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Title: Entrepreneurial Knowledge as a Catalyst for Overcoming Risk Aversion and Social Constraints: A Study of Quetta, Pakistan

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Entrepreneurial Knowledge as a Catalyst for Overcoming Risk Aversion and Social Constraints: A Study of Quetta, Pakistan

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Abstract

The study has developed a theoretical framework, which has four hypotheses, two direct and two moderating. The study collected data using a five-point Likert-scale questionnaire adapted from prior studies. The sample size for the study was 260, and we collected data physically and from Google Forms. Before collecting the data, we followed all required ethical protocols. Four articulated hypotheses were tested and accepted. Hypothesis 1: "Risk-averse attitudes negatively affect entrepreneurial growth" was accepted. We accepted Hypothesis 2: "Absence of social capital negatively affects entrepreneurial growth. We accepted Hypothesis 3, "Exposure to entrepreneurial knowledge mediates the association between risk-averse attitudes and entrepreneurial growth. We accepted Hypothesis 4: "Exposure to entrepreneurial knowledge mediates the association between absence of social capital and entrepreneurial growth. The study has empirically tested the variables drawn from the Theory of Planned Behavior. Hence, enhancing its generalizability, as the authors of the theory have themselves admitted that their theory may face issues if applied in other cultures.

Keywords: *Risk-averse attitude, entrepreneurial knowledge, social capital, and entrepreneurial growth, and the Theory of Planned Behavior.*

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Introduction

Researchers believe that entrepreneurship is an important determinant of economic stability and prosperity (Amjad & Khan, 2025). It also promotes long-term growth and reduces poverty (Hatim et al., 2025). Researchers believe many psychological, social, and environmental barriers hinder the start and operation of a new venture (Amjad & Khan, 2025), including geology, economy, and social elements. Studies show that entrepreneurs in smaller and less-connected areas face different problems than big cities, including a lack of institutional support, restricted access to resources, and weaker infrastructure. Government in developing countries like Pakistan need to encourage entrepreneurs to make invest in small and medium ventures in Quetta. The government of Pakistan has taken many initiatives to empower youth, including the Kamyab Jawan Program, the Hunarmand Program, and the Youth Entrepreneurship Scheme (Kamyab Jawan). But researchers believe these imitative have not translated into real ventures. Quetta, the Capital of Baluchistan, faces many challenges, including tribal social structures, ethnic diversity, weak governance, and underdeveloped institutions (Shahzad et al., 2025). Hatim et al. (2025) assert that these factors, both directly and indirectly, contributed to various structural issues in Quetta, including inadequate entrepreneurial infrastructure, insufficient business support services, and limited financing.

The study has extended the Theory of Planned Behavior and developed a conceptual framework that has one dependent variable, two antecedents, and one mediator. The research objectives are presented below:

1. To ascertain the “effect of risk aversion, and the absence of social capital on entrepreneurial growth.”
2. To ascertain the “mediating effect of exposure to knowledge on the relationship between risk-averse attitude and entrepreneurial growth.”
3. To examine the “mediating role of exposure to knowledge on the relationship between relationship between absence of social capital and entrepreneurial growth.”

Literature Review

Theoretical Grounding

The study has used the Theory of Planned Behavior, to develop a conceptual framework. Many past studies have used it in their studies to understand consumer attitudes and behavior. It has been used in many domains and countries, including

health and medicine (Ajzen, 1991), environmental studies (Bamberg & Möser, 2007), and business and marketing (George, 2004). The Theory of Planned Behavior has five components. Attitudes towards behavior (Ajzen, 1991), Subjective norms (Fishbein & Ajzen, 1975), perceived behavior control (Ajzen, 2002), behavior intention (Ajzen, 1985), and actual behavior (Armitage & Conner, 2001). Attitude is the consumer's enduring, stable perception towards an object or service (Ajzen, 1991). It directly affects behavioral intentions and, indirectly, actual behavior (Ajzen, 1991). Subjective norms include the influence of culture and friends and peers, directly affecting behavioral intention and indirectly affecting actual behavior. Behavioral intentions directly affect actual behavior. Perceived behavioral control is an internal mechanism. It shows how much control individual think they have over carrying out an action.

In this study, we have used four variables. A risk-averse attitude aligns with the Attitudes component of the Theory of Planned Behavior. Exposure to Knowledge aligns with the subjective norms component of the Theory of Planned Behavior. Absence of Social Capital aligns with the Perceived Behavior control component of the Theory of Planned Behavior. Entrepreneurial Growth relates to the Behavioral Intention Component of the Theory of Planned Behavior.

