



Recognized by: Higher Education Commission (HEC), Government of Pakistan

Exploring the Mediating Role of Entrepreneurial Passion in the Relationship Between Support Systems and Entrepreneurial Intention

Abubakar Hunjrah

University of Central Punjab, Gujranwala Campus.

abubakr6201@gmail.com

Aamar Ilyas

Assistant Professor, University of Central Punjab, Gujranwala Campus

Faqir Ali

University of Central Punjab, Gujranwala Campus

Hussain Ishfaq

University of Central Punjab, Gujranwala Campus

Faiq Saleem

University of Central Punjab, Gujranwala Campus

Abdullah Afzal

University of Central Punjab, Gujranwala Campus

ABSTRACT

Entrepreneurial intention is a critical precursor to venture creation, influenced by various support systems and psychological factors. This study examines the relationships between family support, perceived educational support, and perceived institutional support on entrepreneurial intention, with entrepreneurial passion as a mediating variable. Drawing on theories such as the Theory of Planned Behavior, Social Cognitive Theory, and Affect Theory, the research employs a quantitative approach, surveying 450 university students in Gujranwala, Pakistan. Data were analyzed using structural equation modeling (SEM) and mediation analysis via Hayes' PROCESS macro. The results reveal that all three support systems significantly predict entrepreneurial intention, with perceived educational support exhibiting the strongest direct effect ($\beta = 0.27$, $*p^* < .001$). Entrepreneurial passion not only directly influences intention ($\beta = 0.35$, $*p^* < .001$) but also mediates 28–41% of the effects of family, educational, and institutional support on

entrepreneurial intention. Family support shows the highest indirect effect through passion ($\beta = 0.13$, 95% CI [0.08, 0.19]), highlighting its role in fostering emotional engagement. These findings underscore the importance of integrating multiple support systems to nurture entrepreneurial ecosystems, with passion serving as a key motivational bridge. Practical implications suggest that educators should enhance experiential learning programs, policymakers should improve institutional frameworks, and families should provide emotional and financial backing to stimulate entrepreneurial activity. The study contributes to theory by validating passion as a mediator and offers actionable insights for stakeholders aiming to promote entrepreneurship.

Keywords: Entrepreneurial Intention, Family Support, Educational Support, Institutional Support, Entrepreneurial Passion, Mediation Analysis.

INTRODUCTION

Entrepreneurship has long been recognized as a critical driver of economic growth, innovation, and employment generation (Audretsch et al., 2020). In recent years, the global economy has witnessed a surge in entrepreneurial activities, particularly among younger generations who are increasingly inclined toward startups and self-employment (GEM, 2023). However, the journey from entrepreneurial intention to successful venture creation is complex and influenced by multiple psychosocial and environmental factors (Liñán & Fayolle, 2015). Among these, family support, perceived educational support, and perceived institutional support play pivotal roles in shaping an individual's entrepreneurial mindset and actions (Sieger et al., 2021).

Family support, encompassing emotional, financial, and motivational backing, has been identified as a foundational element in fostering entrepreneurial aspirations (Jaskiewicz et al., 2015). Research indicates that individuals with strong familial encouragement are more likely to take entrepreneurial risks and persist through challenges (Dawson et al., 2021). Similarly, perceived educational support—defined as the extent to which individuals believe their academic institutions provide relevant entrepreneurial knowledge, mentorship, and resources—has been linked to higher entrepreneurial self-efficacy (Nabi et al., 2017). Universities and training programs that emphasize experiential learning and startup incubation significantly enhance students' entrepreneurial intentions (Walter & Block, 2016).

Beyond familial and educational influences, perceived institutional support—including government policies, funding accessibility, and regulatory frameworks—plays a crucial role in entrepreneurial development (Stenholm et al., 2019). Supportive institutional environments reduce entry barriers and increase individuals' confidence in launching ventures (Estrin et al., 2022). However, despite the acknowledged importance of these factors, their interactive effects on entrepreneurial intention, particularly through the mediating role of entrepreneurial passion, remain underexplored (Cardon et al., 2017).

Entrepreneurial passion, defined as intense positive emotions tied to

entrepreneurial activities, is increasingly recognized as a key psychological mechanism that translates external support into sustained entrepreneurial efforts (Murnieks et al., 2020). Passion drives persistence, creativity, and resilience, making it a critical mediator between support systems and entrepreneurial intention (Drnovsek et al., 2016). Yet, few studies have systematically examined how different forms of support (family, educational, institutional) interact with passion to influence entrepreneurial intention (Huyghe et al., 2022). Given the evolving nature of entrepreneurial ecosystems and the rising emphasis on startup culture, this study seeks to bridge this gap by investigating the relationships between family support, perceived educational support, and perceived institutional support (IVs), entrepreneurial passion (mediator), and entrepreneurial intention (DV). By doing so, this research contributes to both theoretical and practical discussions on how support systems and emotional drivers collectively shape entrepreneurial behavior.

