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Entrepreneurial Growth under Risk Aversion: The Mediating Effects of Entrepreneurial Education and Social Networking

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Abstract

This study investigates the impact of entrepreneurial education on individuals' ability to overcome risk aversion and social constraints in Quetta, Pakistan. In a context where cultural norms, limited resources, and fear of failure inhibit entrepreneurial activity, access to entrepreneurial education and information can act as a critical facilitator for change. The study focuses on behavioral and social barriers to entrepreneurship, particularly risk aversion and limited social networking, and examines the mediating role of entrepreneurial education. A cross-sectional research design was employed, using primary data collected through surveys of aspiring students and existing entrepreneurs in Quetta, selected via self-selection sampling. PLS (SEM) was used for data analysis in examining the relationships among the variables. The findings reveal that greater exposure to entrepreneurial education significantly reduces risk aversion and strengthens individuals' confidence to engage in entrepreneurial ventures despite prevailing social constraints. The study highlights the importance of targeted entrepreneurial education and policy interventions in encouraging an enabling entrepreneurial environment in underdeveloped regions.

Keywords: Risk Aversion, Entrepreneurial education, Social Networking, and Entrepreneurial Growth.

1. Introduction

Entrepreneurship is globally recognized as a pathway to economic stability and prosperity. As the world's economies keep growing, entrepreneurship becomes more and more important for reducing poverty, boosting the economy, and promoting long-term growth. It goes beyond starting new firms to turn ideas into businesses that boost the local economy, create jobs, and improve lives (Hatim et al., 2025).

However, many psychological, social, and environmental barriers are associated with starting and running a business (Amjad & Khan, 2025). The geology, economy, and social elements of the area can also have an effect on the shape and strength of these barriers. Studies show that entrepreneurs in smaller, less connected areas confront different problems than those in big cities, which include a lack of support from institutions, restricted access to resources, and a weaker infrastructure. People will likely deal with these problems and reach their goals in a different way (Hatim et al., 2025).

Developing countries like Pakistan need to encourage entrepreneurship in order to make progress in innovation, economic growth, and social development. As Pakistan is the fifth most populous country and has the world's ninth-largest labor force (Amjad & Danish, 2024; Shah et al., 2022).

Recognizing the challenging situation, the government has prioritized nationwide youth empowerment initiatives. The Prime Minister Youth Development Framework (NYDF) includes programs such as the Kamyab Jawan Program, the Hunarmand Program, the Youth Entrepreneurship Scheme, and the Startup Pakistan Scheme, all aimed at enabling young people to explore markets, pursue business opportunities, and access government support (Amjad & Danish, 2024). Despite these efforts, significant provincial differences remain in labor force participation rates (LFPR), with Punjab showing the highest rate at 31% and Balochistan the lowest at 14% (Amjad & Khan, 2025).

Quetta, the capital of Balochistan, is a challenging environment for living and working due to its tribal social structures, ethnic diversity, weak governance, and underdeveloped institutions. These factors contribute to structural issues such as limited financing, insufficient business support services, and inadequate entrepreneurial infrastructure (Shahzad et al., 2025; Hatim et al., 2025). This study focuses on behavioral and social capital barriers, limited professional networking opportunities and a strong fear of risk, all of which are reinforced by deeply rooted social norms.

This study aims to fill this gap by focusing on Quetta, a city often overlooked in national discussions on entrepreneurship, which has consistently lagged in development. Balochistan, where the majority of the population lives below the poverty line, according to the Balochistan Comprehensive Development and Growth Strategy Report (BCDGS), the Multidimensional Poverty Index (MPI) in Balochistan was reported to be 71.2% in 2015, significantly higher than the national average of 38.8% (UN Women, 2023).

Quetta has largely been excluded from academic research and policy attention. There is a notable lack of empirical studies on the specific socio-psychological and behavioral barriers faced in Quetta's marginalized context (Hatim et al., 2025). Challenges such as risk aversion and absence of social capital, compounded by limited exposure to entrepreneurial knowledge, have been observed anecdotally but not systematically studied.

Given the region's limited entrepreneurial infrastructure and low inclusion in national economic strategies, this study is the first to examine how psychological and social barriers, mediated by entrepreneurial knowledge, influence the development of entrepreneurship in Quetta. The city's economic environment is further shaped by complex social and cultural factors, including tribal relations, weak

institutional structures, and limited access to education, finance, and professional networks (Khan & Hashmi, 2021).

Ajzen's (2020) Theory of Planned Behavior (TPB) underpins this study. It explains how attitudes, subjective norms, and perceived behavioral control shape individuals' intentions to start a business. This framework effectively predicts entrepreneurial behavior. The study examines how social networking constraints (absence of social networks) and psychological barriers (risk-aversion) influence people's willingness and ability to pursue entrepreneurship.

TPB examines how behavioral barriers, such as fear of failure, and social capital constraints, affect both the desire to start a business and entrepreneurial success in Quetta. Incorporating entrepreneurial education as a mediating variable enhances the model, highlighting how education can equip individuals with the skills, confidence, and experience needed to overcome these challenges.

Guided by the TPB, this study aims to accomplish its primary goal by pursuing the following objectives:

1. To investigate behavioral and social barriers that constrain entrepreneurial growth in Quetta, with particular emphasis on risk-aversion and the lack of social networking.
2. To assess the direct impact of risk-aversion and lack of social networking on entrepreneurial growth in Quetta.
3. To examine the mediating role of entrepreneurial education in the relationship between risk-aversion and lack of social networking on entrepreneurial growth in Quetta.

Drawing from the study's objectives, the investigation is guided by the following research questions:

1. What behavioral and social barriers, particularly risk-aversion and lack of social networking, hinder entrepreneurial growth in Quetta?
2. How do risk-aversion and inadequate social networking directly affect entrepreneurial growth in Quetta?
3. Does entrepreneurial education mediate the relationship between risk-aversion and social networking on entrepreneurial growth?

This study is important for several reasons. First, it contributes to the literature by providing insights from a largely overlooked region of Pakistan. Second, it examines how entrepreneurial education can help individuals overcome social and psychological barriers. Ultimately, the findings aim to provide policymakers, educators, and support organizations in Quetta with practical guidance, enabling them to design targeted programs that promote entrepreneurship in overlooked areas.

2. Literature Review

2.1 Entrepreneurial Growth

Entrepreneurial growth (EG) refers to the progressive expansion of a business established and led by an entrepreneur (Wei & Daun, 2024). This growth is typically reflected in sustained increases in revenue, profitability, and market share. Entrepreneurs can pursue growth through a range of strategic approaches, including diversifying product offerings, penetrating new markets, acquiring other enterprises, and investing in innovation through research and development (Sharma, 2021). The goal of entrepreneurial growth is to enhance individuals' ability to start, manage, and grow businesses that contribute to both economic and social development. It encompasses not only business creation but also the cultivation of skills, attitudes, and behaviors that promote job creation and innovation (Wei & Daun, 2024).

