

Impact of Entrepreneurial Competency, Entrepreneurial Mindset, and Self-Esteem on Entrepreneurial Intention with the moderating role of Self-Efficacy. Evidence from Pakistan.

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A B S T R A C T

Purpose- This study looks at the relationships among entrepreneurial competency, entrepreneurial mindset, and self-esteem on entrepreneurial intention with the moderating role of self-efficacy among university students in Pakistan.

Study Design/Methodology/Approach - To investigate the relationship between entrepreneurial competency, entrepreneurial mindset, self-esteem, and entrepreneurial intention, a 5-point Likert scale questionnaire was used to collect data from a sample of 216 students. The study employed a convenience sampling technique, and regression and correlation analyses were conducted for hypothesis testing. The collected data were analyzed using SPSS and Smart PLS.

Findings- The paper's findings show that it has a significant effect on entrepreneurial competency, mindset, and self-esteem and on entrepreneurial intention. Entrepreneurship orientation and creativity also positively impact entrepreneurial success. Furthermore, self-efficacy has positively moderated the relationship between entrepreneurial competency, mindset, self-esteem, and intention..

Practical Implications- In Pakistan, a developing country, this study provides evidence to families, educational institutions, and policymakers at the educational, cultural, and support levels on the importance of fostering self-esteem, self-efficacy, and a mindset that encourages the advancement of entrepreneurship. We discussed the practical implications of our findings.

Originality/Novelty - Previous studies have examined several variables that influence entrepreneurial intention. However, our research focuses on closely related topics that have not received much attention, particularly in the context of Pakistan. This study makes a significant contribution to the existing literature by providing empirical data in the areas mentioned above.

Keywords: Entrepreneurial Competency, Entrepreneurial Mindset, Self-Esteem, Self-Efficacy, Entrepreneurial Intention

1 | INTRODUCTION

One of the main drivers of economic growth is entrepreneurship, which is sparked by the recognition of entrepreneurial prospects and the assessment of one's entrepreneurial potential and results in the formation of new and creative companies ([Abu Bakar et al., 2017](#)). A nation's economic progress depends heavily on entrepreneurship, which also acts as an incubator for innovation and the creation of jobs ([Vodă & Florea, 2019](#)). The acts, attitudes, and activities of people in pursuit of business opportunities and goals are referred to as entrepreneurial intentions ([St-Jean & Labelle, 2018](#)). For developing nations to have access to high-quality education and the independence they need to prosper in the global economy, entrepreneurship may be crucial to attaining sustainable development goals ([Abbasi et al., 2023](#)).

Entrepreneurial intention is a psychological concept that refers to the subjective attitude of prospective entrepreneurs who plan to devote themselves to entrepreneurial activity ([Mei et al., 2017](#)). As a result, research and practice in a variety of domains have begun to pay greater attention to the study of entrepreneurial ambitions ([Dabbous & Boustani, 2023](#)). Although entrepreneurial intention is thought to be among the finest indicators of entrepreneurial execution, it is essential to the growth of entrepreneurship ([Hueso et al., 2021](#)). Due to their beneficial support of the financial sector [Cui et al. \(2021\)](#) and social benefits [Sutter et al. \(2019\)](#), these businesses have a significant impact on employment ([Ahmed et al., 2020](#)). They also sway lawmakers to embrace and support entrepreneurship activity ([Cui et al., 2021](#)). It is more likely for people who intend to start their own business to do so. The impulses that motivate people to become entrepreneurs are known as entrepreneurial motives, and they are one of the internal elements determining entrepreneurial intentions ([Wicaksono et al., 2024](#)). Individual-level core competencies were defined by [Lahti \(1999\)](#) as the integration of knowledge, skills, abilities, and other traits that are essential for an individual's success in many situations and within an organization. Competency is characterized as an individual's ability to perform well at work and as a strength that they possess ([García, 2008](#)). Self-esteem is essentially one's attitude toward oneself and is described as either positive or negative. It is an opinion on one's value based on a broad assessment of oneself ([Akbari et al., 2024](#)). The ability to quickly identify, act, and mobilize in highly unpredictable conditions can be defined as an entrepreneurial mindset ([McGrath & MacMillan, 2000](#)). The concept of a spirit of business acumen is typically understood as a cognitively grounded mode of thinking ([Naumann, 2017](#)).

Prior research has examined the influence of several elements, such as personal traits, on the emergence of entrepreneurial intentions ([Handayati et al., 2020](#)). Research on the psychological and individual factors that influence entrepreneurial intention is still lacking ([Akbari et al., 2024](#)). [Al-Ghazali et al. \(2022\)](#) assert that personal traits are essential while making entrepreneurial decisions. Thus, the primary goal of this study is to examine how Pakistani students' entrepreneurial intention is impacted by a few of the most important individual elements such as self-esteem, a spirit of business acumen, and entrepreneurial competency. Numerous studies ([Al-Mamary et al., 2020](#)) advocate for additional investigation into the factors, such as self-esteem, that contribute to entrepreneurial intention in developing nations. Behavior among individuals is determined by self-esteem as an individual trait, which also influences personal development ([Abbassi & Sta, 2019](#)). The other important (but often ignored) trait linked to entrepreneurial intention, aside from self-esteem, is an entrepreneurial mindset ([Cui & Bell, 2022](#)). The identification of opportunities is central to the entrepreneurial

