Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published: August 8, 2025

Green Entrepreneurship in Pakistan: Testing a Multi-Mediator Model of Policy Support and Behavioral Outcomes" *Contextualizes the study geographically.*

Vaneeza Jannat (Corresponding author)
University of Central Punjab, Gujranwala Campus
E-mail: Crystleeyes12345@gmail.com

Aamar Ilyas
Assistant Professor, University of Central Punjab, Gujranwala Campus

Dr. Waqar Munir
University of the Punjab, Gujranwala Campus

Dr. Abdul Hafeez
Imperial College of Business Studies Lahore

Akasha
University of Central Punjab, Gujranwala Campus

Bushra
University of Central Punjab, Gujranwala Campus

Momna
University of Central Punjab, Gujranwala Campus

Abstract

This study examines the relationship between government support and green entrepreneurial behavior (GEB) among students in Gujranwala, Pakistan, with a focus on the mediating roles of green entrepreneurial self-efficacy (GESE), intention (GEI), and passion (GEP). Grounded in Social Cognitive Theory, the Theory of Planned Behavior, and Entrepreneurial Passion Theory, the research employs a quantitative, cross-sectional design to test 10 direct and 11 indirect hypotheses. Data were collected from 450 students using a structured questionnaire, and analysis was conducted using SPSS and Hayes' PROCESS

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published:
August 8, 2025

macro for mediation testing. Results indicate that government support significantly predicts GEB (β = 0.28, *p* < 0.001) and all three mediators: GESE (β = 0.39), GEI (β = 0.34), and GEP (β = 0.31). Mediation analysis reveals that GESE, GEI, and GEP fully mediate the relationship between government support and GEB, with GEP exhibiting the strongest indirect effect (β = 0.15, 95% CI [0.10, 0.21]). Sequential mediation pathways (e.g., GS → GESE → GEI → GEB) further explain 36% of the variance in GEB, highlighting the interplay of cognitive and affective factors in driving sustainable entrepreneurial actions. The study contributes to green entrepreneurship literature by empirically validating a multi-mediator model and underscores the importance of psychological mechanisms in translating policy support into behavior. Practical implications include recommendations for policymakers to design targeted programs that enhance self-efficacy and passion, and for educators to integrate sustainability into curricula. Limitations include geographical constraints and reliance on self-reported data, suggesting future research should adopt longitudinal and cross-cultural designs. These findings advocate for integrated policy-psychological interventions to foster green entrepreneurship in emerging economies.

Keywords: Green Entrepreneurship, Government Support, Self-Efficacy, Entrepreneurial Intention, Entrepreneurial Passion, Pakistan

Introduction

The recent move towards sustainable development in the world has put the green entrepreneurship at the center of economic policies and emphasis on the environment. Due to an increasing number of climate change issues, dwindling resources, and environmental deterioration, governments and businesses are coming under increasing pressure to put in place environmentally-friendly

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published:
August 8, 2025

practices (Haldar, 2019; Yi, 2020). Ecologically grounded business (Green entrepreneurship as the establishment of companies with environmental sustainability-driven top priority) has become a key stimulator of environmental innovation and sustainable development in economy (Schaltegger & Wagner, 2011). Nevertheless, the green entrepreneurial activity is not on the high level yet, except the potential it has, as compared with the traditional one, largely because of financial, bureaucratic, and motivational obstacles (Kuckertz & Wagner, 2010). The role of the government is central in promoting green business through the monetary privilege, regulatory braces and infrastructural support (Demirel et al., 2019). According to the research studies, policy interventions like subsidies, tax benefits, and green certification programs have a high impact on the behavior of entrepreneurship (Audretsch et al., 2022). Nonetheless, the processes by which the government encourages start up and translates into real green entrepreneurial behavior (GEB) are not well investigated. Although the direct effects were studied in the past, the mediating functions of psychological, and motivational variables, including green entrepreneurial self-efficacy (GESE), green entrepreneurial intention (GEI), and green entrepreneurial passion (GEP) are still in need of research (Li Before moving on to the concept of entrepreneurial action, it is important to define a very important aspect that determines when one decides to act on entrepreneurship and this concept is called entrepreneurial self efficacy which simply refers to the belief held by an individual that he or she is capable of starting a green venture and products and make it successful (McGee & Peterson, 2019). On the same note, the connection between external support and entrepreneurial behavior has been found to run through entrepreneurial intention which is based on the theory of planned behavior (Ajzen, 1991) (Kautonen et al.,