In recent years, entrepreneurship has emerged as an increasingly attractive career option for individuals aspiring to create and lead their own ventures (Wei & Daun, 2024). Central to this path is the entrepreneurial

mindset cognitive framework that encourages risk-taking, innovative thinking, and the ability to recognize and act on emerging opportunities. This mindset plays a critical role in overcoming the inherent uncertainties of launching and scaling a business (Widhajati, 2024). Ultimately, sustainable entrepreneurial growth is vital for the long-term success and competitiveness of a business. Achieving it requires a synergy of key elements: access to financial resources, an enabling business ecosystem, and a resilient, opportunity-oriented entrepreneurial mindset (Lee et al, 2025).

In Quetta, entrepreneurship development focuses on identifying and training local talent to build sustainable economic activities, manage uncertainty, and overcome resource constraints. As a key driver of local development in this underdeveloped region, entrepreneurship promotes innovation and business creation to reduce poverty, low industrialization, and chronic unemployment. Despite social, political, and economic challenges, fostering entrepreneurship stimulates economic growth and strengthens community empowerment.

Quetta's business growth faces unique challenges, including poor infrastructure, weak institutional support, and limited access to capital. Social factors such as tribal ties, cultural norms, and weak governance can restrict the participation of women and youth in the business ecosystem (Amjad & Khan, 2025). Despite these obstacles, the region holds significant potential, with a young population and growing interest in self-employment. Quetta could attract entrepreneurial activity, provided that adequate support and mechanisms.

Entrepreneurial growth is constrained by two primary barriers: fear of risk and limited social networks; these barriers increase uncertainty and restrict access to essential resources and guidance (Alnassai, 2023). Ultimately hindering entrepreneurial activity. Exposure to entrepreneurial knowledge is expected to mitigate these challenges by providing the skills and confidence necessary for engagement. The underlying model posits that these complex interactions, occurring across individuals, social and institutional levels, eventually aim to foster entrepreneurship.

Several studies have highlighted the importance of personal attributes, cognitive abilities, and social characteristics in shaping entrepreneurial intention (EI) (Anwar et al., 2022; Amjad & Khan, 2025). These studies examine multiple dimensions with the shared objective of understanding the determinants of EI. A comprehensive review of the literature indicates that EI is influenced by internal factors, such as personality traits and behaviors; external factors, including social norms, opportunity perception, and social capital; and contextual factors, such as economic and environmental conditions (Bazan et al., 2019; Anwar et al., 2022). Moreover, prior research has demonstrated that attitude exerts a strong and positive effect on EI. For example, Ahmad et al. (2021) found a significant positive relationship between attitude and EI among business students in Pakistan, a finding consistently supported by subsequent studies (Margca et al, 2021; Shah et al., 2020).

2.2 Risk-Aversion

Risk aversion (RA) reflects a fundamental preference for avoiding uncertainty, often prioritizing the preservation of capital over the pursuit of higher, albeit riskier, returns (Irshad, 2024). Risk aversion refers to the tendency of individuals or organizations to favor stability and predictability, often opting for safer alternatives even when those alternatives yield lower returns (Lee et al., 2025). This tendency is particularly evident in the investment context, where risk-averse investors prioritize the security of their principal investment over the potential for greater financial gains (Afzal, 2025). Low risk-tolerant individuals exhibit a limited willingness to engage in situations that might result in loss or negative outcomes.

Risk aversion significantly influences both decision-making and investment behavior. Risk-averse individuals tend to engage in detailed evaluations of potential risks and returns before committing to decisions (Kheybari et al., 2025). Their approach often includes consulting expert advice or adhering to established frameworks to mitigate potential losses.

The decision to start a business inherently involves a high degree of uncertainty and potential loss, making it a fundamentally risky endeavor (Afzal, 2025). The entrepreneurial landscape is characterized by unpredictability and constant challenges, requiring entrepreneurs to regularly make high-stakes decisions under uncertain conditions. According to the TPB, entrepreneurial success is shaped by a process driven by individual attitudes and behavioral intentions. In this context, Afzal (2025) and Amjad and Khan (2025) identified a direct relationship between risk-taking attitude and entrepreneurial intention to launch a new venture.

Risk-aversion significantly hinders entrepreneurial activity, particularly in contexts such as Quetta, where economic instability and limited safety nets discourage individuals from assuming the risks associated with establishing or expanding a business. This reluctance suppresses economic growth, reduces the rate of new business formation, and constrains innovation. Potential entrepreneurs often abandon viable business ideas because they perceive the financial and social costs of failure as outweighing potential gains (Anwar et al., 2022).

Entrepreneurial risk-aversion in Quetta typically manifests across three dimensions: financial, social, and career related. Financial risk aversion stems from fears of monetary loss and broader economic uncertainty. Social risk aversion reflects concerns about damaging one's reputation or social standing, particularly within Quetta's tribal and collectivist social structure. Career risk aversion involves a preference for stable employment over the uncertainty associated with entrepreneurship. Collectively, these factors reinforce the perception that business ownership is excessively risky in a setting characterized by unpredictable economic conditions and insufficient institutional support.

These elevated levels of risk-aversion reduce both the likelihood of new business creation and the expansion of existing firms. The lack of reliable financing, insurance, and institutional assistance in Quetta further exacerbates these challenges, limiting economic diversification, constraining job creation, and impeding innovation. Over time, sustained avoidance of entrepreneurial risk may entrench a broader cultural aversion to risk-taking, discouraging future generations from engaging in entrepreneurial activities (Anwar et al., 2022).

H1: Risk-aversion has a significant impact on entrepreneurial growth in Quetta.

2.3 Entrepreneurial Education

Education plays a pivotal role in entrepreneurship, serving as a critical foundation for effective decision-making, strategic planning, and the overall management of business operations (Anwar et al., 2020). It enables entrepreneurs to comprehend market dynamics, anticipate challenges, and respond to the complexities inherent in launching and sustaining a venture. In the absence of sufficient education, entrepreneurs are more prone to making misinformed decisions, which can significantly undermine the viability and success of their businesses. Key domains such as market research, financial management, and regulatory compliance are especially vital, as gaps in these areas often lead to costly errors (Ediagbonya & Tioluwani, 2023).

Entrepreneurs can acquire essential knowledge through a variety of channels: Formal Education – Academic qualifications, such as business degrees or specialized training programs, provide foundational

theoretical and practical knowledge. Work Experience – Hands-on experience within relevant industries or managerial roles offers valuable insights into operational realities and industry-specific practices. Mentorship – Guidance from seasoned entrepreneurs, business consultants, or industry experts can accelerate learning and provide practical wisdom. Networking – Building connections with peers, attending professional events, and participating in entrepreneurial ecosystems fosters knowledge exchange and collaborative learning. Self-directed Learning – Reading books, academic journals, case studies, and credible online resources enables continuous development in entrepreneurship and business management (Shi & Weber, 2021). In sum, knowledge acquisition is not a one-time event but an ongoing process that significantly influences entrepreneurial success and sustainability.

Entrepreneurial education encompasses both formal and informal learning programs designed to teach individuals how to start, manage, and innovate within a business. According to Debarliev et al. (2022), this includes structured university courses, incubator-based programs, experiential seminars, and online platforms offering content specifically for entrepreneurs. Access to education is central in resource-limited cities like Quetta, helping entrepreneurs overcome inexperience, limited guidance, and social or cultural barriers, and enabling them to build the confidence and skills needed to realize their potential.

H2: Entrepreneurial education significantly mediates the relationship between risk-aversion and entrepreneurial growth in Quetta.