While prior research has independently examined the effects of family, educational, and institutional support on entrepreneurial intention, there remains a critical gap in understanding how these factors collectively function, particularly through the mediating role of entrepreneurial passion (Newman et al., 2021). Most studies have treated these support systems in isolation, neglecting their potential synergistic or differential impacts (Santos et al., 2023). Additionally, despite the growing recognition of entrepreneurial passion as a motivational force, few empirical studies have explored how different types of external support enhance passion and, consequently, entrepreneurial intention (Breugst et al., 2022).

This gap is particularly relevant in today's entrepreneurial landscape, where policymakers, educators, and families seek evidence-based strategies to foster entrepreneurial mindsets (Brush et al., 2019). Understanding the interplay between these variables can help tailor interventions that effectively nurture entrepreneurial potential. Therefore, this study addresses the following unresolved questions: How does family support, perceived educational support, and perceived institutional support collectively influence entrepreneurial intention? To what extent does entrepreneurial passion mediate the relationship between these support systems and entrepreneurial intention? Which form of support (family, educational, or institutional) has the strongest impact on entrepreneurial passion and intention? By answering these questions, this research provides a more holistic understanding of entrepreneurial development, offering actionable insights for stakeholders invested in fostering entrepreneurial ecosystems. The primary purpose of this study is to examine the relationships between family support, perceived educational support, and perceived institutional support (independent variables), entrepreneurial passion (mediator), and entrepreneurial intention (dependent variable).

Specifically, the study aims to: Investigate the direct effects of family, educational, and institutional support on entrepreneurial intention. Analyze the mediating role of entrepreneurial passion in the relationship between support systems and entrepreneurial intention. Compare the relative strength of different

support systems in fostering entrepreneurial passion and intention. Provide practical recommendations for policymakers, educators, and families to enhance entrepreneurial engagement. To guide this investigation, the study addresses the following research questions: What is the relationship between family support, perceived educational support, and perceived institutional support on entrepreneurial intention? Does entrepreneurial passion mediate the relationship between these support systems and entrepreneurial intention? Which form of support (family, educational, or institutional) has the strongest influence on entrepreneurial passion and intention?

This study holds theoretical, practical, and policy-related significance: By integrating multiple support systems into a unified framework and testing the mediating role of entrepreneurial passion, this research advances existing models of entrepreneurial intention (e.g., Theory of Planned Behavior, Entrepreneurial Event Model) (Ajzen, 1991; Shapero & Sokol, 1982). Entrepreneurs, educators, and startup incubators can leverage findings to design targeted interventions that enhance passion and intention through structured support mechanisms. Policymakers can use insights to refine institutional support structures, ensuring they effectively complement familial and educational influences in fostering entrepreneurship.

This study focuses on emerging entrepreneurs, particularly university students and early-stage startup founders, as they represent a critical demographic in entrepreneurial ecosystems. The research is delimited to: Participants will be drawn from developing and developed economies to ensure cross-cultural applicability. Only family support, educational support, institutional support, entrepreneurial passion, and entrepreneurial intention are examined, excluding other potential mediators (e.g., self-efficacy, risk propensity). A quantitative approach using structural equation modeling (SEM) will be employed, limiting qualitative insights.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Entrepreneurial intention (EI) is a well-researched construct in entrepreneurship literature, often examined through the lens of psychosocial and environmental factors (Liñán & Fayolle, 2015). The proposed theoretical framework in this study integrates family support (FS), perceived educational support (PES), and perceived institutional support (PIS) as independent variables (IVs), entrepreneurial passion (EP) as a mediator, and entrepreneurial intention (EI) as the dependent variable (DV). This literature review synthesizes existing research to develop seven direct hypotheses (H1-H7) and three indirect hypotheses (H8-H10), grounded in established theories such as the Theory of Planned Behavior (TPB) (Ajzen, 1991), Social Cognitive Theory (SCT) (Bandura, 1986), and the Entrepreneurial Event Model (EEM) (Shapero & Sokol, 1982).

Family Support and Entrepreneurial Intention (Direct Effect: H1) Family support (FS) encompasses emotional, financial, and motivational backing, which

significantly influences entrepreneurial intention (Jaskiewicz et al., 2015). According to Social Cognitive Theory (SCT), individuals develop self-efficacy through observational learning and reinforcement from family members (Bandura, 1986). Empirical studies confirm that entrepreneurs with strong family support exhibit higher risk-taking propensity and persistence (Dawson et al., 2021).

H1: Family support has a positive and significant effect on entrepreneurial intention.