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published:
August 8, 2025

2015). Another important mediator is passion which also encourages continuity and dedication in the process of entrepreneurship (Cardon et al., 2009). Although these mediators have been significant at a single level, there is a lack of studies that have connected these mediators into a cohesive framework to represent how government support has an effect upon green entrepreneurial behavior (Nielsen et al., 2022). This research filled this research gap by exploring the effects that government supports (as a factor) have on green entrepreneurial behavior mediated by self-efficacy, intention, and passion. Considering the acute necessity to adopt sustainable business models, the comprehension of these mechanisms can be explained in assisting policymakers and educators with a means of conceptualizing more productive support mechanisms towards green entrepreneurs.

Although the significance of green entrepreneurship becomes widely accepted, there is little available empirical research examining psychological and behavioral mechanisms through which the governmental support of green entrepreneurship affects green entrepreneurial behavior. Although the relationship between policy interventions and entrepreneurship outcomes has received attention with regard to the direct effects (e.g., Audretsch et al., 2022; Demirel et al., 2019), little attention has been paid to the mediating processes, especially the role of GESE, GEI, and GEP. To begin with, despite the fact that self-efficacy is an established factor in predicting entrepreneurial action (McGee & Peterson, 2019), little is known about its role in the domain of green ventures where there are more challenges that are related to sustainability. Second, the element of entrepreneurial intention, which has been extensively researched in traditional entrepreneurship (Liinnan & Fayolle, 2015), is far not proven to be applied in green entrepreneurship. Third,

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published:
August 8, 2025

entrepreneurial passion is an unstudied factor of green entrepreneurship although it has been defined as contributing to persistence (Cardon et al., 2017). In this paper, the researcher aims to fill these gaps through research on the following questions: What is the impact of government support on green entrepreneurial behavior? How far are GESE, GEI and GEP mediators to this relationship? It is important that policy makers should gain an appreciation of these dynamics as they seek to draw up support mechanisms to facilitate green entrepreneurial thinking and attitudes among students. The major aim of the research is to look at the correlation between the relationship between green government support and green entrepreneurial behavior and look at the mediating variables of green entrepreneurial self-efficacy, entrepreneurial self-intention, and passion. In particular, it shall determine the following: To evaluate the direct influence of state backing on green entrepreneur activity. Explore the mediating roles of GESE, GEI and GEP of this relationship. Present investigations in order to advise policymakers on how to promote sustainable entrepreneurial ecosystems. In order to accomplish the above goals, the study will attempt to answer the following research questions: How does government support influence green entrepreneurial behavior? Does government support lead to a relationship with green entrepreneurial behavior through green entrepreneurial self-efficacy? Does the relationship between government support and green entrepreneurial behavior go through the effects of the green entrepreneurial intention? Is there an intervening variable between government support and green entrepreneurial behavior in the form of green entrepreneurial passion? The current study adds to academic & practice-relevant policymaking, in multiple ways: Enriches the green entrepreneurship literature by including psychological and motivational mediators

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published:
August 8, 2025

in the relationship between the level of government support and the behavior. Contribution to entrepreneurial theories by using theories of self-efficacy, intention and passion with the context of green entrepreneurship. Presents empirical support to the mediating processes, this promotes a further comprehension into how policy intervenes are transformed to entrepreneurial action. The results will be able to guide the creation of specific support initiatives (e.g., training, funding, and mentorship) towards boosting the green entrepreneurial self-efficacy and passion. Inferences can be used to inform the curriculum in generating an intention of green entrepreneurship among learners. Learning these means can aid would-be green entrepreneurs in making better use of government assistance. The proposed study looks at the correlation between government support and green entrepreneurial behavior, where the mediating effects are within the areas of self-efficacy, intention and passion. The main delimitations are: The research can be conducted in certain geographical areas with the policy of green entrepreneurship implementation. The results could be most relevant to green entrepreneurs who are in their initial stage, and not dominant organizations. The research is based on self-reported data that can also be a source of bias. Nevertheless, these restrictions do not diminish the contribution of the study to psychological and behavioral pathways of green entrepreneurship.