2.4 Social Networking

Social networking is the extent to which individuals establish and maintain relationships with family, friends, mentors, business professionals, entrepreneurs, and institutional actors to gain access to knowledge, resources, advice, financial support, and business opportunities that enhance entrepreneurial activities and growth. (Vonneilich, 2022). These networks facilitate collective action and contribute to achieving personal and communal goals. At its core, social networking covers the effective functioning of social structures through elements such as interpersonal trust, shared norms and values, mutual understanding, cooperation, and a sense of collective identity (Saijo, 2022).

It is often described as a form of capital that, unlike financial or physical capital, is embedded in social relationships and produces intangible yet significant benefits, often in the form of public goods (Portes, 2024). These may include increased civic participation, knowledge sharing, reduced transaction costs, and enhanced group cohesion, all of which contribute to the broader social and economic development of a community. It is defined as the web of social relationships that facilitate the exchange of information, mutual assistance, and access to resources, and is a pivotal determinant of entrepreneurial success.

Social networks generally fall into three categories: bonding, bridging, and vertical networks. Bonding networks refer to close relationships with family and friends, which provide emotional support but contribute little to business expansion. In contrast, bridging networks connect entrepreneurs with professionals, mentors, and peers who introduce them to new ideas and external resources. Vertical networks, meanwhile, connect entrepreneurs with influential institutions, including banks, government bodies, and regulatory authorities.

Entrepreneurs in Quetta struggle to access key networks, mentors, peers, investors, and professional contacts because of the absence of structured networking platforms. As a result, they rely heavily on family-based connections, limiting exposure to diverse perspectives and essential resources (Rehman et al; 2026). This challenge is especially severe for young people and women, who face additional cultural barriers. Consequently, many local businesses miss out on critical opportunities for growth and innovation. The

predominance of bonding networks and the weakness of bridging vertical ties result in limited access to mentoring, financing, and institutional support factors that are vital for entrepreneurial advancement (AlMarzooqi, 2025; Amjad, 2026).

The lack of strong networking structures in Quetta limits entrepreneurs’ access to resources, partnerships, industry knowledge, and investment, ultimately restricting business growth, innovation, and regional development. The city’s remoteness further isolates its economic environment. Structured business education, however, can help offset these constraints by offering programs, seminars, and incubators that connect entrepreneurs to mentors, peers, and experts. These interactions create valuable networks that informal, family-based ties cannot provide, strengthening entrepreneurial outcomes. Consequently, this study argues that limited social networking is closely linked to constrained entrepreneurial growth in Quetta.

H3: Lack of social networking has a significant impact on entrepreneurial growth in Quetta.

H4: Entrepreneurial education significantly mediates the relationship between social networking and entrepreneurial growth in Quetta.

2.5 Theoretical Background of the Study

The Theory of Planned Behavior (TPB) suggests that behavior is shaped by attitudes, subjective norms, and perceived behavioral control. This study draws on TPB to analyze how psychological and social constraints, specifically risk aversion and lack of social networking, affect entrepreneurial behavior, and how entrepreneurial education mediates these relationships. Risk aversion reflects the attitudinal dimension, as fear of failure diminishes favorable evaluations of entrepreneurial activity. Lack of social networking corresponds to subjective norms, whereby reduced social support and expectations inhibit entrepreneurial engagement. Entrepreneurial education enhances perceived behavioral control by strengthening individuals’ confidence and preparedness. Although TPB was not formally adopted as the study’s theoretical model, its constructs closely align with the variables investigated, providing a strong conceptual lens for understanding the translation of entrepreneurial intentions into action. This framework is particularly pertinent to Quetta’s distinctive entrepreneurial environment, addressing a notable gap in theory-driven research. Entrepreneurial traits have been identified as significant predictors of entrepreneurial intentions (EI). For instance, Baluku (2018) demonstrated that attitude towards entrepreneurship contributes to EI. Similarly, Roy (2017) found a positive influence of risk-taking attitude on EI.

Based on the Theoretical framework, the conceptual framework of this study is presented in Figure 1.

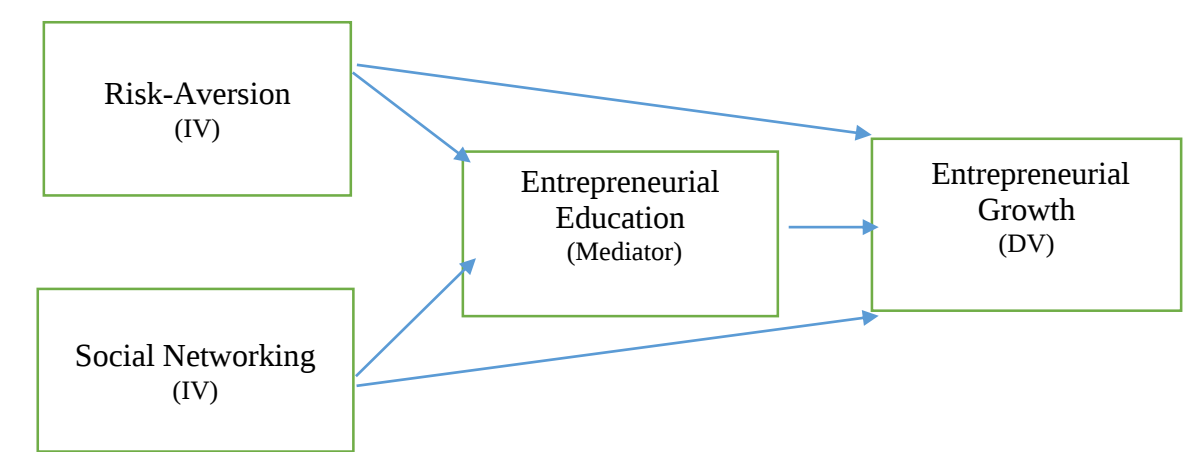


Figure 1. Theoretical Framework

3. Methodology

3.1 Participants and Procedures

This exploratory study employed a cross-sectional survey design. Primary data were collected from 260 undergraduate and graduate students at various universities in Quetta, as well as from small- and medium-sized business owners, to capture diverse perspectives on entrepreneurship. A self-selection sampling technique was used, allowing individuals to voluntarily participate in the study through online and offline modes (Amjad, 2020). Data were collected between April and July 2025 using a structured questionnaire. The online survey was distributed via Google Forms through WhatsApp groups, academic networks, and other digital platforms, while printed questionnaires were administered to participants who preferred offline participation.

Measurement of Key Variables

This study used validated scale items from earlier research to measure each component. Measured on a 5-point Likert scale, with 1 meaning "Strongly Disagree" and 5 meaning "Strongly Agree."

Validity and Reliability: In addition to Cronbach's Alpha, a Confirmatory Factor Analysis (CFA) was performed to ensure the construct validity of the scales used.

Entrepreneurial Growth (EG): adopted scale from (Shahzad & Tariq, 2025). It is a four-item scale and is counted on a five-point Likert scale with a Cronbach's Alpha (α) of 0.872, indicating high internal consistency. This scale has been widely validated in prior research on entrepreneurial growth, particularly among university students and early-career professionals, making it well-suited to this context.

Risk-Aversion (RA): This is a four-item scale adopted from the General Risk Aversion Scale from Meertens & Lion (2011) with a Cronbach's Alpha (α) of 0.739

Social Networking (SN): This is a five-item scale adopted from the study by Hidalgo et al. (2024). The Cronbach's Alpha (α) for the overall scale was 0.785, demonstrating high internal consistency.