Hypothesis Development

Risk-Averse Attitude and Entrepreneurial Growth

Many factors adversely affect a risk-averse attitude. (Fossen et al., 2021). Individuals with such an attitude avoid entrepreneurial activity despite its growth potential because of their reluctance to take risks (Ahmed et al., 2022). Gimenez-Jimenez et al. (2022) noted that, in addition to taking risks, entrepreneurs make decisions regarding investment, market expansion, and resource allocation (de Blasio et al., 2021). Entrepreneurs with low risk aversion are least concerned about security and stability. They take strategic decisions that could increase the competitiveness of their ventures (Boudreaux, 2021). On the contrary, entrepreneurs with a high risk-averse orientation are more concerned with security and stability; they avoid making strategic decisions that could enhance their ventures' competitiveness (Ahmed et al., 2022). Many researchers believe individuals tend to avoid loss, meaning they are more concerned with equivalent gains than with potential losses (de Blasio et al., 2021). As a result, such an individual may overlook potentially profitable opportunities and be less competitive in their ventures (Zhao & Xie, 2020). Moreover, such individuals avoid investing in new and innovative technologies, which is essential for a firm's sustainable growth (Fossen et al., 2021).

Miller (1983) documented that the fundamental dimensions of entrepreneurship

include risk-taking, innovativeness, and proactivity. His study also noted that only firms with a high orientation towards entrepreneurial behavior would achieve high growth and performance (Mor et al., 2020). Based on the above discussions, we argue that excessive risk-averse behavior prevents entrepreneurs from capitalizing on emerging opportunities and, as a result, constrains business growth (Fossen et al., 2021). Many scholars, including David and McClelland (1961), observed that successful entrepreneurs have a built-in capacity for achievement and a strong willingness to take moderate risks to attain their goals. On the contrary, unsuccessful entrepreneurs often avoid taking moderate risks, therefore, they are not able to attain their goals (Zhao & Xie, 2020). Furthermore, many studies have documented that risk-averse entrepreneurs often struggle to achieve long-term growth because they are reluctant to seek external financing and invest in research and development (Ahmed et al., 2022). Additionally, high-risk-averse individuals prefer to maintain existing operations rather than pursue expansion (Fossen et al., 2021). On the contrary, low-risk-averse entrepreneurs are committed to obtaining external finances despite uncertain returns (Zhao & Xie, 2020).

H1: Risk-averse attitude "has a negative impact on entrepreneurial growth"

Absence of Social Capital and Entrepreneurial Growth

Social capital is a multidisciplinary concept, which has been extensively used both in sociology and economics. It refers to the value derived from networks of relationships between individuals and groups (Vonneilich, 2022). These networks facilitate collective actions and help in achieving personal and communal goals. Researchers believe, social capital also improves the effective functioning of social structures through elements such as interpersonal trust, shared norms and values, and mutual understanding (Saijo, 2022). It is often described as a form of capital which is intangible. Yet it has significant benefits, including increased knowledge sharing, and enhanced group cohesion, all of which contribute to a community's broader social and economic development.

Researchers believe bonding, bridging, and vertical network are important components of social networking. Bonding refers to close relationships with peers, friends, and family. In contrast, the bridging network plays a significant role in connecting entrepreneurs with professionals and mentors who can offer new ideas and external resources. On the other hand, researchers assert that vertical networking is an important tool that connects entrepreneurs with institutions such as banks, government bodies, and regulatory authorities. These institutions are critical for entrepreneurship. Structural networking platforms are unavailable in Quetta, making it difficult for entrepreneurs to access key networks, mentors, and professional contacts (AlMarzooqi, 2025). Therefore, the entrepreneurs in Quetta have limited exposure to diverse essential resources as a

result, their reliance on family-based connections is significantly higher (AlMarzooqi, 2025).

H2: The absence of social capital has a “significant negative impact on entrepreneurial growth in Quetta.”

Exposure to Entrepreneurial Knowledge, Absence of Social Capital, and Entrepreneurial Growth

Past studies stress that individuals with a risk-averse attitude have a low inclination to pursue entrepreneurial activities. Such individuals prefer financial stability and want to avoid the uncertainty associated with entrepreneurship (Zhang & Cain, 2017). On the contrary, researchers believe that individuals with low risk aversion engage in entrepreneurial activities because they are not afraid to take risks (Cramer et al., 2002). However, exposure to entrepreneurial knowledge mitigates the negative effects of risk aversion by improving individuals' understanding of business operations and confidence. At the same time, low exposure to entrepreneurial knowledge increases the negative effects of risk aversion on entrepreneurship (Hassan et al., 2020). Individuals' ability to manage business risk effectively increases when they are exposed to entrepreneurial education, training, mentorship, and market information (Zhang & Cain, 2017). On the other hand, an individual's ability to manage business risk effectively decreases when they lack opportunities for entrepreneurial education, training, mentorship, and market information. Many studies have documented that entrepreneurial knowledge mediates the association between risk-aversion attitudes and entrepreneurial growth (Zhang & Cain, 2017).