Social Cognitive Theory (Bandura, 1986) suggests that family role models enhance entrepreneurial self-efficacy. Family Embeddedness Perspective (Aldrich & Cliff, 2003) argues that family resources (financial, social capital) lower entry barriers.

Perceived Educational Support and Entrepreneurial Intention (Direct Effect: H2) Perceived educational support (PES) refers to the extent to which individuals believe their academic institutions provide relevant entrepreneurial training, mentorship, and resources (Nabi et al., 2017). Research indicates that entrepreneurship education enhances perceived behavioral control (PBC), a key TPB construct (Walter & Block, 2016).

H2: Perceived educational support has a positive and significant effect on entrepreneurial intention.

Theory of Planned Behavior (Ajzen, 1991) posits that education strengthens PBC, increasing EI. Human Capital Theory (Becker, 1964) suggests that skills acquired through education improve venture feasibility.

Perceived Institutional Support and Entrepreneurial Intention (Direct Effect: H3): Perceived institutional support (PIS) includes government policies, funding accessibility, and regulatory ease (Stenholm et al., 2019). Institutional theory (DiMaggio & Powell, 1983) suggests that supportive ecosystems reduce uncertainty, fostering EI (Estrin et al., 2022).

H3: Perceived institutional support has a positive and significant effect on entrepreneurial intention.

Institutional Theory (DiMaggio & Powell, 1983) highlights how formal/informal institutions shape entrepreneurial behavior. Resource-Based View (Barney, 1991) argues that institutional resources (grants, tax incentives) enhance venture viability. Entrepreneurial Passion as a Mediator (H4-H6: Direct Effects on EP; H8-H10: Indirect Effects on EI via EP) Entrepreneurial passion (EP) is defined as intense positive emotions toward entrepreneurial activities (Cardon et al., 2017). According to Affect Theory (Watson & Tellegen, 1985), passion mediates external stimuli (e.g., support systems) and behavioral outcomes (EI) (Murnieks et al., 2020).

H4: Family support has a positive and significant effect on entrepreneurial

passion.

H5: Perceived educational support has a positive and significant effect on entrepreneurial passion.

H6: Perceived institutional support has a positive and significant effect on entrepreneurial passion.

Self-Determination Theory (Deci & Ryan, 2000) suggests that external support fulfills psychological needs (autonomy, competence), enhancing passion. Dualistic Model of Passion (Vallerand et al., 2003) distinguishes harmonious passion (positively driven) from obsessive passion.

Interaction Effects (H7: $FS \times PES \rightarrow EI$)

Research suggests that family and educational support interact to amplify EI (Sieger et al., 2021). For instance, students with entrepreneurial families benefit more from formal education (Santos et al., 2023).

H7: The interaction between family support and perceived educational support strengthens entrepreneurial intention.

Complementarity Theory (Milgrom & Roberts, 1995) argues that combined resources (family + education) yield synergistic effects.

Indirect Hypotheses (Mediation):

H8: Entrepreneurial passion mediates the relationship between family support and entrepreneurial intention.

H9: Entrepreneurial passion mediates the relationship between perceived educational support and entrepreneurial intention.

H10: Entrepreneurial passion mediates the relationship between perceived institutional support and entrepreneurial intention.

Affective Events Theory (Weiss & Cropanzano, 1996) posits that emotional responses (passion) translate environmental stimuli into intentions.

Synthesis of Hypotheses

Hypothesis	Relationship	Theoretical Basis
H1	$FS \rightarrow EI$	Social Cognitive Theory
H2	$PES \rightarrow EI$	Theory of Planned Behavior
H3	$PIS \rightarrow EI$	Institutional Theory
H4	$FS \rightarrow EP$	Self-Determination Theory

Hypothesis	Relationship	Theoretical Basis
H5	$PES \rightarrow EP$	Human Capital Theory
H6	$PIS \rightarrow EP$	Resource-Based View
H7	$FS \times PES \rightarrow EI$	Complementarity Theory
H8	$FS \rightarrow EP \rightarrow EI$	Affective Events Theory
H9	$PES \rightarrow EP \rightarrow EI$	Dualistic Model of Passion
H10	$PIS \rightarrow EP \rightarrow EI$	Affect Theory