Entrepreneurial Education (EE): This scale is adopted from Anwar et al. (2022). It is a three-item scale and is counted on a five-point Likert scale with a Cronbach's Alpha (α) of 0.712, indicating good internal consistency.

3.2 Ethical Consideration

Adherence to ethical principles provides a clear framework for acceptable conduct, strengthens accountability, and improves the credibility and trustworthiness of research findings. Throughout the study, the researcher maintained strict compliance with ethical standards by addressing key principles, including objectivity, integrity, social responsibility, confidentiality, informed consent, respect for cultural values, and non-discrimination.

3.4 Data Analysis

Partial Least Squares Structural Equation Modeling PLS (SEM) was employed for data analysis, as it is a combination of different statistical techniques, which makes the interpretation of results relatively easy and efficient.

4. Results

4.1 Descriptive Statistics

Table .1 summarizes the demographic characteristics of the respondents. Most respondents (94%) are aged 24–35 years, indicating that youth are the most active in entrepreneurial activities in this study. Regarding education, the majority have graduation-level education (87%), followed by master's degrees (58%) and intermediate education (21%), while fewer respondents are matriculated (23%) or have vocational

education (38%). In terms of employment status, 45% of respondents are employed, and 28% are self-employed, while others are students planning to start their own ventures. Additionally, 59% of respondents have no prior business experience, and 40% have some business know-how, suggesting that many entrepreneurs are relatively new. Only 11% earn a monthly income of Rs. 50,000 or above, while the majority earn below this level despite high inflation in Pakistan. Finally, 35% of respondents are unmarried, 24% are divorced or widowed, and the remaining respondents are married.

Table1. Demographic Details of Respondents			
Demographic Detail	Category	Frequency	Percentage
Gender	Male	141	54%
	Female	119	46%
Age	18-23 years	28	11%
	24-29 years	115	44%
	30-35years	117	45%
Education	Matriculation	23	9%
	Vocational	38	15%
	Intermediate	54	21%
	Graduation	87	33%
	Masters	58	22%
Employment status	Student	69	27%
	Employed	118	45%
	Self employed	73	28%
Business Experience	Yes	104	40%
	No	153	59%
Monthly Income	10,000-20,000	104	40%
	20,000-40,000	89	34%
	40,000-50,000	38	14%
	50,000 & above	29	11%
Marital Status	Married	107	41%
	Unmarried	91	35%
	Divorced/Widowed	62	24%

4.2 Correlation Analysis

Pearson correlation analysis was conducted to determine the direction and strength of relationships among the variables under study. Pearson correlation test results are presented in Table 2.

Table 2. Correlation Analysis				
Variables	Correlations			
	EE	RA	SN	EG
EE	1	.158*	.166**	.152**
RA		1	.315**	.089**
SN			1	.451**
EG				1

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

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

Table 2 shows that RA is significantly and positively correlated with EG ($r = 0.158$, $p < 0.05$) and EE ($r = 0.158$, $p < 0.05$). This implies that the relationship between individuals who exhibit an elevated risk-aversion and entrepreneurial activity is limited, even though they may still engage in entrepreneurial activity if they are provided with relevant exposure and education. EG is statistically significant and moderately positively correlated with SN ($r = 0.451$, $p < 0.01$). This suggests that individuals with fewer social connections report higher levels of entrepreneurial growth. This unexpected discovery may indicate a distinctive, restricted dynamic in which entrepreneurship emerges independently, driven by individual motivation or necessity rather than social support. Furthermore, EE exhibits a weak but significant positive correlation with the SN ($r = 0.166$, $p < 0.01$). This may suggest that individuals with limited social networking actively seek educational resources to mitigate the lack of networking opportunities. The hypothesized role of the mediating variable, EE, in facilitating entrepreneurial outcomes is further supported by its significant correlation with the dependent variable, EG ($r = 0.152$, $p < 0.05$).

4.3 Measurement Model Evaluation

The measurement model is assessed by examining indicator reliability, internal consistency reliability, convergent validity, and discriminant validity.

Table No. 3 : Reliability and Validity of Variables						
	No of Items	Alpha	CR	AVE	Factor Loadings	
EE	3	0.712	0.81	0.58	EE 1	0.74
					EE 2	0.72
					EE 3	0.76
RA	4	0.739	0.83	0.55	RA 1	0.71
					RA 2	0.74
					RA 3	0.73
					RA 4	0.75
SN	5	0.785	0.87	0.57	SN 1	0.73
					SN 2	0.77
					SN 3	0.75
					SN 4	0.79
					SN 5	0.74
EG	4	0.872	0.88	0.66	EG 1	0.81
					EG 2	0.82
					EG 3	0.80
					EG 4	0.81

4.3.1 Indicator Reliability

Table No 3. Shows indicator reliability, which was established through the examination of outer loadings. All the indicators demonstrated loading values above the recommended threshold of 0.708, ranging from 0.71 to 0.82, indicating satisfactory item reliability. This confirms that the indicators adequately represent their respective latent constructs.

4.3.2 Internal Consistency Reliability

Internal consistency reliability was evaluated using Composite Reliability (CR). As shown in Table No. 3, CR values ranged from **0.81 to 0.88**, exceeding the recommended minimum value of **0.70**. These findings indicate strong internal consistency in all constructs.

4.3.3 Convergent Validity

Convergent validity was assessed through Average Variance Extracted (AVE). The AVE values in Table No. 3 ranged from **0.55 to 0.66**, all above the threshold of **0.50**, confirming satisfactory convergent validity. This suggests that each construct explains more than 50% of the variance of its respective indicators.

4.3.4 Discriminant Validity

Discriminant validity was evaluated by using 1.Fornell and Larcker criterion (1981) and 2. Hetero trait-monotrait ratio (HTMT) of correlations (Sarstedt et al., 2021).

Table No. 4 Discriminant Validity					
	√AVE	EE	RA	SN	EG
EE	0.762	---	0.158	0.166	0.152
RA	0.742		---	0.315	0.089
SN	0.755			---	0.451
EG	0.812				---

4.3.4.1 Fornell and Larker criterion Table No. 4 shows the square root of AVE of the construct of this study, which indicates that all the values of AVE exceed, and all other elements are lower than the square root of AVE.

4.3.4.2 Hetero trait-monotrait ratio (HTMT) Table No. 4 shows that all HTMT values were below the conservative threshold of 0.85, ranging from 0.089 to 0.451, thereby confirming satisfactory discriminant validity among all latent constructs.

