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Ethical Motivation and Innovation as Antecedents of Responsible Entrepreneurship in Pakistani SMEs: A PLS-SEM Investigation

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Abstract

This research explores the key antecedents influencing responsible entrepreneurial intention (REI) among owner-managers of Small and Medium-sized Enterprises (SMEs) operating in Pakistan. Drawing upon an extended framework of the Theory of Planned Behavior (TPB), this research examines how ethical motivation, innovation capability, and regulatory support influence the intention to pursue responsible business practices. A quantitative, cross-sectional survey was conducted, 488 valid responses from SME owner/managers across Pakistan. The data was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), as it is well-suited for testing complex models with multiple constructs and relationships, particularly in predictive and exploratory research contexts. The findings reveal that the intention to engage in responsible entrepreneurship is strongly and positively influenced by two key pathways. The first is a personal conviction pathway, where ethical motivation significantly strengthens an entrepreneur's positive attitude, which in turn drives REI. The second is a capability pathway, where a firm's innovation capability enhances the entrepreneur's perceived behavioral control, which also positively predicts REI. However, the study uncovers a paradoxical finding within the institutional pathway: perceived regulatory support has a significant 'negative' effect on subjective norms (SN), and SN subsequently have no significant effect on REI. This suggests that in the Pakistani context, formal government support may foster cynicism rather than positive social pressure among entrepreneurs. The study contributes to the TPB by demonstrating how institutional context can alter its social mechanisms and offers critical implications for policymakers, highlighting that building trust and creating a genuinely enabling environment are more crucial than simply providing top-down regulatory support.

Keywords: *Responsible Entrepreneurship, Theory of Planned Behavior, Ethical Motivation, Innovation Capability, SMEs, Pakistan, PLS-SEM*

1 INTRODUCTION

1.1 The Rise of Responsible Entrepreneurship in Emerging Economies

In the modern global economy, the role of business is changing. It is no longer enough for companies to focus only on making a profit. There is a growing understanding that businesses must also consider their impact on society and the environment. This has led to the rise of responsible entrepreneurship (RE), a business approach that combines the pursuit of economic goals with a commitment to ethical conduct, social well-being, and environmental sustainability (Marhandrie, 2024; Vallaster et al., 2019) . Responsible entrepreneurs are those *"who do what is right"* and aim to lead constructive change, seeing business as a tool for positive impact beyond just financial returns (Fuller et al., 2006).

This new way of thinking is very important for emerging economies. In these countries, social and environmental problems are often very serious, and governments may not have enough resources to solve them alone. Entrepreneurs, with their ability to find new solutions and create value, can play a vital role in addressing these challenges. By adopting responsible practices, businesses can help create a more balanced and sustainable path for development that benefits everyone, not just shareholders (van de Velde, 2018; Werner & Stoner, 2018). Therefore, understanding what encourages entrepreneurs in these regions to act responsibly is a critical area of research.

1.2 The Critical Role and Unique Challenges of SMEs in Pakistan

This research centers on Small and Medium-sized Enterprises (SMEs) operating in Pakistan. These enterprises form a crucial part of the national economy, representing more than 90% of total businesses. SMEs contribute nearly 40% to Pakistan's Gross Domestic Product (GDP) and play a significant role in generating employment opportunities across the country (Competition Commission of Pakistan, 2023; SBP, 2024) . Because they are so numerous and deeply connected to local communities, SMEs have a very large collective impact on the nation's social and economic fabric. Their potential to drive positive change through responsible practices is immense.

However, SMEs in Pakistan operate in a very difficult environment and face many serious challenges that make it hard for them to survive, let alone adopt extra responsibilities. These challenges create a unique context that influences how entrepreneurs think and act. Some of the most significant problems include:

- **Financial Constraints:** One of the biggest hurdles is the lack of access to finance. According to a World Bank report, only 7% of SMEs in Pakistan have access to formal credit. Banks often ask for high collateral and have complex documentation requirements that small businesses cannot meet (Worldbank, 2025). Without money, SMEs cannot invest in new technology, improve their processes, or expand their operations.
- **Infrastructural and Institutional Weaknesses:** The business environment in Pakistan is often described as difficult and uncertain (Worldbank, 2025) . SMEs suffer from unreliable electricity supply, poor transportation infrastructure, and complex government regulations that create delays and increase costs , and complex government regulations that create delays and increase costs (Faisal & Jafri, n.d.; Islamia & Kamal, 2020; Noor, 2009) . Furthermore, there is a widespread erosion of public trust in government institutions, which are often seen as inefficient, corrupt, or inconsistent (Jan, 2025; Jehangir, 2024). This creates an atmosphere of uncertainty and cynicism that affects business planning and investment.