process and plays a pivotal role in determining the success rate of the entrepreneur (Cui et al., 2021). Another important individual component that has the potential to have a big impact on entrepreneurial intention is self-efficacy (Akbari et al., 2024). Furthermore, earlier research has looked at the impact of self-efficacy on characteristics at the individual level (Elnadi & Gheith, 2021). It is clear that self-efficacy, which has not been taken into account in prior studies, could influence the connection between self-esteem, the spirit of business acumen, and entrepreneurial competency about entrepreneurial intention. Therefore, the study aims to analyze the impact of self-esteem, entrepreneurial mindset, and entrepreneurial competency on entrepreneurial intention with the moderating role of entrepreneurial self-efficacy.

Graduate unemployment in Pakistan is nearly three times higher than the country's average (Ahsan & Khan, 2023). In Pakistan compared to 14.9% in 2018–19, the unemployment rate for graduates increased to 16.1% in 2020–21. In just two years, the unemployment rate for engineers increased, from 11% to 23.5%. In a similar vein, in just two years, the jobless rate for graduates in computer science increased from 14.2% to 22.6%. The unemployment rate for graduates in agricultural science increased from 11.4% to 29.4% (Ahsan & Khan, 2023). In terms of university-industry linkages, Pakistan is ranked 63rd out of 163 nations by the World Bank. Pakistan is even trailing Sri Lanka (53rd rank) and India (26th rank). This demonstrates how concerning the situation of our graduate unemployment is. In Pakistan, entrepreneurship is viewed as the only viable way to address the country's growing youth unemployment issue. The higher education sector is called upon to play an active part in the development of entrepreneurial skills and the promotion and growth of university students' entrepreneurial endeavors (Abbassi & Sta, 2019). Lack of employment options for educated youth, which leads to employee insufficient utilization, is a major contributing factor to the high unemployment rates among these age groups (Devendiran, 2015). This includes providing students with training and support to make the entrepreneurial profession more accessible. Instead of starting businesses of their own, the majority of students would rather start a job in an organization (Jiatong et al., 2021). Research on entrepreneurship has started to concentrate on youngsters to forecast their entrepreneurial behavior. Establishing a firm is, in fact, one of the antecedents of entrepreneurial action among others.

Ajzen (1991) established the Theory of Planned conduct (TPB), which offers insights into how an individual's intentions function as predictors for their conduct (Nurbaeti et al., 2019). Research utilizing the Theory of Planned Behavior (TPB) has indicated that three have standards, and perceived behavioral control (Kautonen et al., 2015). Investigating elements that strengthen entrepreneurial intentions has been the main emphasis of TPB (Barba-Sánchez & Atienza-Sahuquillo, 2018). Scholars have utilized the theory of planned behavior (TPB) to investigate the influence of external factors on entrepreneurial intention, as it is the most accurate predictor of career decisions related to entrepreneurship (Nguyen et al., 2024). This research provides insight into the vital role of entrepreneurial competency, self-esteem, and entrepreneurial mindset on entrepreneurial Intention as a moderating influence of self-efficacy the model has been ignored by scholars in developing countries like Pakistan entrepreneurship before. To close the gaps in the current understanding of entrepreneurial intention, this study will look into three questions:

1.1 | Research Questions

RQ1: Do entrepreneurial competency, self-esteem, and entrepreneurial mindset impact the student's Entrepreneurial Intention?

RQ2: Does self-efficacy moderate the relationship among entrepreneurial competency, self-esteem, and entrepreneurial mindset impact the student's Entrepreneurial Intention?

This article is organized as follows: The material that is studied in the second section takes the form of developing hypotheses and a theoretical framework. The study's methodology is covered in the third section. Presenting the results is the next step. The discussion, findings, limitations, and future directions are stated at the end of the paper.

2 | LITERATURE REVIEW

2.1 | Entrepreneurial Intention

One persistent and essential concept in the study of entrepreneurship is entrepreneurial intentions and it's found to be among the best indicators of entrepreneurial behavior ([Bagozzi et al., 1989](#)). In another, a state of mind known as decisive entrepreneurial intention focuses on awareness, knowledge, motion, goal-setting, dedication, interaction, planning, and other activities in the formation of entrepreneurial behavior ([Fini et al., 2012](#)). The greatest indicator of conduct is assumed to be the intention, particularly since behavior is an intentional and planned action ([Tounés et al., 2014](#)). The desire to launch and run a new company is referred to as entrepreneurial intention ([Dabbous & Boustani, 2023](#)).