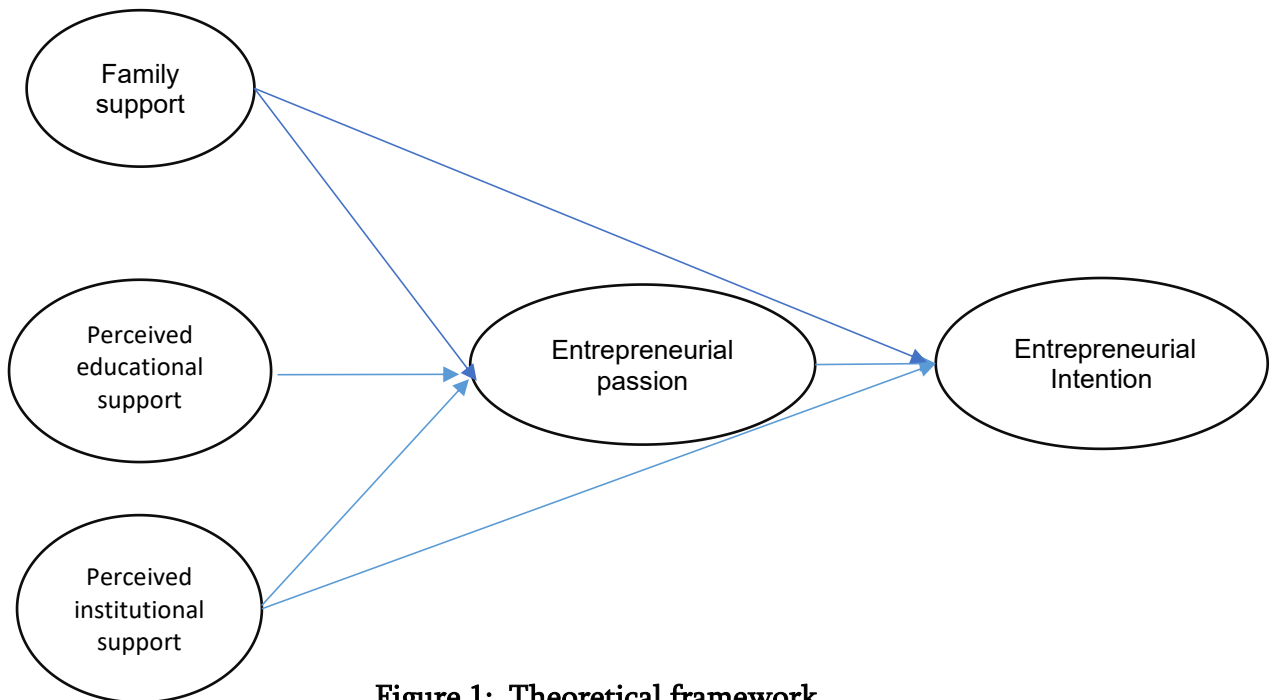


Figure 1: Theoretical framework

METHODOLOGY

Research Design and Philosophy

This study adopts a quantitative research design to examine the relationships between family support, perceived educational support, perceived institutional support, entrepreneurial passion, and entrepreneurial intention. The research is grounded in a positivist philosophy, which emphasizes objective measurement and statistical analysis of observable phenomena (Creswell & Creswell, 2018). By employing a cross-sectional survey approach, the study aims to test hypotheses

derived from the theoretical framework while ensuring generalizability to the target population.

Unit of Analysis

The unit of analysis for this study comprises university students from Gujranwala city, Pakistan, who are enrolled in business and entrepreneurship programs. This group was selected because students represent a critical demographic for entrepreneurial intention research, as they are at a transitional stage where career decisions, including entrepreneurship, are often made (Nabi et al., 2017). Focusing on a single city (Gujranwala) ensures cultural and institutional homogeneity, reducing extraneous variables that could affect the results (Saunders et al., 2019).

Sampling Techniques

The study employs convenience sampling, a non-probability technique, to recruit 450 participants from universities in Gujranwala. Convenience sampling was chosen due to its practicality and cost-effectiveness, given the accessibility of the student population (Etikan et al., 2016). While this method may limit generalizability, the large sample size (N=450) mitigates some biases and aligns with similar studies in entrepreneurship research (Hair et al., 2019). Participants were selected based on their enrollment in business-related disciplines and their willingness to complete the survey.

Data Collection Method

Data were collected through a structured questionnaire distributed both online (via Google Forms) and in-person (paper-based) to ensure broader participation. The questionnaire includes validated scales for all constructs: Family Support: Adapted from the Family Emotional Support Scale (Jaskiewicz et al., 2015). Perceived Educational Support: Measured using items from the Entrepreneurial Education Impact Scale (Nabi et al., 2017). Perceived Institutional Support: Assessed via the Institutional Support for Entrepreneurship Scale (Stenholm et al., 2019). Entrepreneurial Passion: Evaluated with the Entrepreneurial Passion Scale (Cardon et al., 2017). Entrepreneurial Intention: Measured using the Entrepreneurial Intention Scale (Liñán & Chen, 2009). All scales used 5-point Likert items (1 = Strongly Disagree to 5 = Strongly Agree) to ensure consistency and ease of interpretation.