- **Human Capital and Market Access:** Many SMEs struggle to find and keep skilled workers because they cannot offer competitive salaries or clear career paths (Zulqarnain Arshad et al., 2020). They also have limited access to larger markets and face intense competition, which keeps their profit margins very low and forces them to focus on short-term survival.

These challenges mean that for many Pakistani SME owners, simply keeping their business running is a daily struggle. In such a high-pressure environment, choosing to adopt responsible practices which may involve extra costs or effort is a complex decision. It is therefore essential to understand what factors can motivate them to form an intention to do so.

1.3 Gaps and the Purpose of the Study

Scholars have long investigated the psychological and s Societal influences that drive people toward starting entrepreneurial ventures. Among the theoretical frameworks employed in this exploration, Ajzen's (TPB) stands out as a particularly influential model for understanding how entrepreneurial intentions develop and manifest. (Ajzen, 1991). This theoretical approach has proven valuable in mapping the cognitive processes that precede business creation decisions. However, a significant gap emerges when examining the existing scholarship. While researchers have extensively analyzed conventional profit-driven business formation, the academic community has devoted considerably less attention to understanding responsible entrepreneurship - ventures that prioritize social and environmental outcomes alongside financial sustainability. This oversight becomes particularly pronounced when considering emerging economies such as Pakistan, where unique socioeconomic challenges and cultural contexts create distinct motivational patterns for would-be entrepreneurs.

The scholarly landscape thus presents an opportunity for deeper investigation into how responsible entrepreneurial intentions form within complex developing market environments, where traditional Western business models may not fully capture the nuanced decision-making processes that drive socially conscious venture creation.

The purpose of this research is to investigate the antecedents of responsible entrepreneurial intention (REI) among SME owner/managers in Pakistan. It uses an extended version of the TPB to explore how three different types of factors one personal, one capability-based, and one institutional influence this intention. Specifically, the study examines:

i. **Ethical Motivation is** personal moral drive of the entrepreneur (Armstrong et al., 2003; Scholl et al., 2016).
ii. **Innovation Capability** refers to the capacity to develop novel products and processes within an organization (Anzules-Falcones & Novillo-Villegas, 2023; Zastempowski, 2022).
iii. **Regulatory Support:** The entrepreneur's perception of government support for responsible business (Duong et al., 2021).

By testing a model that connects these factors to the core components of the TPB, this study seeks to provide a more complete picture of what drives responsible entrepreneurship in a challenging but critically important economic sector. To achieve this, the study addresses the following key research questions:

RQ1. How does the personal conviction of an SME owner, specifically their ethical motivation, influence their intention to engage in responsible entrepreneurship?

RQ2. What is the role of a firm's capability, specifically its innovation capability, in shaping an SME owner's intention to engage in responsible entrepreneurship?

RQ3. How does the external institutional environment, specifically perceived regulatory support, affect an SME owner's intention to engage in responsible entrepreneurship in the Pakistani context?

1.4 Contribution and Structure of the Paper

This study makes two main contributions. First, it contributes to theory by extending the TPB to the specific domain of responsible entrepreneurship in an emerging economy. It tests whether the standard pathways of the TPB hold true in this context and explores how external factors like innovation and regulatory support are channelled through the theory's core mechanisms. Second, it offers practical insights for policymakers, business support organizations, and entrepreneurs in Pakistan. By identifying the key drivers of and barriers to responsible entrepreneurship, the findings can help in designing more effective policies and strategies to promote sustainable business practices.

The rest of this paper are organized as Section 2 establishes the conceptual framework through the Theory of Planned Behavior (TPB) while formulating the research propositions. Section 3 details the methodological approach, encompassing participant characteristics, data gathering procedures, and measurement techniques for core constructs. Section 4 presents the outcomes from statistical analyses. Section 5 offers comprehensive interpretation of results, linking findings to previous literature while examining theoretical contributions and practical implications. Finally, Section 6 concludes the study by summarizing key discoveries and proposing directions for subsequent investigations.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