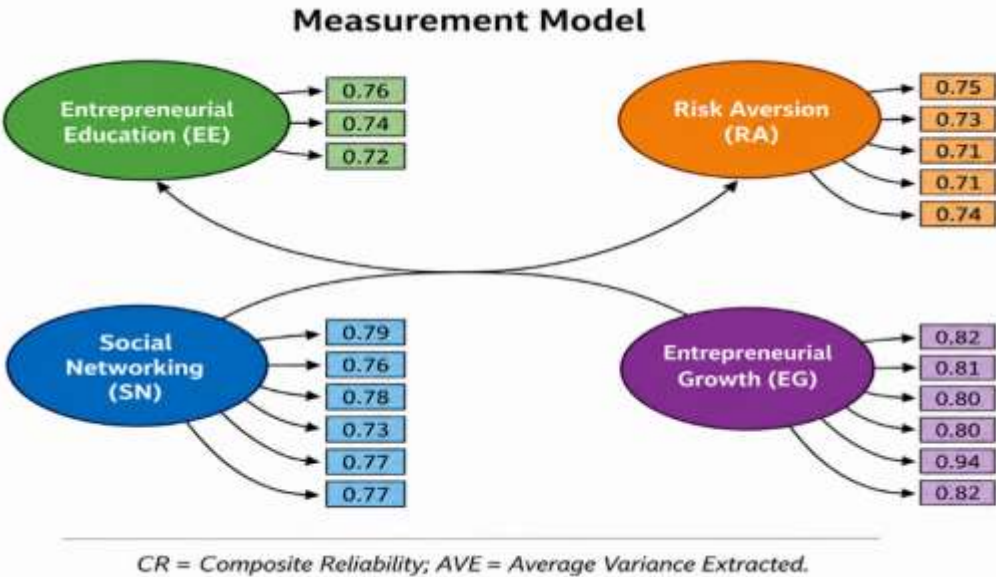


Fig No 2. Measurement Model

4.4 Structural Model Evaluation

The satisfactory results of the measurement model provide a strong foundation for evaluating the structural model and testing the proposed hypotheses. The structural model was evaluated using path coefficients (β), t-statistics, p-values, coefficient of determination (R^2), and mediation effects through bootstrapping procedures in PLS (SEM).

4.4.1 Path Analysis

Table No. 4 Path Analysis					
Effects	Paths	(β) Coefficient	T-values	P-Values	Results
Direct H1	RA $\rightarrow$ EG	0.089	1.417	0.158	Not supported.
Direct H3	SN $\rightarrow$ EG	0.451	7.903	0.000	Supported
Indirect H2	RA $\rightarrow$ EE $\rightarrow$ EG	0.167	4.511	0.008	Supported
Indirect H4	SN $\rightarrow$ EE $\rightarrow$ EG	0.150	4.273	0.050	Supported

Direct Effects

The direct effect of Risk Aversion on Entrepreneurial Growth was found to be positive but statistically insignificant ($\beta = 0.089$, $t = 1.417$, $p = .158$). Therefore, H1 was not supported.

In contrast, Social Networking showed a strong and statistically significant positive effect on Entrepreneurial Growth ($\beta = 0.451$, $t = 7.903$, $p < .001$), providing strong support for H3.

This indicates that entrepreneurs with greater access to social capital tend to experience significantly higher business growth.

Indirect Effects

The indirect effect of RA $\rightarrow$ EE $\rightarrow$ EG was statistically significant ($\beta = 0.167$, $t = 4.511$, $p = .008$), supporting H2.

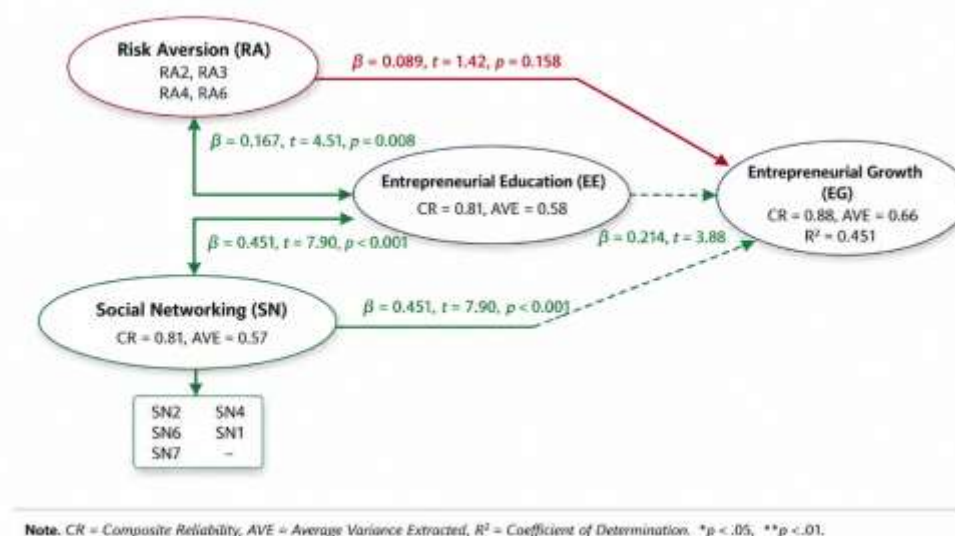
Similarly, the indirect effect of SN $\rightarrow$ EE $\rightarrow$ EG was also significant ($\beta = 0.150$, $t = 4.273$, $p = .050$), supporting H4.

These findings suggest that entrepreneurial education serves as an important mediating mechanism through which both risk aversion and social networking influence entrepreneurial growth.

4.4.2 Coefficient of Determination (R^2)

The predictive accuracy of the model was assessed using the coefficient of determination (R^2) for the endogenous construct, EG. Based on the significant paths from SN and mediated paths through EE, the model demonstrates a moderate level of explanatory power. According to PLS-SEM guidelines, an R^2 value of 0.45 indicates moderate predictive accuracy, suggesting that the exogenous constructs explain 45.1% of the variance in entrepreneurial growth.

Table No. 5 Coefficient of Determination (R^2)	
Endogenous Variable	R^2
EG	0.45

**Fig No 3. Structural Model****5. Discussion and Conclusion****5.1 Discussion****H1: Direct Impact of RAA on EG in Quetta**

The empirical analysis presented in this section examines the relationships among RA, SN, and EE on EG as illustrated in Figure 3. The direct effect of Risk Aversion on Entrepreneurial Growth was found to be positive but statistically insignificant ($\beta = 0.089, t = 1.417, p = .158$). Therefore, H1 was not supported, which suggests that individuals with a higher risk-aversion do not significantly differ in entrepreneurial engagement. Moreover, the model explained only 0.8% of the variance ($R^2 = 0.008$), indicating a weak and negligible effect.

This finding contrasts with mainstream literature that positions risk aversion as a psychological barrier to entrepreneurship. For example, Alnassai (2023) reported a significant negative association in the UAE, while Afzal (2025) found that fear of failure was used as a proxy for risk aversion.

However, in the context of Quetta, it is a different reality. In underdeveloped or resource-constrained environments, entrepreneurship is often necessity-driven rather than opportunity-driven. The prevalence of informal sectors such as home-based services, roadside retail, and unregistered trades lowers the perceived risk, enabling risk-averse individuals to engage in entrepreneurial activity without substantial financial exposure.

The rejection of H1 aligns with other empirical findings that highlight the contextual variability of risk aversion's influence. Zichella and Reichstein (2023) found no significant effect of risk aversion on opportunity evaluation, while [38] reported that fear of failure did not hinder business growth. Similarly, Willebrands et al. (2012) observed that more cautious Nigerian entrepreneurs achieved better outcomes, suggesting that risk awareness may contribute to more deliberate decision-making. Koch and Menkhoff (2025); Amjad (2024) also found that moderate risk-takers demonstrated the highest business survival rates, implying that both excessive risk-seeking and extreme aversion can be counterproductive.