Entrepreneurs in developing countries like Pakistan live in an uncertain economic and institutional environment; therefore, entrepreneurial knowledge is important for them to cope with these challenges. Based on the above theoretical discussion, we believe that individuals in Quetta may initially hesitate to pursue entrepreneurial ventures. Conversely, we believe that when entrepreneurial knowledge is imparted to them through education and mentoring, their entrepreneurial competencies will increase significantly. Thereby, it may translate risk-averse attitudes into productive entrepreneurial behavior, ultimately contributing to entrepreneurial growth.

Social capital is a multidisciplinary concept, widely used in both sociology and economics. Researchers believe, it refers to the value derived from networks of relationships between individuals and groups (Vonneilich, 2022). These networks facilitate collective action and help achieve personal and communal goals. Moreover, at its core, social capital promotes the effective functioning of social structures through

elements such as interpersonal trust, and shared norms (Saijo, 2022). It unlike financial or physical capital, produces intangible yet significant benefits, such as knowledge sharing, and enhanced group cohesion. Both contribute to a community's broader social and economic development.

Researchers believe bonding, bridging, and vertical networks are important components of social networking. Bonding refers to close relationships between peers, friends, and family. The bridging network plays a significant role in connecting entrepreneurs with professionals and mentors who can offer new ideas and external resources. On the other hand, researchers assert that vertical networking is an important tool that connects entrepreneurs with institutions such as banks, government bodies, and regulatory authorities. These institutions are critical for entrepreneurship. Structural networking platforms are unavailable in Quetta, making it difficult for entrepreneurs to access key networks, mentors, and professional contacts (AlMarzooqi, 2025). Therefore, the reliance of entrepreneurs in Quetta on family-based connections has increased significantly (AlMarzooqi, 2025).

H3: Exposure to entrepreneurial knowledge significantly “mediates the relationship between risk-averse attitude and entrepreneurial growth in Quetta.”

Social Absence Capital, Exposure to Entrepreneurial Knowledge, and Entrepreneurial Growth

Past studies have extensively explored the association between social capital, entrepreneurial knowledge, and entrepreneurial growth (Liao & Welsch, 2003). Rathod et al. (2023) assert that the availability of social capital enables entrepreneurs to access resources, opportunities, and information more easily. Researchers believe that when social capital are available to entrepreneurs, they are not reluctant to venture into new projects (Lee et al., 2001). Conversely, when social capital is unavailable to entrepreneurs, they do not take the initiative in entrepreneurial activities. They are constrained by limited access to market information, mentorship, financing, and professional networks. (Chen, et al. 2015). Peng et al. (2022) assert that policymakers can increase entrepreneurs' knowledge by providing education, training, workshops, and institutional support. These supports compensate for their deficiency and increase entrepreneurial growth (Chen et al., 2015). Many past studies have documented that social capital promotes innovation and acquisition, which, directly and indirectly, contribute to business growth (Liao & Welsch, 2003).

Many prior studies, including Peng et al. (2022), have shown that entrepreneurial knowledge serves as a catalyst that helps entrepreneurs recognize business

opportunities and improve decision-making. Moreover, many past studies highlighted that the interaction between entrepreneurial and social capital significantly promotes entrepreneurship. Furthermore, many past studies have documented that social capital provides access to entrepreneurial learning and resource mobilization. However, individuals with limited social capital may still grow if exposed to entrepreneurial education, training programs, and institutional knowledge-sharing mechanisms. The above arguments support that entrepreneurial knowledge mediates the association between social capital and business growth. Quetta, compared to other cities of Pakistan, has a significantly underdeveloped entrepreneurial ecosystem and networking opportunities. However, exposure to knowledge through exposure to entrepreneurial knowledge may mediate the association between the absence of social capital and entrepreneurial growth.

H4: Exposure to entrepreneurial “knowledge significantly mediates the relationship between the absence of social capital and entrepreneurial growth.”

Conceptual framework

A conceptual framework provides a structural explanation of the main concepts and the relationships among the constructs used in the study. It is basically a map that helps researchers on how to proceed in the study. Based on the discussions in the preceding sections, we have formulated a conceptual framework, as shown in Figure 1.