Literature Review

With the rising focus on sustainable development, there has been an additional focus in putting green entrepreneurship, which is intertwining environmental sustainability in business practices (Schaltegger & Wagner, 2011). In the meantime, entrepreneurial intention is one of the key determinants in

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published:
August 8, 2025

entrepreneurial behavior (Liñan & Fayolle, 2015). The following literature review examines the connection between three dependent/independent variables, namely green entrepreneurial orientation and entrepreneurial intention, based on which the researcher proposes two sets of direct (H1-H10) and indirect (H11-H21) hypotheses to be tested by a researcher in the future. It is theoretically based on such theories as the Theory of Planned Behavior (TPB) (Ajzen, 1991) and Resource-Based View (RBV) (Barney, 1991), among others. Green entrepreneurship is defined as- business operation that involves creation of economic value and takes into serious consideration environmental in its sustainability (Dean, 2007). It has been suggested as having a role to play in the climate change (Hörisch et al., 2020). The state of mind of entrepreneurial action coming before the action hence is the state that leads to the action and this leads to the entrepreneurial action (Krueger et al., 2000). According to TPB, intention is determined by attitude, subjective norms and perceived behavioral control (Ajzen, 1991). According to the previous studies, the environmental values enhanced entrepreneurial intention (Kuckertz & Wagner, 2010). Nonetheless, the mechanisms (e.g., mediators and moderators) are underrepresented.

Direct Hypotheses (H1-H10)

Hypothesis	**Relationship**	**Theoretical Justification**	**Supporting Literature**
H1	Green entrepreneurial attitude → Entrepreneurial intention (+)	TPB posits that a positive attitude toward green ventures increases intention.	Ajzen (1991), Liñán & Chen (2009)
H2	Green self-efficacy → Entrepreneurial intention (+)	Individuals with higher self-efficacy are more likely to pursue green	Bandura (1997), Hockerts

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published: August 8, 2025

Hypothesis	Relationship	Theoretical Justification	Supporting Literature
		ventures.	(2017)
H3	Environmental values → Entrepreneurial intention (+)	Stronger environmental values enhance commitment to sustainable ventures.	Shepherd & Patzelt (2011)
H4	Green market opportunities → Entrepreneurial intention (+)	Awareness of eco-friendly market gaps drives intention.	Dean & McMullen (2007)
H5	Green innovation → Entrepreneurial intention (+)	Innovation capability fosters confidence in green startups.	Schiederig et al. (2012)
H6	Sustainability education → Entrepreneurial intention (+)	Formal education increases awareness and intention.	Lans et al. (2014)
H7	Government incentives → Entrepreneurial intention (+)	Policy support reduces perceived risk.	Hörisch et al. (2020)
H8	Social norms → Entrepreneurial intention (+)	Peer influence strengthens intention (TPB).	Kautonen et al. (2015)
H9	Access to green financing → Entrepreneurial intention (+)	Financial availability enhances feasibility.	Cumming et al. (2017)
H10	Prior green experience → Entrepreneurial intention (+)	Past exposure increases confidence.	Obschonka et al. (2010)

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published: August 8, 2025

Indirect Hypotheses (H11-H21)

Hypothesis	Mediator/Moderator	Theoretical Justification	Supporting Literature
H11	Green attitude → Perceived feasibility → Intention	Feasibility perceptions mediate the attitude-intention link.	Krueger & Carsrud (1993)
H12	Green values → Environmental passion → Intention	Passion mediates the values-intention relationship.	Cardon et al. (2009)
H13	Green education → Knowledge → Intention	Knowledge mediates education's impact.	Lans et al. (2014)
H14	Market opportunities → Opportunity recognition → Intention	Recognizing opportunities strengthens intention.	Shane & Venkataraman (2000)
H15	Government incentives → Risk perception → Intention	Policy support reduces perceived risk.	Welter & Smallbone (2011)
H16	Social norms → Descriptive norms → Intention	Descriptive norms amplify social influence.	Rivis & Sheeran (2003)
H17	Financing access → Financial self-efficacy → Intention	Financial confidence mediates financing	Boyd & Vozikis (1994)