Collectively, these findings reinforce the notion that a risk-averse attitude does not uniformly constrain entrepreneurial behavior. In contexts like Quetta, economic necessity, informal market dynamics, and

culturally specific coping mechanisms may mitigate its effects. Consequently, while H1 is not supported, the result aligns with a broader body of research emphasizing the importance of contextual factors.

This further substantiates the relevance of Hypothesis H3, which theorizes that targeted entrepreneurial education, focused on skill-building, planning, and risk management, can equip even risk-averse individuals to make informed, low-risk decisions, thereby fostering entrepreneurial participation irrespective of personality traits.

H3: Direct Impact of ASC on EG in Quetta

Social Networking showed a strong and statistically significant positive effect on Entrepreneurial Growth ($\beta = 0.451$, $t = 7.903$, $p < .001$), providing strong support for H3. This confirms H3's inverse logic: lack of social networking negatively impacts entrepreneurial success, i.e. individuals with weaker social ties struggle more to start or grow businesses.

This aligns with social capital theory, which views social networks as essential intangible assets. Entrepreneurs lacking mentors, peers, or professional connections often face barriers in accessing resources like market information, funding, and collaboration opportunities.

Earlier research reinforces these findings. Aslam and Adil (2024) found that strong family and social support improved entrepreneurial behaviors among tribal women in Balochistan. Similarly, Alnassai (2023) highlighted how the absence of structured entrepreneurial centers in parts of the UAE hindered networking. Zafar et al. (2022) also emphasized the importance of family support and positive social norms in motivating women entrepreneurs. Even capable individuals may feel isolated or discouraged without such support systems. In conclusion, the evidence for H3 suggests that the absence of social capital in Quetta hinders entrepreneurship.

H2: The Mediating Role of EE on RA and EG in Quetta

Perhaps the most compelling aspect of the findings in this study is the mediating role of entrepreneurial education, which bridges the influence of entrepreneurial growth. This mediation effect underpins a path where entrepreneurial education leads to entrepreneurial growth through a willingness to take risks.

The mediation analysis supports Hypothesis H2, showing that entrepreneurial education fully mediates the relationship between risk-aversion and entrepreneurial growth. The indirect effect of $RA \rightarrow EE \rightarrow EG$ was statistically significant ($\beta = 0.167$, $t = 4.511$, $p = .008$), supporting H2. This finding suggests that entrepreneurial knowledge serves as an important mediating mechanism through which both risk aversion and entrepreneurial growth occur.

Practically, this means entrepreneurial education can counteract the negative effects of risk aversion (Amjad, 2024; Nishat & Nadeem, 2016; Amjad, 2026). Even risk-averse individuals can gain the confidence and skills needed for entrepreneurial action when properly trained. This aligns with previous findings. Alnassai (2023) weighs the value of embedding risk management in formal education to help future entrepreneurs overcome fear. Similarly, behavioral and human capital theories argue that education and exposure enhance self-efficacy and reduce perceived uncertainty (Khurram et al., 2022).

Findings of the study reinforce that risk aversion alone does not predict entrepreneurial growth; education and awareness fill the gap, enabling cautious individuals to move forward. Local youth entrepreneurship programs that include financial literacy and risk analysis demonstrate this strategy in action, helping participants see risk as manageable rather than paralyzing.

In conclusion, support for H2 underlines the critical role of entrepreneurial education and educational interventions in overcoming psychological barriers. Expanding access to programs that build decision-

making, risk-assessment, and confidence is a powerful way to unlock entrepreneurial potential in risk-averse communities.

The mediation analysis aligns with the Baron and Kenny (1986) framework on mediation effects, offering concrete evidence of how risk-aversion and entrepreneurial education interact to shape entrepreneurial growth.

H4: The Mediating Role of EE on SN and EG in Quetta

The mediation analysis supports Hypothesis H4, showing that entrepreneurial education partially mediates the relationship between social networking and entrepreneurial growth. The indirect effect of $SN \rightarrow EE \rightarrow EG$ was significant ($\beta = 0.150$, $t = 4.273$, $p = .050$), supporting H4. These findings suggest that entrepreneurial education serves as an important mediating mechanism through which social networking influences entrepreneurial growth.

This suggests that even individuals with limited personal or professional networks can improve their entrepreneurial prospects through educational programs. Such programs often serve as alternative sources of social capital, offering exposure to mentors, peers, and industry professionals through incubators, competitions, and structured networking sessions. These institutional environments help bridge the social gap for those lacking supportive families or communities (Zichella & Reichstein, 2023).

Studies show that entrepreneurship education not only builds skills but also facilitates social connections (Serpente et al., 2025). For example, university students in Pakistan reported higher entrepreneurial intentions when they had access to incubators and entrepreneurship support services (Korejo et al., 2023). Alnassai (2023) similarly found that educational programs in the UAE helped close the networking gap for aspiring entrepreneurs.

In Quetta, youth entrepreneurship initiatives apply this model by linking participants with mentors, investors, and experienced entrepreneurs, providing critical exposure and building confidence. These programs effectively deliver both human capital (skills) and social capital (connections).

In conclusion, support for H4 highlights that entrepreneurship education in Quetta serves dual purposes: developing skills and compensating for weak social networks. Investing in incubators, mentorship, university programs, and structured training is a practical strategy to level the playing field and expand entrepreneurial opportunities for under-connected individuals.

5.2 Conclusion

This study concludes by proposing a conceptual framework that identifies risk-aversion and social networking as key barriers to business growth in Quetta, Pakistan. Psychological factors such as fear of failure and uncertainty avoidance, intensified by economic and political instability, constrain entrepreneurial activity, while weak social networks limit access to mentorship, market information, and financial resources, particularly for women and youth.

This study provides empirical evidence of how risk-aversion and limited social networks hinder entrepreneurial growth in Quetta, while highlighting the mitigating role of entrepreneurial education. The findings support TPB and demonstrate knowledge and education in addressing these challenges. Enhancing strategic skills, confidence, and opportunity recognition can help individuals overcome psychological and social constraints and engage in calculated risk-taking.

The research underlines the need for targeted policy support, comprehensive training programs, and tailored interventions to strengthen the entrepreneurial ecosystem in underrepresented regions like Quetta,

Pakistan. Further research is needed to deepen understanding and inform more effective entrepreneurship promotion strategies.

5.3 Theoretical Implications of the Study

This study reinforces and extends the Theory of Planned Behavior (TPB) by demonstrating how risk aversion reflects negative behavioral attitudes and weak social networks indicate low subjective norms, both of which diminish entrepreneurial intent. Notably, the mediating role of entrepreneurial education suggests a valuable refinement to TPB, which traditionally treats these antecedents as relatively static. Study findings indicate that education and knowledge can reshape attitudes, challenge prevailing social norms, and enhance perceived behavioral control, pointing to a more dynamic interplay between individual traits, social context, and educational interventions within entrepreneurship theory.

5.4 Practical Implications of the Study

The findings offer actionable insights for policymakers, educators, and development practitioners. Risk aversion emerged as a significant barrier, highlighting the need for financial mechanisms such as startup grants, credit guarantees, and pilot funding schemes to reduce perceived risks. Enhancing social networking through initiatives like entrepreneurship expos, mentorship programs, and women-centred entrepreneurial spaces can improve access to information, resources, and peer support. Targeted interventions for marginalized groups, particularly youth and women, are essential. Overall, fostering entrepreneurship in Quetta requires localized, inclusive, and context-sensitive strategies that address both psychological and structural barriers.