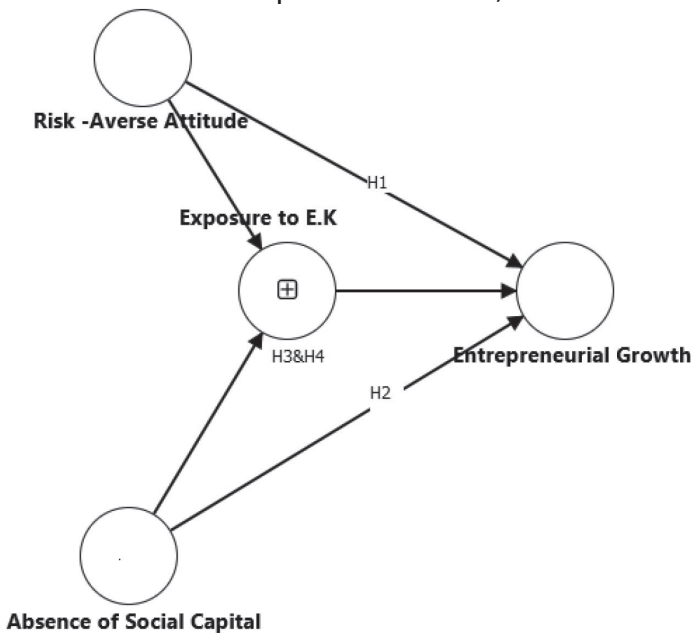


Figure 1: Conceptual Framework

Methodology

Research Design

A well-developed research design helps a researcher ensure that the study is organized, reliable, and capable of producing valid results (Creswell & Creswell, 2022). There are many types, including descriptive, correlational, experimental, qualitative, and quantitative (Privitera, 2023). Descriptive research focuses on describing characteristics of a population or phenomenon (Islam et al., 2022). Correlational research focuses on examining relationships among constructs in a study (Sarwono, 2022). Experimental research focuses on investigating cause-and-effect relationships under controlled conditions (Acharya & Pal, 2022). Qualitative research helps to understand experiences and behaviors through open-ended questionnaires (Creswell & Creswell, 2022). Quantitative research focuses on collecting and analyzing numerical data and testing hypotheses (Privitera, 2023). This study is quantitative and cross-sectional.

Population and Sampling

The population contains all the elements in it (Islam et al., 2022). Whereas a sample is a small segment drawn from the population (Privitera, 2023). The population of this study comprised all small- and medium-sized entrepreneurs in Quetta. The sample size for the study was 260, which, according to many researchers, is appropriate for the study using Smart PLS. The study collected data using a closed-ended questionnaire distributed via Google Forms.

Ethical Consideration

Ethical compliance ensures clarity regarding what is permissible. It promotes accountability and enhances the reliability and credibility of the information produced (Creswell & Creswell, 2022). The researcher ensured that ethical standards were strictly followed throughout the research process, addressing major concerns such as objectivity, honesty, social responsibility, confidentiality, informed consent, respect for cultural considerations, and non-discrimination (Privitera, 2023).

Scale and Measure

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." Table 1 shows constructs, sources, and the number of items.

Table 1: Scale and Measures

Construct	Sources	Items
Risk Averse Attitude	Weeber et al. (2002)	6
Exposure to Entrepreneurial Knowledge	Liñán et al. (2009)	5
Absence of Social Capital	Onyx and Bullen (2000)	5
Entrepreneurial Growth	Lumkin and Dess (1996)	5

Results

Respondent Profile

Respondent profiles help researchers understand who provided the data, which helps them interpret the findings correctly (Privitera, 2023). Table 2 shows the summary of the respondents’ profiles.

Table 2: Demographics Profile

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%

Descriptive Analysis

A descriptive analysis summarizes the results related to the mean, standard deviation, Skewness, and Kurtosis of the constructs used in the study (Creswell & Creswell, 2022). It helps in determining univariate normality and the reliability of the constructs (Privitera, 2023). Additionally, these analyses help in understanding the general patterns within the data (Islam, et al. 2022). Table 2 depicts the descriptive analysis.

Table 2: Descriptive Analysis

Construct	Mean	Std Dev.	Skewness	Kurtosis
Risk Aversion Attitude	3.440	2.210	-0.620	-0.481
Absence of Social Capital	3.721	2.120	-0.352	-0.210
Exposure to Entrepreneurial knowledge	3.581	1.765	-0.410	-0.333
Entrepreneurial Growth	3.889	1.666	0.271	-0.150

The results show that the mean values ranged between 3.440 and 3.889. Standard deviation ranged between 1.666. and 2.220. Skewness values ranged between 0.352 and 0.410. Kurtosis values ranged between 0.150 and 0.481. Based on these results, we have concluded that the constructs used in the study meet the requirements of univariate normality (Sarwono, 2022).