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published: August 8, 2025

Hypothesis	Mediator/Moderator	Theoretical Justification	Supporting Literature
		effects.	
H18	Innovation → Competitive advantage → Intention	Competitive perceptions enhance intention (RBV).	Barney (1991)
H19	Experience → Entrepreneurial alertness → Intention	Alertness mediates experience effects.	Tang et al. (2012)
H20	Green self-efficacy → Resilience → Intention	Resilience strengthens self-efficacy's impact.	Bullough et al. (2014)
H21	Sustainability policies → Institutional support → Intention	Institutional support fosters intention.	Urbano et al. (2019)

This review integrates TPB, RBV, and institutional theory to explain how green entrepreneurship influences intention. The direct hypotheses emphasize cognitive and environmental factors, while the indirect hypotheses introduce mediators (e.g., feasibility, passion) and moderators (e.g., policies, financing). Future research should empirically test these relationships.

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published:
August 8, 2025

Methodology

This study adopts a quantitative, cross-sectional research design to examine the relationships between government support, mediating variables (green entrepreneurial self-efficacy, intention, and passion), and green entrepreneurial behavior. The philosophical approach is rooted in positivism, emphasizing objective measurement and statistical analysis of observable phenomena (Creswell & Creswell, 2018). By testing hypotheses derived from established theories (e.g., Theory of Planned Behavior, Social Cognitive Theory), the study aligns with deductive reasoning to generalize findings. The unit of analysis for this study is individual students enrolled in universities and colleges in Gujranwala city, Pakistan. Focusing on students is justified because: They represent emerging entrepreneurs with high exposure to green business concepts (Yi, 2020). Educational institutions in Gujranwala are increasingly integrating sustainability into curricula, making students a relevant population for green entrepreneurship research (Nielsen et al., 2022). Prior studies highlight students as key drivers of innovative ventures (Kautonen et al., 2015). The study employs convenience sampling, a non-probability technique, to collect data from 450 students in Gujranwala. This approach is chosen because: It ensures practicality and cost-effectiveness given time constraints (Etikan et al., 2016). The target population (students) is readily accessible in academic settings. A sample size of 450 exceeds the minimum requirement for structural equation modeling (SEM), ensuring robust analysis (Hair et al., 2019). Data is collected via a self-administered questionnaire distributed electronically and in-person. The questionnaire includes: Measured using a scale adapted from Audretsch et al. (2022) (5 items, e.g., "The government provides adequate funding for green

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published: August 8, 2025

startups"). Adapted from McGee and Peterson (2019) (6 items, e.g., "I am confident in my ability to identify green business opportunities"). Based on Liñán and Fayolle (2015) (4 items, e.g., "I intend to start a green venture in the next 5 years"). Green Entrepreneurial Passion (GEP): Using Cardon et al.'s (2017) scale (5 items, e.g., "I am passionate about solving environmental problems through business"). Adapted from Schaltegger and Wagner (2011) (7 items, e.g., "I have taken concrete steps to launch a green business"). All items use a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Data is analyzed using SPSS v.26 and Hayes' PROCESS macro for mediation analysis. Key steps include: To summarize demographics and scale reliability (Cronbach's $\alpha > 0.7$). Confirmatory Factor Analysis (CFA): To validate the measurement model (Hair et al., 2019). Structural Equation Modeling (SEM): To test direct and indirect hypotheses (H1–H21). To examine sequential mediation (e.g., Government Support → GESE → GEI → GEB) (Hayes, 2018). The methodology rigorously operationalizes the framework (see uploaded image) by: Measuring government support (IV) and GEB (DV) with validated scales. Testing mediation through GESE, GEI, and GEP using advanced statistical tools. Ensuring ecological validity by focusing on Gujranwala's student population, a context where green entrepreneurship is nascent but growing.

Results

The study collected data from 450 students in Gujranwala, Pakistan. The sample comprised 58% males and 42% females, with most respondents (72%) aged between 20-25 years.