Entrepreneurial intentions are the mindset of entrepreneurs, according to [Bird \(1988\)](#). One of the most important prerequisites for business activity is entrepreneurial intention and a brief transition to an entrepreneurial step ([Krueger Jr et al., 2000](#)). This mindset focuses their attention, experience, and activity toward embracing a business concept and establishing the structure and course of organizations throughout their early stages of development ([Al-Mamary et al., 2020](#)). According to [Simatupang et al. \(2022\)](#), entrepreneurial intentions include concepts, ideas, and originality that come from within a person. These goals, whether deliberate or not, direct a person's actions while starting a business to meet their needs ([Wicaksono et al., 2024](#)). The trait that drives someone to pursue a career in self-employment or launch their own business is known as entrepreneurial intention ([Pérez-Pérez et al., 2021](#)).

With a foundation in the theory of planned behavior (TBP) ([Ajzen, 1991](#)), research has been done on what makes people more likely to pursue entrepreneurial intention ([Akbari et al., 2024](#); [Al-Mamary et al., 2020](#); [Panda & Arumugam, 2023](#); [Ukil & Jenkins, 2023](#); [Wicaksono et al., 2024](#)). University students' entrepreneurial intentions have been studied from a variety of angles, but the results are still unknown. As a result, integrated investigation and comparative research are lacking about the mechanisms and outcomes relevant to how entrepreneurial intention could be influenced by various factors ([Al-Mamary et al., 2020](#)). Furthermore, research on the goals and actions of real-world entrepreneurs reveals that they differ from regular people in terms of personality ([Abbassi & Sta, 2019](#)). Examining the relationship between the characteristics of entrepreneurs and entrepreneurial goals is a crucial step in revitalizing this area of study. In this study, the researcher uses popular models (TPB) to investigate the potential effects of several factors on Pakistani university students' entrepreneurial intention.

2.2 | Entrepreneurial Competency and Entrepreneurial Intention

According to several writers, competency is the process that enables people to carry out tasks, create questions, find and analyze pertinent information, and analyze, interpret, and reflect while applying their knowledge to real-world demands ([Bancroft, 2016](#)). Individual-level core competencies were defined by [Lahti \(1999\)](#) as the integration of knowledge, skills, abilities, and other traits that are essential for an individual's success in many situations and within an organization. Competency is characterized as an individual's ability to perform well at work and as a strength that they possess ([García, 2008](#)). The goal of research has been to identify the entrepreneurial competencies needed for the creation of successful research-based ventures ([Rasmussen et al., 2011](#)). It has been noted that these competencies are different from those needed to manage a business as it grows ([Kuratko et al., 2021](#)).

According to [Ismail and Zain \(2015\)](#), competency can also be defined as successful behavior in a task when knowledge, skills, and attitudes are all required to achieve the behavior. The way that students learn and are competent in today's educational environment has changed dramatically. For instance, the European Higher Education Area (EHEA) centers the educational mode around the student and the learning process around the concept of competency ([Simovic et al., 2023](#)). Graduates are expected to adapt to shifts in the regional and global economy, and having entrepreneurial and digital competencies will make them more employable than students lacking these skills ([Simovic et al., 2022](#)). The youthful workforce's education and labor market identification will be aided by the development of entrepreneurial competencies and skills ([Jardim et al., 2021](#)). [Man et al. \(2002\)](#) study on entrepreneurial capacity led to the proposal of six elements that affect students' formation of entrepreneurial intentions.

The information-seeking competencies element, in particular, has a favorable effect on the concept search for work opportunities for comparison, appraisal, career orientation, and startup activities ([Le & Loan, 2022](#)). Finding knowledge and possibilities helps students practice skills and increase their self-awareness of responsibility in choosing a career or developing EI, according to research by [Baron and Ensley \(2006\)](#). The study by [Hassan et al. \(2021\)](#) further supported the notion that competency which includes knowledge, abilities, and attitudes plays a critical role in helping students and young people develop their emotional intelligence. Thus, we hypothesized that:

H1: *Entrepreneurial competency has a significant impact on entrepreneurial intention.*

2.3 | Self-Esteem and Entrepreneurial Intention

Self-esteem is a personality characteristic that influences personal growth and success as well as how people behave ([Abbassi & Sta, 2019](#)). Self-esteem is essentially one's attitude toward oneself and is described as either positive or negative. It is an opinion on one's value based on a broad assessment of oneself ([Akbari et al., 2024](#)). Therefore, those who possess specific personality traits like a strong sense of will, confidence in themselves, a tolerance for ambiguity and uncertainty, a willingness to take risks, etc. are more likely to engage in entrepreneurial activities and business formation ([Abbassi & Sta, 2019](#)).

One personality characteristic that expresses how much someone likes or doesn't like themselves is self-esteem [Brockner \(1988\)](#). In psychology, the notions of self and self-esteem originated from a psychosocial

viewpoint. In the late 1800s, one of the first psychologists to write about them was William James ([Akbari et al., 2024](#)). Self-esteem is a fundamental psychological quality associated with the ability to evaluate oneself and form an opinion of oneself ([Rosenberg et al., 1995](#)). Human behavior is determined by one's self-esteem, which also affects personal development and growth ([Oğuz & Körükçü, 2010](#)). [Rosenberg et al. \(1995\)](#) state that having a high sense of self-worth is a sign of acceptance, tolerance, and contentment with oneself, but it does not imply feelings of superiority or perfection. Respect for oneself, then, is implied by high self-esteem ([Abbassi & Sta, 2019](#)). The unconditional and conditional levels of regard are distinguished by Rosenberg. While conditional respect entails congruence between the personal standards of competency, morality, excellence, and feelings of accomplishment concerning these standards, unconditional respect assumes that the individual respects himself as a human being, regardless of his qualities or his achievement ([Abbassi & Sta, 2019](#)). Additionally, the self-consistency theory ([Dipboye, 1977](#)) can be used to explain how self-esteem influences entrepreneurial intention.