Internal Consistency and Convergent Validity

There are different methods for assessing the internal consistency of the constructs. It includes Cronbach's Alpha (Creswell & Creswell, 2022), split-half reliability (Privitera, 2023), and Kuder–Richardson Formula 20 (Islam et al., 2022). We assessed the construct's internal consistency using Cronbach's alpha. The results show that Cronbach's alpha falls within the acceptable range, indicating adequate internal consistency for the construct (Sarwono, 2022)

Additionally, we assessed convergent validity using composite reliability and AVE. The results show that all AVE values are greater than 0.650 (Acharya & Pal, 2022), and composite reliability values are at least 0.80 (Islam, et al. 2022), confirming that the constructs meet the requirement of convergent validity (Creswell & Creswell, 2022). Refer to Table 3.

Table 3: Internal Consistency and Convergent Validity

Construct	Cronbach's Alpha	Composite Reliability	AVE
Risk Aversion Attitude	0.821	0.881	0.651
Absence of Social Capital	0.851	0.900	0.691
Exposure to Entrepreneurial knowledge	0.871	0.901	0.702
Entrepreneurial Growth	0.892	0.902	0.751

Discriminant Validity

If the constructs used in the study are not unique and distinct, the results of the hypothesis may be incorrect (Creswell & Creswell, 2022). Researchers have proposed various methods for assessing discriminant validity, including the Fornell–Larcker criterion and the HTMT ratios (Islam, et al. 2022). We have employed both methods. Table 4 shows that the correlation values are lower than their square roots, suggesting that the constructs are empirically distinct under the Fornell-Larcker Criterion. Additionally, Table 5 shows that all the HTMT values are less than 0.850. Thus, we established the discriminant validity using HTMT criteria as well (Sarwono, 2022).

Table 4: Discriminant Validity (Fornell-Larcker, Criteria)

Construct	RAA	ASC	EEK	EG
Risk Aversion Attitude	0.781			
Absence of Social Capital	0.420	0.810		
Exposure to Entrepreneurial knowledge	0.361	0.470	0.840	
Entrepreneurial Growth	0.291	0.502	0.580	0.860

Table 5: Discriminant Validity (HTMT Ratio)

Construct	RAA	ASC	EEK	EG
Risk Aversion Attitude	-			
Absence of Social Capital	0.551	-		
Exposure to Entrepreneurial knowledge	0.490	0.631	-	
Entrepreneurial Growth	0.410	0.710	0.580	-

Fit Indices

The study used several commonly used fit indices to assess how well the proposed model fit the observed data. The summarized results are depicted in Table 6.

Table 6: Fit Indices

Fit Indices	Recommended Value	Obtained Value	Interpretation
Chi-square (χ^2)	(lower is better)	412.35	Acceptable Fit
χ^2/df	< 3.00	2.21	Good Fit
GFI	≥ 0.900	0.920	Good Fit
AGFI	≥ 0.800	0.880	Acceptable Fit
CFI	≥ 0.900	0.950	Excellent Fit
TLI	≥ 0.900	0.940	Good Fit
RMSEA	≤ 0.080	0.056	Good Fit
SRMR	≤ 0.080	0.049	Good Fit

The results show that the model overall has good fitness. One index falls in the excellent threshold level (Creswell & Creswell, 2022), five fall in the good fit threshold (Privitera, 2023), and two falls in the acceptable threshold level (Islam, et al. 2022).

R and Q Square Values

The study has used R-squared values to assess the model's explanatory power (Privitera, 2023) and Q-squared values to assess its predictive relevance (Creswell & Creswell, 2022). The results in table 7 show that exposure to entrepreneurial knowledge ($R^2=0.410$, and $Q^2=0.260$) has moderate explanatory power and predictive relevance (Privitera, 2023). At the same time, entrepreneurial growth ($R^2=0.580$, $Q^2=0.340$) has substantial explanatory and predictive relevance (Islam, et al. 2022).

Table 7: R and Q Square Values

Construct	R ²	Q ²	Interpretation
Exposure to Entrepreneurial Knowledge	0.410	0.260	Moderate explanatory & predictive relevance
Entrepreneurial Growth	0.580	0.340	Substantial explanatory & predictive relevance

Hypothesis Results

We have proposed and tested four hypotheses. Table 8 depicts the hypothesis results, and Figure 3 depicts the structural model.