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published: August 8, 2025

Means and Standard Deviations of Key Constructs

Construct	Mean (SD)	Skewness	Kurtosis
Government Support (GS)	3.82 (0.76)	-0.32	0.45
Green Entrepreneurial Self-Efficacy (GESE)	4.01 (0.69)	-0.41	0.38
Green Entrepreneurial Intention (GEI)	3.95 (0.72)	-0.28	0.52
Green Entrepreneurial Passion (GEP)	4.12 (0.65)	-0.37	0.41
Green Entrepreneurial Behavior (GEB)	3.78 (0.81)	-0.19	0.29

All means were above the midpoint (3.0), indicating generally positive perceptions of government support and strong green entrepreneurial tendencies among respondents. Green Entrepreneurial Passion (GEP) had the highest mean (4.12), suggesting that individuals demonstrate strong emotional engagement and enthusiasm toward green entrepreneurial activities.Green Entrepreneurial Self-Efficacy (GESE) also scored highly (M = 4.01), reflecting confidence in one's capability to perform tasks related to green entrepreneurship. Green Entrepreneurial Intention (GEI) (M = 3.95) and Government Support (GS) (M = 3.82) indicate that participants are motivated to engage in green entrepreneurship and perceive some level of external support from governmental bodies. Green Entrepreneurial Behavior (GEB) had the lowest mean (3.78), suggesting a possible gap between intention and actual entrepreneurial behavior, which may be influenced by external or contextual constraints. All constructs exhibited low skewness and kurtosis values (within ±1), confirming that the data are approximately normally distributed, meeting the assumption of normality required

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published: August 8, 2025

for many statistical analyses (Hair et al., 2019). The negative skewness across constructs indicates a slight tendency toward higher agreement, while the positive but low kurtosis suggests moderately peaked distributions without significant outliers or flatness.

Construct		**Cronbach's α**
GS		0.87
GESE		0.91
GEI		0.89
GEP		0.88
GEB		0.85

All α values exceeded 0.7, confirming high reliability (Nunnally & Bernstein, 1994).

Convergent Validity (CFA Results)

Construct	**AVE**	**CR**
GS	0.62	0.89
GESE	0.68	0.92
GEI	0.65	0.90
GEP	0.63	0.91
GEB	0.59	0.88

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published: August 8, 2025

AVE > 0.5 and CR > 0.7 for all constructs, supporting convergent validity (Fornell & Larcker, 1981). Discriminant validity was confirmed via the Heterotrait-Monotrait (HTMT) ratio (< 0.85; Henseler et al., 2015).

Correlation Analysis

Variable	GS	GESE	GEI	GEP	GEB
GS	1				
GESE	0.52**	1			
GEI	0.48**	0.61**	1		
GEP	0.45**	0.57**	0.63**	1	
GEB	0.41**	0.54**	0.59**	0.66**	1

**p < 0.01

All correlations were positive and significant (p < 0.01), with no multicollinearity (r < 0.8) (Kline, 2016). GEP-GEB showed the strongest correlation (r = 0.66), aligning with passion's role in driving behavior (Cardon et al., 2017).

(H1–H10: Regression Analysis)

Hypothesis	Path	β	t-value	p	Supported?
H1	GS → GEB	0.28	4.92	<0.001	Yes
H2	GS → GESE	0.39	6.84	<0.001	Yes
H3	GS → GEI	0.34	5.71	<0.001	Yes
H4	GS → GEP	0.31	5.12	<0.001	Yes

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published: August 8, 2025

Hypothesis	Path	β	t-value	p	Supported?
H5	GESE → GEB	0.33	5.45	<0.001	Yes
H6	GEI → GEB	0.41	6.78	<0.001	Yes
H7	GEP → GEB	0.47	7.93	<0.001	Yes
H8	GESE → GEI	0.38	6.21	<0.001	Yes
H9	GEP → GEI	0.42	6.89	<0.001	Yes
H10	GESE → GEP	0.36	5.67	<0.001	Yes

Government support (GS) had significant direct effects on all mediators and Green Entrepreneurial Behavior (GEB) (H1–H4), indicating its foundational role in fostering green entrepreneurial outcomes. GEP was the strongest predictor of GEB ($\beta = 0.47$, $p < 0.001$), supporting H7 and highlighting the critical role of emotional engagement in driving green entrepreneurial actions. GEI (Green Entrepreneurial Intention) also had a strong positive effect on GEB ($\beta = 0.41$, $p < 0.001$), supporting H6 and showing that intention plays a vital role in translating mindset into behavior. GESE (Green Entrepreneurial Self-Efficacy) significantly influenced GEB ($\beta = 0.33$, $p < 0.001$), confirming H5 and indicating that self-belief contributes meaningfully to green entrepreneurial actions. GS significantly enhanced GESE (H2: $\beta = 0.39$), GEI (H3: $\beta = 0.34$), and GEP (H4: $\beta = 0.31$) — all with strong statistical support ($p < 0.001$) — underscoring the importance of supportive policy environments. GESE positively influenced GEI (H8: $\beta = 0.38$, $p < 0.001$), reinforcing the role of self-efficacy in shaping entrepreneurial intentions. GEP had a significant impact on GEI (H9: $\beta = 0.42$, $p < 0.001$),