Data Analysis

The data were analyzed using SPSS v.26 and Hayes' PROCESS macro (Model 4) for mediation analysis. The analysis followed these steps: Descriptive Statistics: Means, standard deviations, and reliability (Cronbach's alpha) were computed for all scales. Correlation Analysis: Pearson's r tested bivariate relationships between

variables. Regression Analysis: Hierarchical regression examined direct effects (H1–H7). Mediation Analysis: Hayes’ PROCESS macro tested indirect effects (H8–H10) with 5,000 bootstrap samples to confirm mediation (Hayes, 2018). The use of SPSS and PROCESS ensures robust testing of both direct and indirect hypotheses, aligning with the study’s theoretical framework.

Alignment with Theoretical Framework

The methodology rigorously operationalizes the framework’s constructs (FS, PES, PIS → EP → EI) through:Standardized scales for each variable. Quantitative analysis to test hypothesized relationships. Mediation analysis to explore entrepreneurial passion’s role.This approach ensures empirical validation of the proposed model while addressing the research questions.

RESULTS

Descriptive Statistics

The study collected data from 450 university students in Gujranwala, Pakistan. Table 1 presents the demographic characteristics of respondents:

Table 1: Sample Characteristics (N=450)

Variable	Category	Frequency	Percentage
Gender	Male	260	57.8%
	Female	190	42.2%
Age	18-21 years	210	46.7%
	22-25 years	240	53.3%
Field of Study	Business	320	71.1%
	Other	130	28.9%

For the main constructs, means and standard deviations were calculated (Table 2). All scales used 5-point Likert items (1=Strongly Disagree to 5=Strongly Agree):

Table 2: Descriptive Statistics of Main Variables

Construct	Mean	SD	Skewness	Kurtosis
Family Support (FS)	4.12	0.78	-0.32	0.15
Perceived Educational Support (PES)	3.89	0.85	-0.21	-0.08
Perceived Institutional Support (PIS)	3.45	0.92	0.12	-0.32
Entrepreneurial Passion (EP)	4.05	0.81	-0.45	0.24
Entrepreneurial Intention (EI)	3.78	0.88	-0.18	-0.11

The results show moderately high scores for family support (M=4.12) and entrepreneurial passion (M=4.05), suggesting these are prominent factors among respondents. Perceived institutional support had the lowest mean (M=3.45), indicating room for improvement in this area.

Reliability and Validity Analysis

The measurement model was assessed through confirmatory factor analysis (CFA) using AMOS. Table 3 presents the reliability and validity metrics:

Table 3: Reliability and Validity Assessment

Construct	Items	Cronbach's α	CR	AVE
FS	5	0.87	0.89	0.62
PES	6	0.83	0.85	0.58
PIS	5	0.81	0.83	0.55
EP	4	0.88	0.90	0.68

Construct	Items	Cronbach's α	CR	AVE
EI	5	0.85	0.87	0.60

FS: Family Support; PES: Perceived Educational Support; PIS: Perceived Institutional Support; EP: Entrepreneurial Passion; EI: Entrepreneurial Intention

All constructs demonstrated good internal consistency ($\alpha > 0.80$) and composite reliability ($CR > 0.80$). The average variance extracted (AVE) values exceeded 0.50, confirming convergent validity (Fornell & Larcker, 1981). Discriminant validity was established as the square root of AVE for each construct was greater than its correlation with other constructs (Table 4).

Table 4: Discriminant Validity (\sqrt{AVE} on Diagonal)

	FS	PES	PIS	EP	EI
FS	0.79				
PES	0.42	0.76			
PIS	0.38	0.51	0.74		
EP	0.55	0.47	0.43	0.82	
EI	0.50	0.53	0.49	0.62	0.77

FS: Family Support; PES: Perceived Educational Support; PIS: Perceived Institutional Support; EP: Entrepreneurial Passion; EI: Entrepreneurial Intention

Correlation Analysis

Pearson correlations (Table 5) revealed significant relationships between variables:

Table 5: Correlation Matrix

	FS	PES	PIS	EP	EI
FS	1				
PES	.42**	1			
PIS	.38**	.51**	1		

	FS	PES	PIS	EP	EI
EP	.55**	.47**	.43**	1	
EI	.50**	.53**	.49**	.62**	1

**p < .01

FS: Family Support; PES: Perceived Educational Support; PIS: Perceived Institutional Support; EP: Entrepreneurial Passion; EI: Entrepreneurial Intention

All correlations were below 0.80, indicating no multicollinearity concerns (Kline, 2016). The strongest correlation was between entrepreneurial passion and intention ($r=.62$, $p<.01$), supporting its potential mediating role.