Table 8: Hypotheses Results

Hypothesis	Beta (β)	t-value	p-value	Decision
RAA → EG (H1)	-0.200	4.150	0.026	Supported
ASC → EG (H2)	-0.349	4.670	0.000	Supported
RAA → EEK → EG (Mediation)(H3)	0.190	3.121	0.002	Supported
ASC → EEK → EG (Mediation)(H4)	0.270	3.980	0.000	Supported

The results that the highest effect size is on the negative association between absences of social capital and entrepreneurial growth ($\beta=-0.349$, $t=4.670 < 0.05$), followed mediating effect of exposure to entrepreneurial knowledge between absence of social capital and entrepreneurial knowledge ($\beta=0.270$, $t=3.980 < 0.05$), negative association between risk aversions attitude and entrepreneurial growth ($\beta= -0.200$, $t=4.150 < 0.05$), and mediating effect of exposure to entrepreneurial knowledge between risk aversion attitude and entrepreneurial knowledge ($\beta=0.190$, $t=3.121 < 0.05$).

Discussion and Conclusion

Discussion

We accepted Hypothesis 1: "Risk-aversion attitude has a significant effect on entrepreneurial growth" ($\beta = -0.200$, $t = 4.150 < 0.05$). Individuals, especially in developing countries, tend to avoid uncertainty and refrain from investing in riskier, higher-return portfolios (Irshad, 2024). Lee et al. (2025) argue that organizations and individuals prefer stable, predictable returns on their investments, despite the comparatively low returns. Among other factors, investment in high-risk ventures is low because individuals fear losses or negative outcomes (Afzal, 2025). Kheybari et al. (2025) believe that risk aversion affects decision-making and investment behavior both directly and indirectly. An individual who avoids taking risks before making investment decisions conducts detailed evaluations of potential risks and returns (Kheybari et al., 2025). They often engage experts to assess the viability of their ventures from both financial and business perspectives (Kheybari et al., 2025). In Pakistan, estimates suggest that more than 20,000 small ventures have closed due to a lack of capital and an inability to assess project viability before making investments.

Many studies have documented that entrepreneurs in cities such as Quetta do not venture into new projects because they have a positive risk-averse attitude (Anwar et al., 2022). Some factors that have contributed to these attitudes in Quetta include economic instability and limited stability. As a result, the economic growth rate has decreased quite significantly. Moreover, potential entrepreneurs in Quetta do not pursue viable projects because they believe that the financial and social costs of failure outweigh the potential gains. We believe that the risk-averse attitude can be segmented into three broad categories: financial, social, and career. Financial risk has stemmed from monetary loss and economic uncertainty. Social risk has stemmed from damaging reputation and social standing. Career risk has stemmed from a preference for a stable job over the uncertainty associated with entrepreneurship. All the above determinants, directly and indirectly, affect entrepreneurship.

The study supports H2: "Absence of social capital negatively affects entrepreneurial growth." ($\beta = -0.349$, $t = 4.670 < 0.05$). Social capital is a multidisciplinary concept, widely used in both sociology and economics. It refers to the value derived from networks of relationships between individuals and groups (Vonneilich, 2022). These networks facilitate collective action and help achieve personal and communal goals. At its core, social capital promotes the effective functioning of social structures through elements such as interpersonal trust and shared norms (Saijo, 2022). It is often described as a form of capital that produces intangible yet significant benefits, such as knowledge sharing,

reduced transaction costs, and enhanced group cohesion (Portes, 2024). Researchers believe bonding, bridging, and vertical network are important components of social networking. Bonding refers to close relationships with peers, friends, and family. In contrast, the bridging network plays a significant role in connecting entrepreneurs with professionals and mentors who can offer new ideas and external resources. On the other hand, researchers assert that vertical networking is an important tool that connects entrepreneurs with institutions such as banks, government bodies, and regulatory authorities. These institutions are critical for entrepreneurship. Structural networking platforms are unavailable in Quetta, making it difficult for entrepreneurs to access key networks, mentors, and professional contacts (AlMarzooqi, 2025). Therefore, the entrepreneurs in Quetta's reliance on family-based connections is significantly higher (AlMarzooqi, 2025).