According to [Bandura \(1971\)](#) theory of social study, self-esteem is a crucial sense of what one deserves. According to Korman's self-consistency theory, those who believe they are worthy have a higher chance of succeeding in tasks than those who don't think they are competent at what they do because both of these groups behave in ways that are consistent with their beliefs about who they are ([Akbari et al., 2024](#)). The literature reported a positive relationship between self-esteem and entrepreneurial intention ([Abbassi & Sta, 2019](#); [Akbari et al., 2024](#)). So, we hypothesized that:

H2: *There is a strong correlation between self-esteem and entrepreneurial intention.*

2.4 | Entrepreneurial Mindset and Entrepreneurial Intention.

In general, the spirit of business acumen describes a mindset that directs behavior toward entrepreneurial goals and pursuits ([Cui & Bell, 2022](#)). The ability to quickly identify, act, and mobilize in highly unpredictable conditions can be defined as an entrepreneurial mindset ([McGrath & MacMillan, 2000](#)). [Kuratko et al. \(2021\)](#) distinguished between three different facets of entrepreneurial mindset: behavioral, emotional, and cognitive.

According to some researchers, mindset, and mentality are a broader perspective that is used to evaluate opportunities and hazards associated with starting new business ventures ([Roeslie & Arianto, 2022](#)). Additionally, they demonstrated how, under the impact of education in entrepreneurship a spirit of business acumen positively links to motivation for entrepreneurship based on [Bandura \(1977\)](#) Social Cognition Theory. Likewise, an additional study has highlighted that a spirit of business acumen encompasses not just the entrepreneur's way of thinking or thoughts, but also their background, creativity, and ability to solve problems and identify new ways to operate them in addition to identifying opportunities ([Zupan et al., 2018](#)). A critical and inventive method of thinking is known as an entrepreneurial mindset.

An individual with an entrepreneurial mindset is inclined to take risks, have a strong drive for success, and are passionate about creating and managing initiatives that will help them reach their goals ([Jiatong et al., 2021](#)). A person with a spirit of business acumen can spot opportunities, generate fresh ideas, explore possibilities and challenges in novel ways, and come up with inventive solutions ([Akbari et al., 2024](#)). It's still unclear how an entrepreneur's thoughts and feelings relate to their actual actions or behaviors in

entrepreneurship, even though the cognitive and affective perspectives of the entrepreneurial mindset provide insight into how entrepreneurs think about a task or opportunity and feel during entrepreneurship (Cui & Bell, 2022).

We use the following definition of behavioral components of EM, as proposed by Shepherd et al. (2010): “ability to rapidly sense, act, and mobilize in response to a judgmental decision under uncertainty about a possible opportunity for gain.” Consequently, those who possess an entrepreneurial mindset are driven and equipped to engage in entrepreneurial endeavors (Akbari et al., 2024). A person's motivation is influenced by their mindset, which represents their latent intellectual capacity (Dweck, 1999). In this sense, students' inclinations toward entrepreneurship may be influenced by an entrepreneurial mindset (Cui & Bell, 2022). The relationship between an entrepreneurial mindset and an entrepreneurial intention is supported by empirical findings (Akbari et al., 2024; Al-Ghazali et al., 2022; Cui & Bell, 2022). These earlier research findings bolster the notion that people are more inclined to think and behave like entrepreneurs when they possess an entrepreneurial mindset. Thus, we hypothesized that:

H3: *The mindset of an entrepreneur greatly influences the goal of an entrepreneur.*

2.5 | Moderating Role of Self-efficacy

Self-efficacy refers to the belief in one's ability to play good performance in life (Stajkovic & Luthans, 1998). Social cognitive theory acts as the basis for the idea of self-efficacy (Jiatong et al., 2021). In his Social Cognitive Theory, Bandura (1977) coined the term "self-efficacy" to refer to people's assessments of their skills and likelihood of success. It refers to people's self-assurance in conquering obstacles and realizing their objectives. Bandura (1977) defined "self-efficacy" as a person's belief in their abilities. Matsu's ability to carry out particular duties or obligations. Dissanayake (2014) defines self-efficacy as the capacity of an individual to enhance motivation, cognitive abilities, and a specific set of action plans all of which are necessary for success in a given career.

Fenech et al. (2019) define entrepreneurial self-efficacy as a person's belief in their capacity to launch their own business. Self-efficacy is also linked to people's propensity to fulfill their objectives (Newman et al., 2019). Similarly, self-efficacy is a fundamental requirement for entrepreneurial pursuits, and high levels of self-efficacy are linked to a variety of behaviors, including taking risks and seeing business opportunities (Lucas & Cooper, 2004). According to Burnette et al. (2020), self-efficacy fosters creative thinking, helps people make decisions when starting a new business, and explains how the mind works. Prior research on the cognitive process gave individual creative thinking toward new business startups a lot of attention. As a result, those who have high self-efficacy like challenging tasks and are better at overcoming difficulties than those who have low self-efficacy (Akbari et al., 2024).