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published: August 8, 2025

suggesting that emotional passion drives future green entrepreneurial goals. GESE significantly predicted GEP (H10: $\beta = 0.36$, $p < 0.001$), indicating that confidence in one's green entrepreneurial ability also fosters greater passion.

(H11–H21: PROCESS Macro)

Hypothesis	**Mediation Path**	**Indirect Effect (Bootstrapped 95% CI)**	**Supported?**
H11	GS → GESE → GEB	0.13 [0.08, 0.19]	Yes
H12	GS → GEI → GEB	0.14 [0.09, 0.20]	Yes
H13	GS → GEP → GEB	0.15 [0.10, 0.21]	Yes
H14	GS → GESE → GEI → GEB	0.06 [0.03, 0.10]	Yes
H15	GS → GEP → GEI → GEB	0.07 [0.04, 0.11]	Yes

All indirect effects were significant (bootstrapped 95% confidence intervals excluded zero), confirming the presence of mediation effects according to Hayes (2022). GEP had the strongest indirect effect (H13: 0.15 [0.10, 0.21]), emphasizing that green entrepreneurial passion is a key mechanism through which government support translates into entrepreneurial behavior. GEI also showed a substantial indirect effect (H12: 0.14 [0.09, 0.20]), suggesting that intentions are critical mediators in the pathway from policy support to green entrepreneurial action. GESE played an important mediating role (H11: 0.13 [0.08, 0.19]), indicating that confidence in one's capabilities helps bridge the gap between

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published: August 8, 2025

government support and green behavior. Serial mediation paths were also supported: GS → GESE → GEI → GEB (H14: 0.06 [0.03, 0.10]). GS → GEP → GEI → GEB (H15: 0.07 [0.04, 0.11]). These findings highlight that both self-efficacy and passion influence intention, which in turn leads to green entrepreneurial behavior. Directly influenced GEB (β = 0.28) and all mediators, validating its role as a catalyst (Audretsch et al., 2022). GEP was the strongest predictor of GEB (β = 0.47), underscoring the emotional dimension of entrepreneurship (Cardon et al., 2017). Sequential mediation (e.g., GS → GESE → GEI → GEB) explained 36% of GEB's variance (R^2 = 0.36), aligning with Social Cognitive Theory (Bandura, 1986).

Discussion

The current study examined the relationship between government support (GS) and green entrepreneurial behavior (GEB), mediated by green entrepreneurial self-efficacy (GESE), intention (GEI), and passion (GEP). All 10 direct hypotheses (H1–H10) and 11 indirect hypotheses (H11–H21) were supported, providing robust empirical validation for the proposed theoretical framework. Consistent with prior research (Audretsch et al., 2022; Yi, 2020), government support significantly predicted: GEB (β = 0.28, $p < 0.001$, H1), confirming that policy interventions (e.g., subsidies, training) encourage sustainable business practices. GESE (β = 0.39, $p < 0.001$, H2), aligning with Social Cognitive Theory (Bandura, 1986): external support enhances entrepreneurs' confidence in tackling sustainability challenges. GEI (β = 0.34, $p < 0.001$, H3) and GEP (β = 0.31, $p < 0.001$, H4), reinforcing that institutional backing fosters motivation and goal-setting (Liñán & Fayolle, 2015; Cardon et al., 2017). Validates the Theory of Planned Behavior (Ajzen, 1991): GS strengthens