The study accepted Hypothesis 3: "Knowledge exposure mediates the relationship between risk aversion and entrepreneurial growth." Past studies stress that individuals with a risk-averse attitude have a low inclination to pursue entrepreneurial activities. Such individuals prefer financial stability and want to avoid the uncertainty associated with entrepreneurship (Zhang & Cain, 2017). On the contrary, researchers believe that individuals with low risk aversion engage in entrepreneurial activities because they are not afraid to take risks (Cramer et al., 2002). However, exposure to entrepreneurial knowledge mitigates the negative effects of risk aversion by improving individuals' understanding of business operations and confidence. At the same time, low exposure to entrepreneurial knowledge increases the negative effects of risk aversion on entrepreneurship (Hassan et al., 2020). Individuals' ability to manage business risk effectively increases when they are exposed to entrepreneurial education, training, mentorship, and market information (Zhang & Cain, 2017). On the other hand, an individual's ability to manage business risk effectively decreases when they lack opportunities for entrepreneurial education, training, mentorship, and market information. Many studies have documented that entrepreneurial knowledge mediates the association between risk-aversion attitudes and entrepreneurial growth (Zhang & Cain, 2017).

Entrepreneurs in developing countries like Pakistan live in an uncertain economic and institutional environment; therefore, entrepreneurial knowledge is important for them to cope with these challenges. If we apply the above theoretical discussion, we believe that individuals in Quetta may initially hesitate to pursue entrepreneurial ventures. Conversely, we believe that when entrepreneurial knowledge is imparted to them through education and mentoring, their entrepreneurial competencies will increase significantly. Thereby, it may translate risk-averse attitudes into productive entrepreneurial behavior, ultimately contributing to entrepreneurial growth.

The study accepted Hypothesis 4: "Exposure to entrepreneurial knowledge mediates the relationship between the absence of social capital and entrepreneurial growth ($\beta = 0.270$, $t = 3.980 < 0.05$)". Past studies have extensively explored the association between social capital, entrepreneurial knowledge, and entrepreneurial growth (Liao & Welsch, 2003). Rathod et al. (2023) assert that the availability of Social capital enables entrepreneurs to access resources, opportunities, and information more easily. Researchers believe that when social capital are available to entrepreneurs, they are not reluctant to venture into new projects (Lee et al., 2001). Conversely, when social capital is unavailable to entrepreneurs, they do not take the initiative in entrepreneurial activities. They are constrained by limited access to market information, mentorship, financing, and professional networks. (Chen, et al., 2015). Peng et al. (2022) assert that policymakers can increase entrepreneurs' knowledge by providing education, training, workshops, and institutional support. These supports compensate for their deficiency and increase entrepreneurial growth (Chen et al., 2015). Many past studies have documented that social capital promotes innovation and acquisition, which, directly and indirectly, contribute to business growth (Liao & Welsch, 2003). Prior studies, including Peng et al. (2022), have shown that entrepreneurial knowledge serves as a catalyst, helping entrepreneurs recognize business opportunities and ultimately improving decision-making and strengthening venture performance.

Additionally, many past studies highlighted that the interaction between entrepreneurial and social capital significantly promotes entrepreneurship. Furthermore, many past studies have documented that social capital provides access to entrepreneurial learning, opportunity recognition, and resource mobilization. However, individuals with limited social capital may still grow if exposed to entrepreneurial education, training programs, and institutional knowledge-sharing mechanisms. The above arguments support that entrepreneurial knowledge mediates the association between social capital and business growth. Quetta, compared to other cities of Pakistan, has a significantly underdeveloped entrepreneurial ecosystem and networking opportunities. However, exposure to entrepreneurial knowledge through universities may mediate the association between social capital and entrepreneurial knowledge.

Conclusion

Researchers believe that entrepreneurship is an important determinant of economic stability and prosperity (Amjad & Khan, 2025). It also promotes long-term growth and reduces poverty (Hatim et al., 2025). It goes beyond turning new ideas into businesses that boost the local economy, create jobs, and improve lives (Hatim et al., 2025). However, many psychological, social, and environmental barriers hinder the start and operation of a business (Amjad & Khan, 2025). The geology, economy, and social elements of

the area can also affect the shape and strength of these barriers. Studies show that entrepreneurs in smaller, less-connected areas face different problems than those in big cities, including a lack of institutional support, restricted access to resources, and weaker infrastructure. People will likely address these problems and reach their goals in different ways (Hatim et al., 2025). Given its importance, the study has extended the Theory of Planned Behaviour (TPB) and developed a conceptual framework containing four hypotheses, two direct and two moderating. The study collected data using a five-point Likert-scale questionnaire adapted from prior studies. The sample size for the study was 260, and we collected data physically and from Google Forms. Before collecting the data, we followed all required ethical protocols. Four hypotheses were accepted. Hypothesis 1: "risk-averse attitudes negatively affect entrepreneurial growth" was accepted. We accepted Hypothesis 2: "Absence of social capital negatively affects entrepreneurial growth". We accepted Hypothesis 3: "Exposure to entrepreneurial knowledge mediates the association between risk-averse attitudes and entrepreneurial growth. We accepted Hypothesis 4: "Exposure to entrepreneurial knowledge mediates the association between absence of social capital and entrepreneurial growth".