Previous studies have demonstrated a positive correlation between students' entrepreneurial mindset in community re-engineering and their level of self-efficacy (Adebayo and Rachel (2020), and self-esteem toward entrepreneurship (Eliyana et al., 2020). Furthermore, in examining the relationship between antecedents and entrepreneurial intention, researchers have demonstrated how self-efficacy can have moderating effects (Ahlin et al., 2014; Doanh, 2021). Accordingly, prior research examining the relationship between self-efficacy and

entrepreneurial ambitions has demonstrated that those with higher levels of self-efficacy also have more entrepreneurial intentions (Akbari et al., 2024). Thus, the selection and perseverance of functions by students can be influenced by their level of self-efficacy. Furth more able to forecast also predict their future output. It also has an impact on their ability to make decisions about their careers (Sisco, 2014). In conclusion, pupils who have strong self-efficacy are more likely to have entrepreneurial goals. It is speculative that Pakistani students who exhibit high levels of self-efficacy, entrepreneurial mindset, entrepreneurial competency, and entrepreneurial self-esteem will also exhibit high levels of entrepreneurial intention. As a result, we hypothesize that:

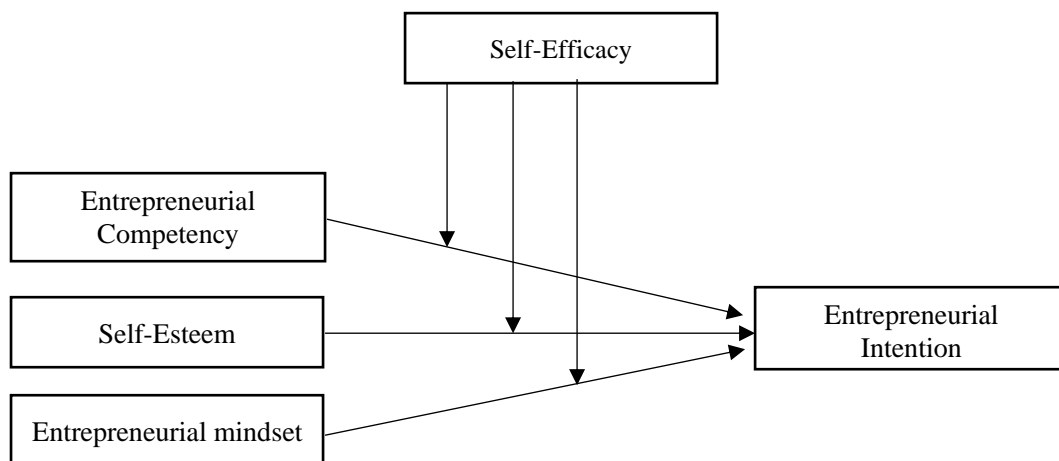
H4: *The relationship between entrepreneurial competency and entrepreneurial intention is favorable moderating via self-efficacy.*

H5: *The relationship between self-esteem and entrepreneurial intention is favorable moderating via self-efficacy.*

H6: *The relationship between the aim and attitude of an entrepreneur is favorable moderating via self-efficacy.*

Figure 1

Theoretical Model



3 | METHODOLOGY & DESIGN

3.1 | Operationalization of Variables

The primary goal of the research is to investigate how entrepreneurial mindset, entrepreneurial competency, and entrepreneurial self-esteem influence entrepreneurial intention and moderate Self-Efficacy in Pakistan. To accomplish this research goal, a survey approach was employed, and a questionnaire that was created, if feasible, was based on already-existing measurement tools from the literature. The authors employed a five-point Likert scale, which ranged from 1 (strongly disagree) to 5 (strongly agree), for every multi-item concept measurement. Below is a discussion of the operationalization of variables in more detail.

3.2 | Independent Variables

3.2.1. Entrepreneurial Competency

Nine items were used to measure entrepreneurial competency. The items were adopted from ([López-Núñez et al., 2022](#)). To measure entrepreneurial competency, participants were asked how much they agreed or disagreed with “I am capable of making judgments in the face of danger, ambiguity, and uncertainty” etc.

3.2.2. Entrepreneurial Mindset

Four items were used to measure entrepreneurial mindset. The items were adopted from ([Cui et al., 2021](#)). To measure entrepreneurial competency, participants were asked how much they agreed or disagreed with “I speak with people all the time to learn new things” etc.

3.2.3. Entrepreneurial Self-esteem

Ten items were used to measure entrepreneurial self-esteem. The items were adopted from ([Winch, 1965](#)). To measure entrepreneurial self-esteem, participants were asked how much they agreed or disagreed with “Considering everything, I often feel like I've failed” etc.

3.3 | Dependent Variables

3.3.1. Entrepreneurial Self-esteem

Four items were used to measure entrepreneurial self-esteem. The items were adopted from (Winch, 1965). To measure entrepreneurial intention, participants were asked how much they agreed or disagreed with “I am determined to start my own business in the future” etc.