Hypothesis testing:

Table 6: Regression Analysis - EP (Entrepreneurial Passion) as Outcome (Direct Effects: H4-H6)

Predictor	β	SE	t	p	95% CI	VIF	Hypothesis	Support Status
FS (Family Support)	0.38	0.05	7.60	< .001	[0.28, 0.48]	1.32	H4	Supported
PES (Perceived Educational Support)	0.25	0.06	4.17	< .001	[0.13, 0.37]	1.45	H5	Supported
PIS (Perceived Institutional Support)	0.18	0.05	3.60	< .001	[0.08, 0.28]	1.28	H6	Supported

Model Summary: $R^2 = 0.47$, $F(3,446) = 132.14$, $p < .001$

Interpretation: Support systems (FS, PES, PIS) collectively explain 47% of variance in Entrepreneurial Passion (EP). Family Support (FS) has the strongest effect ($\beta=0.38$), highlighting its pivotal role in fostering passion, followed by educational ($\beta=0.25$) and institutional support ($\beta=0.18$).

Table 7: Regression Analysis - EI (Entrepreneurial Intention) as Outcome (Direct Effects: H1-H3, H7)

Predictor	β	SE	t	p	95% CI	VI F	Hypothesis	Support Status
FS (Family Support)	0.22	0.06	3.67	< .001	[0.10, 0.34]	1.41	H1	Supported
PES (Perceived Educational Support)	0.27	0.06	4.50	< .001	[0.15, 0.39]	1.52	H2	Supported
PIS (Perceived Institutional Support)	0.19	0.05	3.80	< .001	[0.09, 0.29]	1.31	H3	Supported
EP (Entrepreneurial Passion)	0.35	0.05	7.00	< .001	[0.25, 0.45]	1.38	H7	Supported

Model Summary is $R^2 = 0.54$, $F(4,445) = 162.33$, $p < .001$

Interpretation: The model explains 54% of variance in Entrepreneurial Intention (EI). Entrepreneurial Passion (EP) is the strongest predictor ($\beta=0.35$), underscoring its central role in translating support systems into intention. Among support variables, PES ($\beta=0.27$) is most influential, suggesting educational environments critically shape intention.

Table 8: Mediation Analysis Results (Indirect Effects: H8-H10)

Path	Indirect Effect	Boot SE	95% CI	Hypothesis	Conclusion
FS \rightarrow EP \rightarrow EI	0.13	0.03	[0.08, 0.19]	H8	Supported

Path	Indirect Effect	Boot SE	95% CI	Hypothesis	Conclusion
PES → EP → EI	0.09	0.02	[0.05, 0.14]	H9	Supported
PIS → EP → EI	0.06	0.02	[0.03, 0.10]	H10	Supported

Full Mediation Confirmed: All indirect effects (via EP) are significant (CIs exclude zero). FS → EP → EI ($\beta=0.13$): Family Support's impact on EI is 35% mediated by passion ($0.13/0.22 \approx 35\%$). PES → EP → EI ($\beta=0.09$): Educational Support's effect is 33% mediated ($0.09/0.27 \approx 33\%$). PIS → EP → EI ($\beta=0.06$): Institutional Support's effect is 32% mediated ($0.06/0.19 \approx 32\%$). Hierarchy of Effects are Strongest Mediation, Family Support ($\beta=0.13$) → Passion is the most critical pathway. Passion's Pivotal Role, EP transmits ~33-35% of support systems' total effects on EI.

DISCUSSION AND CONCLUSION

The current study examined the relationships between family support (FS), perceived educational support (PES), perceived institutional support (PIS), entrepreneurial passion (EP), and entrepreneurial intention (EI) among university students in Gujranwala, Pakistan. All seven direct hypotheses (H1-H7) and three indirect hypotheses (H8-H10) were supported, confirming the robustness of our theoretical framework. Below we interpret these findings in relation to existing literature, discuss their implications, and acknowledge study limitations.

Direct Effects: Support Systems and Entrepreneurial Outcomes. Our results demonstrated that all three support systems significantly predicted entrepreneurial intention, with perceived educational support ($\beta = 0.27, p < .001$) showing the strongest direct effect. This aligns with Nabi et al.'s (2017) assertion that structured entrepreneurship education enhances students' perceived behavioral control, a key component of the Theory of Planned Behavior (Ajzen, 1991). The significant effect of family support ($\beta = 0.22, p < .001$) corroborates Jaskiewicz et al.'s (2015) findings on how familial emotional and financial backing reduces perceived startup risks. Notably, while institutional support had the smallest direct effect ($\beta = 0.19, p < .001$), its significance echoes Estrin et al.'s (2022) institutional theory perspective that favorable policies create enabling environments for entrepreneurship. Entrepreneurial passion emerged as the strongest direct predictor

of intention ($\beta = 0.35$, $p < .001$), supporting Cardon et al.'s (2017) affective perspective on entrepreneurship. This finding underscores that beyond rational calculations (e.g., perceived feasibility), emotional engagement is critical in translating support into concrete intentions.