5.5 Managerial Implications of the Study

Program managers and trainers should prioritize curriculum modules that address the fear of failure and promote risk management through simulations, real-world case studies, and confidence-building exercises. In the context of Quetta, entrepreneurship programs should also incorporate robust mentorship structures and networking opportunities to reduce isolation and strengthen social capital. Program customization is essential; interventions must be adaptable to accommodate participants with diverse levels of confidence, technical expertise, and support needs. Ultimately, the managerial focus should be on fostering both emotional resilience and practical preparedness to equip aspiring entrepreneurs for the complex realities of business creation.

5.6 Future Avenues of Study

Future research should expand the variables to include key barriers such as institutional challenges, access to capital, and fear of failure to better understand entrepreneurial obstacles. Incorporating qualitative or mixed methods, like interviews with successful and unsuccessful entrepreneurs, would provide deeper insights into their lived experiences. Additionally, exploring other mediators and moderators, such as mentorship, technology, and government programs, could enhance theoretical models and inform more effective policies and practices.

5.7 Limitations of the Study

While this study provides meaningful insights into the entrepreneurial barriers faced in Quetta, several limitations should be acknowledged. First, the analysis was limited to two independent variables, risk-aversion and social networking, excluding other potentially influential factors such as fear of failure, access to finance, and institutional instability. Second, the cross-sectional design restricts the ability to draw causal inferences, as data were collected at a single point in time. It is also plausible that individuals predisposed to entrepreneurship are more likely to pursue educational opportunities, rather than education being the

driving factor. Finally, the quantitative methodology limits the exploration of contextual dimensions, such as personal narratives, cultural expectations, and informal support systems. These limitations suggest that future research would benefit from a mixed-methods approach to capture both measurable and experiential aspects of entrepreneurship in underdeveloped ecosystems.

References

1. Hatim, M., Irfan, A., Bajwa, Z. S., Malik, A. A., & Younas, E. (2025). The China-Pakistan Economic Corridor and Its Implications for Balochistan: A Socio-Political and Economic Perspective. *ACADEMIA International Journal for Social Sciences*, 4(2), 1305-1314. <https://doi.org/10.63056/ACAD.004.02.0256>
2. Amjad, S., & Khan, M. Z. (2025). From Mindset to Action: The Interplay of Psychological Capital and Risk-Taking in Women's Entrepreneurship in Balochistan, Pakistan. *Human Systems Management*, 44(5), 878-889. <https://doi.org/10.1177/01672533251331494>
3. Shah, S. Z. A., Shabbir, M. R., & Parveen, S. (2022). The impact of unemployment on economic growth in Pakistan: An empirical investigation. *iRASD Journal of Economics*, 4(1), 78-87. <https://doi.org/10.52131/joe.2022.0401.0062>
4. Amjad, S., & Danish, M. (2024). Effectiveness of microfinancing on women's entrepreneurial intentions through structural equation modelling in Balochistan, Pakistan. *Human Systems Management*, 43(6), 1062-1081. <https://doi.org/10.1177/01672533251331494>
5. Shahzad, K., Siddiqui, F. U. H., & Ahmed, J. (2025). An Analysis of the Women's Entrepreneurial Intentions and Participation in the Informal Economy: A Case Study of Quetta, Pakistan. *Social Sciences Spectrum*, 4(1), 323-344.
6. National report on the status of women in Pakistan. Pakistan: UN Women, 2023. <https://Pakistan.unwomen.org/sites/default/files/2023-07/summary-nrsw-inl-final.pdf>
7. Khan, T. A., & Hashmi, N. (2021). Women's political participation and their role in the socio-economic development of Baluchistan. *Pakistan Journal of Society, Education and Language (PJSEL)*, 8(1), 305-313.
8. Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human behavior and emerging technologies*, 2(4), 314-324.. <https://publons.com/publon/10.1002/hbe2.195>
9. Wei, W., & Duan, J. (2024). How do entrepreneurial activities at different levels promote business growth: a review and research agenda? *Chinese Management Studies*, 18(3), 755-784. <https://doi.org/10.1108/CMS-06-2022-0226>.
10. Sharma, G. (2021). The makerspace phenomenon: A bibliometric review of literature (2012–2020). *International Journal of Innovation and Technology Management*, 18(03), 2150006.
11. Widhajati, E. (2024). The Role of Entrepreneurial Mindset in Facing Market Uncertainty in New Entrepreneurs. *InJEBA: International Journal of Economics, Business and Accounting*, 2(3), 463-472. <https://doi.org/10.5281/zenodo.13898851>
12. Lee, C. W., Wang, C. C., Fu, M. W., & Chen, H. C. (2025). Policy Incentives for Strengthening Industry-Academia Collaboration toward Sustainable Innovation and Entrepreneurship. *Sustainability*, 17(20), 9183. <https://doi.org/10.3390/su17209183>
13. Alnassai, J. M. I. A. (2023). A Study on the Barriers to Entrepreneurship in the UAE. *Journal of Risk and Financial Management*, 16(3), 146. <https://doi.org/10.3390/jrfm16030146>

14. Anwar, I., Thoudam, P., & Saleem, I. (2022). Role of entrepreneurial education in shaping entrepreneurial intention among university students: Testing the hypotheses using a mediation and moderation approach. *Journal of Education for Business*, 97(1), 8-20. <https://doi.org/10.1080/08832323.2021.1883502>
15. Bazan, C., Shaikh, A., Frederick, S., Amjad, A., Yap, S., Finn, C., & Rayner, J. (2019). Effect of Memorial University's environment & support system in shaping the entrepreneurial intention of students. *Journal of Entrepreneurship Education*, 22(1), 1-35.
16. Ahmed, T., Klobas, J. E., & Ramayah, T. (2021). Personality traits, demographic factors and entrepreneurial intentions: Improved understanding from a moderated mediation study. *Entrepreneurship Research Journal*, 11(4), 20170062.
17. Margaça, C., Hernández-Sánchez, B. R., Cardella, G. M., & Sánchez-García, J. C. (2021). Impact of the optimistic perspective on the intention to create social enterprises: a comparative study between Portugal and Spain. *Frontiers in Psychology*, 12, 680751.
18. Shah, I. A., Amjed, S., & Jaboo, S. (2020). The moderating role of entrepreneurship education in shaping entrepreneurial intentions. *Journal of Economic Structures*, 9(1), 19. <https://doi.org/10.1186/s40008-020-00195-4>
19. Irshad, S. M. (2024). Theorizing Risk Economics. In *Economics of Disasters and Climate Change: Risk and Uncertainties* (pp. 1-37). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-97-9415-7_1
20. Afzal, M. F. (2025). Loss Aversion, Risk Perception, and Household Financial Decisions in Pakistan: A Prospect Theory Assessment. *Asian Finance Research Journal (AFRJ)*, 01-23.
21. Kheybari, S., Mehrpour, M. R., Bauer, P., & Ishizaka, A. (2024). How can risk-averse and risk-taking approaches be considered in a group multi-criteria decision-making problem? *Group Decision and Negotiation*, 33(4), 883-909. <https://doi.org/10.1007/s10726-024-09895-9>
22. Anwar, I., Saleem, I., Islam, K. B., Thoudam, P., & Khan, R. (2020). Entrepreneurial intention among female university students: examining the moderating role of entrepreneurial education. *Journal for International Business and Entrepreneurship Development*, 12(4), 217-234. <https://doi.org/10.1504/JIBED.2020.110254>
23. Ediagbonya, V., & Tioluwani, C. (2023). The role of fintech in driving financial inclusion in developing and emerging markets: issues, challenges and prospects. *Technological Sustainability*. 2(1), 100-119. doi.org/10.1108/TECHS-10-2021-0017ts
24. Shi, W., & Weber, M. (2021). The impact of entrepreneurs' prior experience and communication networks on perceived knowledge access. *Journal of Knowledge Management*, 25(5), 1406-1426. <https://doi.org/10.1108/JKM-05-2020-03651406-26>.
25. Debarliev, S., Janeska-Iliev, A., Stripeikis, O., & Zupan, B. (2022). What can education bring to entrepreneurship? Formal versus non-formal education. *Journal of Small Business Management*, 60(1), 219-252. <https://doi.org/10.1080/00472778.2019.1700691>
26. Vonneilich, N. (2022). Social relations, social capital, and social networks: A conceptual classification. *Social networks and health inequalities*, 23.
27. Saijo, E. (2022). Understanding the role of social capital in promoting knowledge-based growth in Europe. *Journal of Policy Options*, 5(4), 1-7. <https://resdojournals.com/index.php/jpo/article/view/301>
28. Portes, A. (2024). Social capital: Its origins and applications in modern sociology. *New critical writings in political sociology*, 53-76.