3.4 | Moderating Variables

3.4.1. Self-efficacy

Ten items were used to measure entrepreneurial self-esteem. The items were adopted from ([Jerusalem & Schwarzer, 1995](#)). To measure entrepreneurial intention, participants were asked how much they agreed or disagreed with “Even if someone doesn't agree with me, I can still manage to achieve my goals” etc.

3.5 | Sampling and Data Collection

The study's sample consists of the university students of Pakistan's selected twin cities, Rawalpindi and Islamabad, to meet the research aim. We requested assistance from the university lecturers in charge of the programs and courses by communicating with them. The survey forms were then sent to their students via email. Ultimately, 263 questionnaires from Pakistani-educated students selected using a multiphase stratified random sampling procedure were received. 47 of which had missing values and were judged to be improperly completed; as a result, they were eliminated. As a result, 216 questionnaires with accurate and complete answers from students were utilized for analysis.

3.6 | Data Analysis Method

With the use of SPSS software, and Smart-PLS the survey data were evaluated. To ensure the instrument's validity and reliability. Subsequently, the study employed confirmatory factor analysis to verify the component structure, assess the study constructs' convergent validity, and eliminate items with low standardized factor loading. The study aims are attained by the utilization of statistical approaches such as path coefficient and correlation analysis.

4 | RESULTS AND ANALYSIS

4.1 | Statistics for Demographic Variables

Table 1 shows the demographic results of the students where 133 (61.6%) responses were from males and 83 (38.4%) from females. Of the 216 respondents, 79.6% were between 18 to 22 years old, 16.7% were between 23 to 26 years old, and 3.7% were between 27 to 30 years old. Regarding the Educational qualification of respondents, 146 (67.6%) respondents had bachelor's degrees, 22.7% had high school diplomas or equivalent degrees, 5.1% had Master's degrees, 3.7% respondents Less than a high school diploma, and 0.9% respondents had PhD degrees.

Table 1

Demographics

Category		Frequency	Percentage
Gender	Male	133	61.6%
	Female	83	38.4%
Age	18-22	172	79.6%
	23-26	36	16.7%
	27-30	8	3.7%
Educational Qualification	Less than a high school diploma	8	3.7%
	High school diploma or equivalent degree	49	22.7%
	Bachelor's degree	146	67.6%
	Master's degree	11	5.1%
	PhD	2	0.9%

4.2 | Correlation Analysis

All of the tolerance values in Table 4 are larger than 0.10 and the VIF values are all less than 3.3, indicating that they are within an acceptable range. It seems that the entire collinearity test procedure is effective in detecting common method bias.

Table 2

Multicollinearity

Constructs	Tolerance	VIF
Entrepreneurial Mindset	.964	1.037
Entrepreneurial Competency,	.648	1.543
Entrepreneurial Self-Esteem	.659	1.518

4.3 | Reliability Analysis

Table 3 displays the findings of the reliability analysis, which is based on Cronbach's alpha coefficient, for the various constructs in this study. The alpha score of entrepreneurial self-esteem is 0.719, which is higher than the recommended range of 0.7 according to [Hair et al. \(2017\)](#). With an alpha score of 0.854, entrepreneurial competency is considerably over the recommended cutoff. Furthermore, the Entrepreneurial Mindset's alpha

value of 0.730 is greater than the recommended level. The alpha value of self-efficacy is 0.879, significantly higher than the recommended boundary. The alpha value of entrepreneurial intention is 0.895, over the recommended threshold. The constructs display great reliability across the board.

Table 3

Reliability

Constructs	Cronbach's alpha	CR	AVE
EC	.854	.867	.762
SE	.719	.906	.760
EM	.730	.771	.543
SEF	.879	.713	.529
EI	.895	.901	.673

Note(s): CR = Composite Reliability, AVE = Average Variance Extracted, SE = Self-Esteem, EC = Entrepreneurial Competency, EM = Entrepreneurial Mindset, SEF = Self-Efficacy, and EI = Entrepreneurial Intention.

According to academic recommendations (e.g., Hair et al., 2010), an AVE value of more than 0.50 signifies that the variance of the loaded items in the corresponding construct is greater than the error term. The constructs in this article had AVE values ranging from 0.529 to 0.762. Furthermore, Table 3 reports that all of the factors' composite reliability (CR) falls within a good range, indicating that the constructs' reliability is adequate. Therefore, we were able to move forward with SEM testing after meeting all of the requirements for fitness of measurement.

4.4 | Descriptive Statistics and Correlations

The findings of the descriptive statistics and correlations are shown in Table 4; the descriptive statistics test is used to evaluate each indicator. There were 216 observations in total. The mean and standard deviation of Self-Esteem are 3.9857 and 3.9857 respectively. The mean value of entrepreneurial competency is 3.8688 and the standard deviation is .67695. The value of the mean of entrepreneurial mindset is 3.8520 and the standard deviation is .82961. The value of the mean of self-efficacy is 3.8656 and the standard deviation is .67269. The value of the mean of entrepreneurial intention is 4.1250 and the standard deviation is .80563. In this study table 4. Shows the results of correlation among the variables.