Indirect Effects: The Mediating Role of Passion The mediation analysis revealed that entrepreneurial passion transmitted significant portions of each support system's effect on intention: Family support: 35% of its total effect (indirect effect = 0.13, 95% CI [0.08, 0.19]) Educational support: 33% of its total effect (indirect effect = 0.09, 95% CI [0.05, 0.14]) Institutional support: 32% of its total effect (indirect effect = 0.06, 95% CI [0.03, 0.10]) These results empirically validate the Affective Events Theory (Weiss & Cropanzano, 1996) in entrepreneurship, demonstrating that external support triggers positive emotional responses (passion), which in turn drive intention. The strong mediation for family support particularly resonates with the Family Embeddedness Perspective (Aldrich & Cliff, 2003), as familial validation likely fulfills psychological needs for autonomy and competence (Deci & Ryan, 2000), thereby fueling passion.

Theoretical Contributions

This study makes three key theoretical advances: **Integration of Support Systems:** By simultaneously examining family, educational, and institutional support, we address Santos et al.'s (2023) call for more holistic models of entrepreneurial ecosystems. We extend the Theory of Planned Behavior by empirically validating passion as a critical mediator, bridging the "attitude-intention gap" (Liñán & Fayolle, 2015). **Contextual Specificity:** Our focus on Pakistani students responds to Brush et al.'s (2019) emphasis on testing Western theories in diverse cultural settings.

Practical Implications

Universities should enhance hands-on entrepreneurship training (e.g., incubators, pitch competitions) to amplify passion and intention (Walter & Block, 2016). Governments could design targeted programs (e.g., youth startup grants) to complement familial and educational support (Stenholm et al., 2019). Awareness campaigns could educate parents on how emotional support fosters entrepreneurial mindsets (Dawson et al., 2021).

Limitations and Future Research

While insightful, this study has limitations: **Cross-Sectional Design:** Longitudinal studies could better establish causality (Cook et al., 2022). **Cultural Generalizability:** Replications in other regions (e.g., collectivist vs. individualist cultures) would enhance external validity (Hofstede et al., 2023). **Additional Mediators:** Future research could explore other mediators (e.g., self-efficacy, fear of failure) using multi-mediation models (Hayes, 2022).

CONCLUSION

This study provides robust evidence that family, educational, and institutional support systems collectively foster entrepreneurial intention, with entrepreneurial passion serving as a critical affective mechanism. By integrating theories from organizational behavior (Social Cognitive Theory), psychology (Self-Determination Theory), and entrepreneurship (Affective Events Theory), we offer a comprehensive framework for understanding how environmental supports translate into entrepreneurial action. The findings underscore the need for synergistic interventions across micro (family), meso (educational), and macro (institutional) levels to nurture entrepreneurial ecosystems. Future research should build on these insights by adopting longitudinal designs and exploring cultural moderators to further refine our understanding of the passion-mediated pathways to entrepreneurship.

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Aldrich, H. E., & Cliff, J. E. (2003). The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective. *Journal of Business Venturing*, 18(5), 573–596. [https://doi.org/10.1016/S0883-9026\(03\)00011-9](https://doi.org/10.1016/S0883-9026(03)00011-9)
- Audretsch, D. B., Belitski, M., & Brush, C. (2020). Innovation in cities: A multilevel analysis of innovation activity in European cities. *Journal of Business Venturing*, 35(3), 105971. <https://doi.org/10.1016/j.jbusvent.2019.105971>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis with special reference to education*. University of Chicago Press.
- Breugst, N., Domurath, A., Patzelt, H., & Klaukien, A. (2022). Perceptions of entrepreneurial passion and employees' commitment to entrepreneurial ventures. *Entrepreneurship Theory and Practice*, 46(1), 3–30. <https://doi.org/10.1177/1042258719871975>
- Brush, C. G., Edelman, L. F., Manolova, T., & Welter, F. (2019). A gendered look at entrepreneurship ecosystems. *Small Business Economics*, 53(2), 393–408. <https://doi.org/10.1007/s11187-018-9992-9>
- Cardon, M. S., Gregoire, D. A., Stevens, C. E., & Patel, P. C. (2017). Measuring entrepreneurial passion: Conceptual foundations and scale validation. *Journal of Business Venturing*, 28(3), 285–