29. Rehman, Z. U., Amjad, S., Karamat, M., & Hussain, M. (2026). Determinants of Profitability and Success in Family-Owned Businesses: Evidence from Pakistan. *ASSAJ*, 5(01), 4775-4790.
<https://www.assajournal.com/index.php/36/article/view/2033>
30. AlMarzooqi, N. (2025). *Developing a Networking Structure for Women Entrepreneurs in the MENA Region: Formal and Informal Networking Elements* (Doctoral dissertation, Durham University).
31. Amjad, S. (2026). Entrepreneurial knowledge as a catalyst for overcoming risk aversion and social constraints: a study of Quetta, Pakistan. *Market Forces*, 21(1). <https://doi.org/10.51153/mf.v2i1.723>
32. Baluku, M. M., Kikooma, J. F., & Otto, K. (2018). Positive mindset and entrepreneurial outcomes: the magical contributions of psychological resources and autonomy. *Journal of Small Business & Entrepreneurship*, 30(6), 473-498.
33. Roy, R., Akhtar, F., & Das, N. (2017). Entrepreneurial intention among science & technology students in India: extending the theory of planned behavior. *International Entrepreneurship and Management Journal*, 13(4), 1013-1041.
34. Khoury, R. B., Cyr, J., & Goodman, S. W. (2024). Sampling hard-to-reach populations. *Doing good qualitative research*, 122.
35. Amjad, S. (2020). Economic determinants of rupee-dollar exchange rates. *Market Forces*, 15(1).
36. Shahzad, K., Tariq, I., & Mehmood, S. (2025). Success Stories of Entrepreneurs of Quetta City, Pakistan: Effectuation, Causation & Hilal Entrepreneurship Models. *Social Science Review Archives*, 3(1), 1938-1949.
<https://doi.org/10.70670/sra.v3i1.503>
37. Meertens, R. M., & Lion, R. (2011). The effects of risk-taking tendency on risk choice and pre-and post-decisional information selection. *Journal of Risk Research*, 14(6), 647-656.
<https://doi.org/10.1080/13669877.2010.547254>
38. Hidalgo, G., Monticelli, J. M., & Vargas Bortolaso, I. (2024). Social capital as a driver of social entrepreneurship. *Journal of Social Entrepreneurship*, 15(1), 182-205.
<https://doi.org/10.1080/19420676.2021.1951819>
39. Zichella, G., & Reichstein, T. (2023). Students of entrepreneurship: Sorting, risk behaviour and implications for entrepreneurship programmes. *Management Learning*, 54(5), 727-752.
<https://doi.org/10.1177/13505076221101516>
40. Henríquez-Daza, M. C., Capelleras, J. L., & Osorio-Tinoco, F. (2024). Does fear of failure affect entrepreneurial growth aspirations? The moderating role of institutional collectivism in emerging and developed countries. *Journal of Entrepreneurship in Emerging Economies*, 16(5), 1213-1234.
<https://doi.org/10.1108/JEEE-08-2022-0232>
41. Koch, M., & Menkhoff, L. (2025). The non-linear impact of risk tolerance on entrepreneurial profit and business survival. *Small Business Economics*, 64(4), 1643-1670. <https://doi.org/10.1007/s11187-024-00956-6>
42. Amjad, S. (2024). Exploring the role of microfinancing, opportunities, and risk in women entrepreneurship development: a study of Balochistan, Pakistan. *South Asian Journal of Management*, 18(1), 63-78. DOI: [10.21621/sajms.2024181.04](https://doi.org/10.21621/sajms.2024181.04)
43. Willebrands, D., Lammers, J., & Hartog, J. (2012). A successful businessman is not a gambler. Risk attitude and business performance among small enterprises in Nigeria. *Journal of Economic Psychology*, 33(2), 342-354.
<https://doi.org/10.2147/PLMI.S328891>.

44. Aslam, F., & Adil, S. (2024). Female Entrepreneurship in Balochistan: Linking Motivation, Empowerment, and Family Well-Being. *Journal of Education and Humanities Research (JEHR), University of Balochistan, Quetta*, 18(02), 136-153.
45. Zafar, D., Khan, S., Khan, M. I., Parachi, S., & Saleem, A. (2022). The Factors influencing entrepreneurship capabilities in Pakistan. *International journal of social science & entrepreneurship*, 2(2), 47-71.
46. Nishat, M., & Nadeem, T. (2016). Factors explaining the risk attitude towards entrepreneurship in Pakistan: an exploratory analysis. *The Pakistan Development Review*, 715-723. <https://www.jstor.org/stable/44986012>
47. Khuram, S., Ahmed, H., & Ali, S. (2022). The impact of entrepreneurial education on the propensity of business students to support new ventures: A moderated mediation model. *Frontiers in psychology*, 13, 1046293. <https://doi.org/10.3389/fpsyg.2022.1046293>
48. Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173. <https://psycnet.apa.org/doi/10.1037/0022-3514.51.6.1173>
49. Serpente, G., Bolzani, D., & Grimaldi, R. (2025). Entrepreneurial support organizations as providers of entrepreneurial education and training. *The Journal of Technology Transfer*, 1-31. <https://doi.org/10.1007/s10961-024-10177-4>
50. Korejo EN, Korejo MS, Bhutto NA, Soomro S. (2023) University Business Incubators and Entrepreneurial Intentions: Impact and Effectiveness. *Lex Humana (ISSN 2175-0947)*. 15(3):182-204. <https://seer.ucp.br/seer/index.php/LexHumana/article/view/2572>
51. Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modelling. In *Handbook of market research* (pp. 587-632). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-57413-4_15