Table 4

Descriptive Statistics and Correlations

	Mean	S.D	SE	EC	EM	SEF	EI
SE	3.9857	.78407	1				
EC	3.8688	.67695	.186**	1			
EM	3.8520	.82961	.137*	.584**	1		
SEF	3.8656	.67269	.144*	.770**	.627**	1	
EI	4.1250	.80563	.217**	.313**	.306**	.295**	1

Note(s): $N = 216$, * $p < 0.05$, ** $p < 0.01$.

The analysis's output displays the correlation coefficient for each of the five variables. The findings showed that entrepreneurial intention was positively and strongly correlated with traits including self-esteem ($r = 0.217$, $p < 0.001$), entrepreneurial competency ($r = 0.313$, $p < 0.001$), and entrepreneurial mentality ($r = 0.306$, $p < 0.01$). According to the findings shown in Table 3, self-efficacy also has a favorable impact on entrepreneurial intention ($r = 0.295$, $p < 0.01$). From a perspective, this indicates that personality traits exacerbate the intention toward entrepreneurship. This is because entrepreneurs afflicted by these traits are unable to make logical choices, leading them to make suboptimal choices concerning entrepreneurial opportunities.

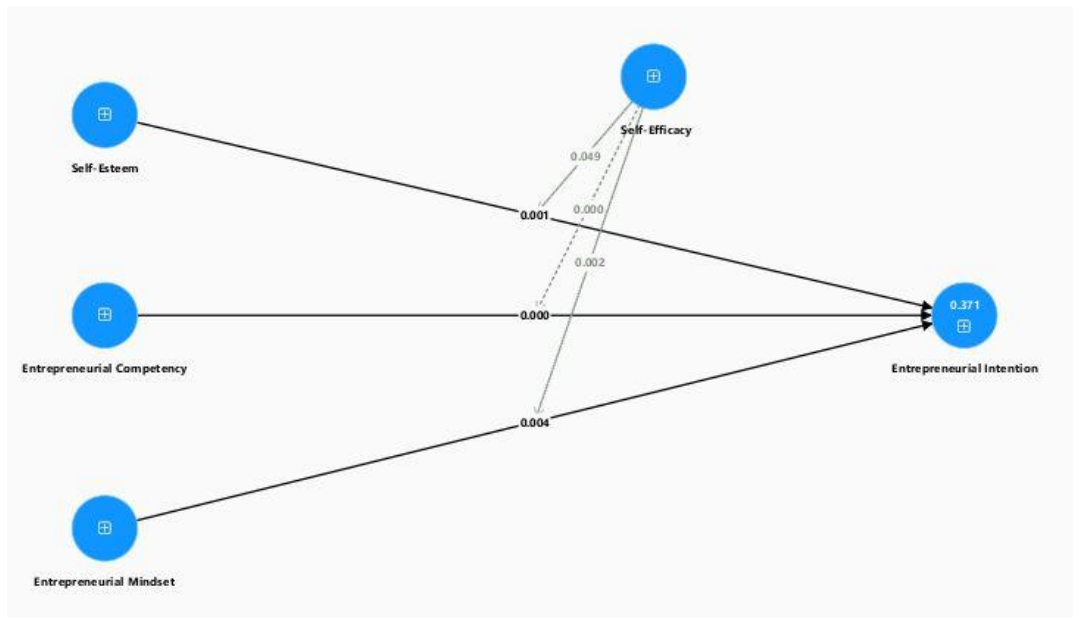
4.5 | Hypothesis Testing

Table 5

Hypothesis Testing

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics	p-value
EC -> EI	0.51	0.507	0.116	4.4	0.000
EM -> EI	0.265	0.23	0.092	2.882	0.004
SE -> EI	0.28	0.289	0.087	3.227	0.001
SEF x EC -> EI	0.513	0.414	0.13	3.931	0.000
SEF x EM -> EI	0.396	0.301	0.128	3.079	0.002
SEF x SE -> EI	0.142	0.119	0.072	1.971	0.049
R-square	0.371		R-square adjusted	0.35	

Table 4 presents the results of the hypothesis testing. Using a structural equation model, we explicitly tested the hypotheses. The hypotheses predict that personality traits are linked with entrepreneurial intention. To test these predictions, we bootstrapped entrepreneurial intention on self-esteem, entrepreneurial competency, and entrepreneurial mindset. Results reported in Table 4 show that self-esteem ($\beta = 0.28$, $p = 0.001$) was a significant predictor of entrepreneurial intention, supporting H2. A significant positive relationship was found between entrepreneurial competency ($\beta = 0.51$, $p = 0.000$) and entrepreneurial intention, providing support for H1. Similarly, a significant positive relationship with entrepreneurial intention was found for the entrepreneurial mindset ($\beta = 0.268$, $p = 0.004$), which supports H3. According to the findings, self-efficacy ($\beta = 0.142$, $p = 0.049$) positively moderates the relationship between self-esteem and entrepreneurial intention, supporting hypothesis H5. The findings confirm H4 by showing that self-efficacy ($\beta = 0.513$, $p = 0.000$) positively moderates the relationship between entrepreneurial intention and competency. According to the findings, self-efficacy positively moderates the relationship between entrepreneurial intention and entrepreneurial mindset ($\beta = 0.396$, $p = 0.02$), supporting hypothesis H6.