Theoretical and Practical Implications of the Study

This study has extended the Theory of Planned Behavior (Ajzen, 1991) for developing a conceptual framework. It has been demonstrated that a risk-averse attitude is negatively associated with behavioral intention (i.e., entrepreneurial growth) (Ajzen, 2002), and documented subjective norms (absence of social capital) (Ajzen, 2020) positively affect behavioral intention (i.e., entrepreneurial growth). Moreover, the mediating roles of entrepreneurial knowledge have further refined the Theory of Planned Behavior (Fishbein & Ajzen, 1975), which, according to prior studies, is static. We also found that education and knowledge can affect attitude, an important component of the Theory of Planned Behavior (Ajzen & Fishbein, 1980). The study has empirically tested the variables drawn from the Theory of Planned Behavior. Hence, enhancing its generalizability, as the authors of the theory have themselves admitted that it may face issues when applied in other cultures (Fishbein & Ajzen, 1975).

This study has several implications for policymakers. Traditionally, individuals in Quetta, Balochistan, have been risk-averse. The reason for such an attitude is that the individuals in Quetta tend to avoid uncertainty. They prefer conventional jobs with low risk and a consistent income. Policymakers need to change these attitudes by organizing workshops and seminars for adults. Moreover, schools and universities must offer entrepreneurship courses that emphasize its importance and benefits. One reason for low entrepreneurial growth is that Quetta, compared with other Pakistani cities, lacks social capital. The institutions of social capital are critical for entrepreneurship.

Moreover, structural networking platforms are unavailable in Quetta, making it difficult for entrepreneurs to access key networks, mentors, and professional contacts (AlMarzooqi, 2025). Therefore, the entrepreneurs in Quetta have limited exposure to diverse essential resources as their reliance on family-based connections is significantly higher (AlMarzooqi, 2025). Addressing the issues discussed would significantly increase entrepreneurial growth. Furthermore, in Quetta, there is low exposure to entrepreneurial knowledge. The policy makers must address this issue by enhancing it by organizing workshops and allocating mentors to the entrepreneurs.

Limitation and Future Research

The study found that risk aversion positively affects entrepreneurship in Quetta, contrary to past studies and the literature. However, this interesting finding cannot be generalized. More studies are needed with larger sample sizes and across diverse cultures and cities before generalizing the findings. The study has used two antecedents (i.e., risk-averse attitude and absence of social capital). Other studies may use antecedents such as human capital, innovation capability, and social networks. The study has not used any moderators between risk-averse attitudes and entrepreneurial growth. Other studies may use moderators such as access to finance, government support policies, entrepreneurial education, and market stability. Similarly, we have not included any moderator in the relationship between the absence of social capital and entrepreneurial growth. Future studies may use moderators such as digital networking platforms, access to financial financing, innovation capability, and personality traits. The study results are based on a small sample collected from a city. Future studies may collect a larger sample size from different cities in Pakistan. Our study is quantitative; other studies may adopt qualitative or mixed methods.

Annexure 1

Constructs and Items use in the Questionnaire

Entrepreneurial Growth

1. I prefer to make decisions that are safe rather than risky.
2. I avoid investments or opportunities that have uncertain outcomes.
3. I invest in improving my skills and knowledge to grow my business.
4. I invest in improving my skills and knowledge to grow my business.
5. I regularly adopt new strategies or technologies to enhance business performance.

Risk Aversion

1. I prefer to make decisions that are safe rather than risky.
2. I avoid investments or opportunities that have uncertain outcomes.
3. I feel uncomfortable when faced with situations that have high uncertainty.
4. I prefer steady, predictable outcomes over potentially higher but uncertain rewards.
5. I am willing to take calculated risks if the potential benefits are high. (reverse-coded)
6. I usually stick to familiar methods rather than trying new approaches with uncertain results.

Absence of Social Capital

1. I have a few professional contacts who can provide guidance or support.
2. I rarely collaborate with others to achieve common goals.
3. I feel isolated when trying to access resources or opportunities.
4. I lack trustworthy individuals to rely on for advice or assistance.
5. I seldom participate in networks or groups that could help my personal or business growth.

Exposure to Entrepreneurial Knowledge

1. I have attended workshops, seminars, or courses on entrepreneurship.
2. I regularly read books, articles, or online content about entrepreneurship.
3. I have mentors or advisors who provide entrepreneurial guidance.
4. I have access to formal training or educational programs on business management.
5. I actively seek information to improve my entrepreneurial skills and knowledge.

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