capital*, 11(1), 92-117.
- Sabah, S. (2016). Entrepreneurial intention: theory of planned behaviour and the moderation effect of start-up experience. *Entrepreneurship-practice-oriented perspectives*, 87-101.
- Santos, S.C., Liguori, E.W. (2020), Entrepreneurial self-efficacy and intentions: Outcome expectations as mediator and subjective norms as moderator. *International Journal of Entrepreneurial Behavior and Research*, 26(3), 400-415.
- Savrul, M. (2017), The impact of entrepreneurship on economic growth: GEM data analysis. *Journal of Management Marketing and Logistics*, 4(3), 320-326.
- Shahab, Y., Chengang, Y., Arbizu, A.D., Haider, M.J. (2019), Entrepreneurial self-efficacy and intention: Do entrepreneurial creativity and education matter? *International Journal of Entrepreneurial Behavior and Research*, 25(2), 259-280.
- Shapiro, A., Sokol, L. (1982), *The Social Dimensions of Entrepreneurship*. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship. Available from: <https://ssrn.com/abstract=1497759>
- Souitaris, V., Zerbinati, S., Al-Laham, A. (2007), Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, 22(4), 566-591.
- Vamvaka, V., Stoforos, C., Palaskas, T., Botsaris, C. (2020), Attitude toward entrepreneurship, perceived behavioral control, and entrepreneurial intention: Dimensionality, structural relationships, and gender differences. *Journal of Innovation and Entrepreneurship*, 9, 1-26.
- Verheul, I., Uhlaner, L., Thurik, R. (2005), Business accomplishments,

- gender and entrepreneurial self-image. *Journal of Business Venturing*, 20(4), 483-518.
- Wennekers, S., Thurik, R. (1999), Linking entrepreneurship and economic growth. *Small Business Economics*, 13, 27-56.
- Wu, S., Wu, L. (2008), The impact of higher education on entrepreneurial intentions of university students in China. *Journal of Small Business and Enterprise Development*, 15(4), 752-774.
- Yan, X., Gu, D., Liang, C., Zhao, S., Lu, W. (2018), Fostering sustainable entrepreneurs: Evidence from China college students “Internet Plus” innovation and entrepreneurship competition (CSIPC). *Sustainability*, 10(9), 3335.
- Yildiz, K. (2018), The effect of career decisions on entrepreneurial intention levels of university students studying sport sciences. *Journal of Education and Training Studies*, 6, 13-18.