Al-Asr International Research Journal of Islamic Studies
Vol 5 Issue 3 (July-September 2025)
ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published:
August 8, 2025

intention (GEI), which in turn drives behavior (GEB). Extends Entrepreneurial Passion Theory (Cardon et al., 2009): Policy support can ignite emotional engagement (GEP) in green ventures. All mediation hypotheses were supported: GESE mediated GS → GEB (H11: β = 0.13, 95% CI [0.08, 0.19]), suggesting confidence acts as a bridge between policy and action. GEP had the strongest indirect effect (H13: β = 0.15, CI [0.10, 0.21]), highlighting passion's critical role in sustaining entrepreneurial efforts. Sequential mediation (GS → GESE → GEI → GEB, H14: β = 0.06, CI [0.03, 0.10]) confirmed a cascading psychological process, where confidence fuels intention, ultimately leading to behavior. Supports Nielsen et al.'s (2022) argument that multi-mediator models better explain entrepreneurial behavior. Echoes McGee and Peterson's (2019) findings on self-efficacy as a key mediator in venture creation. Design targeted programs (e.g., mentorship, green startup grants) to boost GESE and GEP. Leverage emotional appeals in campaigns to inspire green entrepreneurial passion. Integrate sustainability-focused curricula to nurture GEI and GESE among students. Seek government-backed incubators to mitigate risks and enhance confidence. Limited to Gujranwala, Pakistan; findings may not generalize to other regions. Cross-cultural studies in diverse policy environments. Cannot establish causality. Future Direction: Longitudinal studies to track behavior over time. Reliance on questionnaires may inflate correlations. Future Direction: Mixed-methods designs (e.g., interviews + surveys).

Conclusion

This study advances green entrepreneurship research by demonstrating that government support indirectly influences green entrepreneurial behavior through self-efficacy, intention, and passion. Key takeaways include: GS is a

ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published: August 8, 2025

viable tool for promoting sustainable ventures. GEP had the strongest direct and indirect effects on GEB. Confidence (GESE) fuels intention (GEI), which translates into action (GEB).

References

1. **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
2. **Ahmad, M. S., Hafeez, A., Ahmad, A., Ali, U., & Ashraf, H. A.** (2024). Building a resilient workforce: How health and wellness programs influence absenteeism and adaptability. *Pakistan Journal of Law, Analysis and Wisdom, 3*(12), 98–123.
3. **Ahmad, S., Ashraf, H. A., Islam, A., Ahmad, A., & Ali, U.** (2024). Understanding workplace dehumanization: Combined effects of tyrannical leadership and trait anxiety on employee ostracism and burnout. *International Research Journal of Management and Social Sciences, 4*(4), 517–547.
4. **Ahmad, S., Ashraf, H. A., Karamat, J., Munir, W., Malik, M. S., Saadat, U. R., & Hafeez, A.** (2024). Shaping sustainable mindsets: Green leadership's journey towards fostering environment-specific organizational citizenship behavior, mediated by green intellectual capital, and moderated by green human resources management. *Migration Letters, 21*(S10), 665–695. https://migrationletters.com/index.php/ml/article/view/10551/7044
5. **Audretsch, D. B., Eichler, G. M., & Schwarz, E. J.** (2022). Emerging needs of social innovators and social innovation ecosystems. *International Entrepreneurship and Management Journal, 18*(1), 217–234. https://doi.org/10.1007/s11365-021-00789-9
6. **Bandura, A.** (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
7. **Cardon, M. S., Gregoire, D. A., Stevens, C. E., & Patel, P. C.** (2017). Measuring entrepreneurial passion. *Journal of Business Venturing, 32*(1), 1–16. https://doi.org/10.1016/j.jbusvent.2016.08.002
8. **Creswell, J. W., & Creswell, J. D.** (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage.
9. **Demirel, P., Li, Q. C., Rentocchini, F., & Tamvada, J. P.** (2019). Born to be green: New insights into the economics of green entrepreneurship. *Small Business Economics, 53*(3), 759–771. https://doi.org/10.1007/s11187-018-0073-x
10. **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
11. **Fatima, S., Ilyas, A., & Ashraf, H. A.** (2025). From grades to greatness: The role of belief and self-efficacy in shaping entrepreneurial behavior of intermediate students. *Global Social Sciences Review, 10*(3), 44–60. https://doi.org/10.31703/gssr.2025(X-III).05
12. **Fornell, C., & Larcker, D. F.** (1981). Evaluating structural equation models. *Journal of*

ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published: August 8, 2025

Marketing Research, 18(1), 39–50. https://doi.org/10.1177/002224378101800104

13. **Goraya, A. S., Ilyas, A., & Ashraf, H. A.** (2025). Exploring how entrepreneurial self-efficacy bridges workplace factors to entrepreneurial resilience. *Global Management Sciences Review, 10*(2), 36–50. https://doi.org/10.31703/gmsr.2025(X-II).05
14. **Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E.** (2019). *Multivariate data analysis* (8th ed.). Cengage.
15. **Haldar, S.** (2019). Towards a conceptual understanding of sustainability-driven entrepreneurship. *Corporate Social Responsibility and Environmental Management, 26*(6), 1157–1170. https://doi.org/10.1002/csr.1763
16. **Hanan, T. A., Ilyas, A., & Ashraf, H. A.** (2025). The power of proactivity: Entrepreneurial mindset as a link between personality and employability. *Journal of Management Science Research Review, 4*(3), 75–111. https://doi.org/10.5281/zenodo.16417600
17. **Hayes, A. F.** (2022). *Introduction to mediation, moderation, and conditional process analysis* (3rd ed.). Guilford Press.
18. **Iqbal, H., Sheraz, Ashraf, H. A., Iqbal, J., & Hafeez, A.** (2025). The impact of social media, influencer marketing, and advertising on consumer behavior: The role of income. *Physical Education, Health and Social Sciences, 3*(1), 172–178. https://doi.org/10.63163/jpehss.v3i1.136
19. **Iqbal, J., Ashraf, H. A., Karamat, J., Munir, W., Ahmad, M. S., Hafeez, A., & Shah, S. I. U.** (2024). The moderating effect of psychological capital on the relationship between leader's emotional labour strategies and workplace behaviour-related outcomes. *Migration Letters, 21*(S10), 1068–1095.
20. **Iqbal, J., Ashraf, H. A., Karamat, J., Ali, D., Shafqat, M. M., Hafeez, A., & Munir, W.** (2024). Mediating effect of corporate social responsibility and employee motivation on the relationship between responsible leadership and organization citizen behaviour environmentally: Double mediation model. *Remittances Review, 9*(2), 5540–5577. https://doi.org/10.33282/rr.v9i2.290
21. **Kautonen, T., van Gelderen, M., & Fink, M.** (2015). Robustness of the theory of planned behavior in predicting entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice, 39*(3), 655–674. https://doi.org/10.1111/etap.12056
22. **Khalid, A., Ilyas, A., & Ashraf, H. A.** (2025). Triggers of opportunity recognition: Does entrepreneurial alertness mediate the impact of family, social, and government support on employability outcomes? *Global Political Review, 10*(3), 20–34. https://doi.org/10.31703/gpr.2025(X-III).03
23. **Kline, R. B.** (2016). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.
24. **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
25. **McGee, J. E., & Peterson, M.** (2019). The long-term impact of entrepreneurial self-efficacy

ISSN E: (2790-7694)
ISSN P: (2790-7686)
Published:
August 8, 2025

and entrepreneurial orientation on venture performance. *Journal of Small Business Management*, *57*(3), 720–737. https://doi.org/10.1111/jsbm.12324

26. **Nielsen, S. L., Klyver, K., Evald, M. R., & Bager, T.** (2022). *Entrepreneurship in theory and practice: Paradoxes in play* (2nd ed.). Edward Elgar Publishing.
27. **Schaltegger, S., & Wagner, M.** (2011). Sustainable entrepreneurship and sustainability innovation: Categories and interactions. *Business Strategy and the Environment*, *20*(4), 222–237. https://doi.org/10.1002/bse.682
28. **Sheraz, Iqbal, S., Ashraf, H. A., Ali, T., & Khalid, M.** (2025). Green intellectual capital and environmental and social sustainability: The mediating effects of financial condition. *Social Science Review Archives*, *3*(1), 1607–1618. https://doi.org/10.70670/sra.v3i1.46
29. **Yi, G.** (2020). From green entrepreneurial intentions to green entrepreneurial behaviors: The role of university support and external institutional support. *International Entrepreneurship and Management Journal*, *16*(4), 1451–1475. https://doi.org/10.1007/s11365-020-00663-0 **.**
30. **Yousaf, E., Ilyas, A., & Ashraf, H. A.** (2025). Workplace misuse and mental exhaustion: How counterproductive behaviors and ostracism fuel burnout in banks. *Global Sociological Review*, *10*(3), 20–35. https://doi.org/10.31703/gsr.2025(X-III).03