Figure 2*PLS Results*

5 | DISCUSSION

The main focus of the study is to investigate the impact of entrepreneurial competency, self-esteem, and entrepreneurial mindset on the entrepreneurial intention of Pakistani students moderate through self-efficacy. Utilizing information gathered from 216 university students in Pakistan, the study's goal was accomplished. It has been discovered that entrepreneurial intention is significantly positively impacted by entrepreneurial competency H1. Prior studies have generally given positive results regarding the relationship between entrepreneurial competency and entrepreneurial intention (Le, and Loan, 2022; Peter, and Gupta, 2024). H2 of this study supported which showed that positive association between self-esteem and entrepreneurial intention. Prior studies on the relationship between entrepreneurial intention and self-esteem have primarily provided favorable findings (Abbassi & Sta, 2019; Jermstittiparsert & Kumsuprom, 2021). A person with high self-esteem is willing to take risks, seek out novel solutions, and exhibit persistence and tenacity; these traits positively influence their ambition to start their own business. This finding supports other studies that looked at personality characteristics as predictors of students' desire to start their businesses.

Third Hypothesis, our research showed a strong positive correlation between entrepreneurial intention and an entrepreneurial mindset. Our results support the notion that an entrepreneurial mindset is the best predictor of EI and are in line with other studies (Al-Ghazali et al., 2022). The results showed that students would pursue entrepreneurial endeavors and would view entrepreneurship as a desirable and favorable career option. Students are therefore more willing to support entrepreneurial endeavors when they have a greater belief in the success of entrepreneurship.

The findings for H4, H5, and H6 show that the link between entrepreneurial competency, self-esteem, and entrepreneurial mindset, on entrepreneurial intention is positively moderated by entrepreneurial self-efficacy. (Al-Ghazali et al., 2022; Otache et al., 2024) Demonstrated that the relationship between entrepreneurial education and entrepreneurial intention is adversely moderated by self-efficacy. We also draw the conclusion

that the association between entrepreneurial mindset and entrepreneurial intention is strengthened and explained by the mechanisms of entrepreneurial self-efficacy, alertness, and opportunity identification ability, which act both independently and sequentially. Therefore, only when self-efficacy is moderate do entrepreneurial competency, self-esteem, and mentality directly influence entrepreneurial intention. These new findings suggest that the most significant predictor of intention is self-efficacy at a moderate level.

6 | CONCLUSION

This study adds to the body of knowledge regarding the relationships between entrepreneurial competency, self-esteem, mindset, intention, and self-efficacy in the Pakistani context. In addition, it investigates a novel finding of previous research: the moderating role of self-efficacy on the relationship between entrepreneurial competency and intention among university students in Pakistan. In the context of education, TPB may be applied as a model to analyze various entrepreneurial behavior profiles and as a strong basis to look at its moderating influence when fresh antecedents are provided to characterize an individual's conduct. Our research's findings support the theoretical viewpoints of [Gorman et al. \(1997\)](#) and [Kuratko \(2005\)](#) by demonstrating that entrepreneurship education may encourage students to pursue their career goals as entrepreneurs, which may result in profitable start-ups once they graduate ([Peterman & Kennedy, 2003](#); [Zhang et al., 2014](#)). Our results provide credence to the theory that entrepreneurial competency, self-esteem, mindset, intention, and self-efficacy are important for the advancement of entrepreneurial intention.

6.1 | Policy Implications

Practically speaking, households educational establishments, and policymakers seeking ways to address the issue of unemployment in their communities should find value in this research. Educators become more skilled and knowledgeable, especially when it comes to teaching entrepreneurship courses. They can do this by offering an entrepreneurship certification program, conducting internal training, and attending webinars on the subject. For students to become entrepreneurs, universities must assist them in cultivating an entrepreneurial attitude. This would encourage a diverse array of learning opportunities, centered not only on in-class instruction but also on creating extracurricular entrepreneurship curriculum activities. These activities are especially effective in helping students in the Pakistani context develop an entrepreneurial mindset. Finally, by establishing a social entrepreneurship support program, offering business finance, and providing free business spaces where they can conveniently launch their new ventures, the government should improve the entrepreneurial culture and reduce unemployment for university students.

6.2 | Future Research Directions

Future research possibilities will take into account the limitations of this study. First, a small sample size of Pakistani university students from the twin cities (Rawalpindi and Islamabad) was used to collect data. Only university students in the business department were the target population. To generalize the findings, future studies may take into account additional Pakistani cities or students from other sectors of the nation, such as engineering, IT, and vocational school students, and it may also increase the sample size. This study employed a cross-sectional design, and information was obtained via an email survey. With the use of a longitudinal research design, future studies on the relationship between entrepreneurship education and creativity could examine how entrepreneurial alertness functions as a mediator among college students, making significant contributions to the area of entrepreneurship.

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