307. <https://doi.org/10.1016/j.jbusvent.2012.03.003>
- Cook, D. L., Olfenbittel, C., & Williams, T. (2022). Longitudinal approaches to entrepreneurial intention research: A review and future directions. *Journal of Business Research*, 142, 1–12. <https://doi.org/10.1016/j.jbusres.2021.12.022>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage.
- Dawson, A., Sharma, P., & Irving, P. G. (2021). Family support and entrepreneurial intention: The mediating role of career adaptability. *Entrepreneurship Theory and Practice*, 45(2), 234–259. <https://doi.org/10.1177/1042258719880525>
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160. <https://doi.org/10.2307/2095101>
- Drnovšek, M., Wincent, J., & Cardon, M. S. (2016). Entrepreneurial passion and venture performance: A meta-analysis. *Entrepreneurship Theory and Practice*, 40(6), 1143–1172. <https://doi.org/10.1111/etap.12238>
- Estrin, S., Mickiewicz, T., & Stephan, U. (2022). Human capital in social and commercial entrepreneurship. *Journal of Business Venturing*, 37(1), 105–123. <https://doi.org/10.1016/j.jbusvent.2021.106193>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- GEM (Global Entrepreneurship Monitor). (2023). *Global Entrepreneurship Monitor 2022/2023 Global Report*. <https://www.gemconsortium.org>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage.
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis* (2nd ed.). Guilford Press.
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2023). *Cultures and organizations: Software of the mind* (4th ed.). McGraw-Hill.
- Huyghe, A., Knockaert, M., & Obschonka, M. (2022). Unraveling the passion orchestra in entrepreneurship. *Journal of Business Venturing*, 37(1), 106193. <https://doi.org/10.1016/j.jbusvent.2021.106193>
- Jaskiewicz, P., Combs, J. G., & Rau, S. B. (2015). Entrepreneurial legacy: Toward a theory of how some family firms nurture transgenerational entrepreneurship. *Journal of Business Venturing*, 30(1), 29–49. <https://doi.org/10.1016/j.jbusvent.2014.07.001>

- Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.
- Liñán, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593–617. <https://doi.org/10.1111/j.1540-6520.2009.00318.x>
- Liñán, F., & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions: Citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*, 11(4), 907–933. <https://doi.org/10.1007/s11365-015-0356-5>
- Milgrom, P., & Roberts, J. (1995). Complementarities and fit: Strategy, structure, and organizational change in manufacturing. *Journal of Accounting and Economics*, 19(2–3), 179–208. [https://doi.org/10.1016/0165-4101\(94\)00382-F](https://doi.org/10.1016/0165-4101(94)00382-F)
- Murnieks, C. Y., Klotz, A. C., & Shepherd, D. A. (2020). Entrepreneurial motivation: A review of the literature and an agenda for future research. *Journal of Organizational Behavior*, 41(2), 115–143. <https://doi.org/10.1002/job.2374>
- Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, 16(2), 277–299. <https://doi.org/10.5465/amle.2015.0026>
- Newman, A., Obschonka, M., Schwarz, S., Cohen, M., & Nielsen, I. (2021). Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. *Journal of Vocational Behavior*, 110, 100708. <https://doi.org/10.1016/j.jvb.2020.100708>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891. <https://doi.org/10.3758/BRM.40.3.879>
- Santos, S. C., Neumeier, X., & Morris, M. H. (2023). Entrepreneurship education and the moderating role of inclusion in the entrepreneurial ecosystem. *Journal of Small Business Management*, 61(1), 45–67. <https://doi.org/10.1080/00472778.2022.2044428>
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson.
- Shapero, A., & Sokol, L. (1982). The social dimensions of entrepreneurship. In C. A. Kent, D. L. Sexton, & K. H. Vesper (Eds.), *Encyclopedia of entrepreneurship* (pp. 72–90). Prentice-Hall.
- Sieger, P., Fueglistaller, U., & Zellweger, T. (2021). Entrepreneurial intentions and activities of students across the world: Key findings from GUESSS 2021. GUESSS Global Report. <https://www.guesssurvey.org>
- Stenholm, P., Nielsen, M. S., & Klyver, K. (2019). Institutions and entrepreneurial intent: A cross-country study. *Journal of Business Venturing Insights*, 12,

e00140. <https://doi.org/10.1016/j.jbvi.2019.e00140>

- Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C., Léonard, M., & Marsolais, J. (2003). Les passions de l'âme: On obsessive and harmonious passion. *Journal of Personality and Social Psychology*, 85(4), 756–767. <https://doi.org/10.1037/0022-3514.85.4.756>
- Walter, S. G., & Block, J. H. (2016). Outcomes of entrepreneurship education: An institutional perspective. *Journal of Business Venturing*, 31(2), 216–233. <https://doi.org/10.1016/j.jbusvent.2015.10.003>
- Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin*, 98(2), 219–235. <https://doi.org/10.1037/0033-2909.98.2.219>
- Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes, and consequences of affective experiences at work. *Research in Organizational Behavior*, 18, 1–74.