2.1 The Theory of Planned Behavior (TPB) as Foundation

To understand what drives an entrepreneur to form an intention to act responsibly, this study uses the Theory of Planned Behavior (TPB) as its foundation (Ajzen, 1991) . The TPB is a well-established psychological theory that has been successfully used in many studies to predict entrepreneurial intention (Al-Mamary & Alraja, 2022; Boucif et al., 2025; Tornikoski & Maalaoui, 2019) . The central idea of the theory is that the best predictor of a person's behavior is their intention to perform that behavior. This intention, in turn, is shaped by three main psychological factors:

i. **Attitude Toward the Behavior:** This is a person's overall positive or negative feeling about performing a specific behavior. It is based on their beliefs about the likely outcomes of the behavior and their evaluation of those outcomes. In our study, this refers to an SME owner's judgment about whether engaging in responsible entrepreneurship is a good, wise, and beneficial thing to do (Corlett & Marrouch, 2018; Tarrant & Cordell, 1997).
ii. **Subjective Norms (SN):** This refers to the perceived social pressure to perform or not perform the behavior. It is based on a person's beliefs about what important people in their life (like family, friends, mentors, or other business owners) would think of the behavior and their motivation to comply with those people's expectations. For an SME owner, this would be the feeling that their business community or society expects them to run their business responsibly (Anderson, 2023; Mohammed et al., 2017).

iii. **Perceived Behavioral Control (PBC):** This refers to an individual's assessment of how easy or challenging it is to execute a specific behavior. It aligns closely with the concept of self-efficacy and is influenced by one's beliefs regarding available resources, skills, and opportunities, as well as potential barriers. In the context of SME owners, PBC reflects their confidence in effectively adopting responsible business practices while accounting for financial limitations and operational challenges (Magtoto Otchengco Jr et al., 2021).

According to the TPB, when an individual has a positive attitude, feels supportive social pressure, and believes they have control over the behavior, their intention to perform that behavior will be strong. This study extends this basic framework by proposing specific factors from the Pakistani SME context that influence each of these three core components, as shown in the conceptual framework in Figure 1.

2.2 The Personal Conviction Pathway: Ethical Motivation and Attitude

The first pathway we propose is based on the personal values and beliefs of the entrepreneur. Responsible entrepreneurship is, at its core, an ethical choice. It involves making decisions that consider the well-being of others, such as employees, customers, and the community, even if those decisions do not lead to immediate financial gain (Scholl et al., 2016) . Therefore, the personal ethical motivation of the entrepreneur should be a critical starting point.

Ethical Motivation (EM) can be defined as an internal drive to act based on moral principles and a sense of right and wrong (Armstrong et al., 2003). Entrepreneurs with high ethical motivation are more likely to see business to contribute positively to society. They are guided by their conscience and a desire to do good. This internal moral compass should directly influence how they evaluate responsible business practices (Sarkis, 1998; Weller, 2017). When an entrepreneur is ethically motivated, they are more likely to believe that responsible actions are inherently good, valuable, and desirable. This leads to a positive evaluation, or a favorable attitude, toward responsible entrepreneurship. Therefore, we propose the following hypothesis:

H1: Ethical Motivation has a positive effect on Attitude Toward Responsible Entrepreneurship.

Following the logic of the TPB, a person's attitude is a direct predictor of their intention. If an entrepreneur believes that responsible practices are good and worthwhile (a positive attitude), they will be more likely to form a strong intention to implement them. This relationship is a central part of the TPB and has been supported in many studies on entrepreneurial intention. Thus, we hypothesize:

H4: Attitude Toward Responsible Entrepreneurship has a positive effect on Responsible Entrepreneurial Intention.

2.3 The Capability Pathway: Innovation and Perceived Behavioral Control

The second pathway focuses on the practical ability of the SME to act responsibly. Intentions are not formed in a vacuum; they are based on a realistic assessment of what is possible. In the resource-scarce and highly competitive environment of Pakistani SMEs, the ability to innovate is a critical capability.

Innovation Capability (IC) refers to an organization's capacity to design and implement new products, services, processes, and business models. It is a key resource that allows firms to adapt to dynamic market conditions, solve problems creatively, and create a competitive advantage (Anzules-Falcones & Novillo-

Villegas, 2023; Zastempowski, 2022) . We argue that innovation capability is not just for creating commercial products; it can also be used to address social and environmental challenges (Biggeri et al., 2017; Nair & Bhattacharyya, 2022) . For example, an innovative firm might develop a new production process that uses less energy, create a product from recycled materials, or design a new training program for its employees.

When a firm has strong innovation capabilities, its owner/manager is more likely to feel confident that they can overcome the challenges associated with implementing responsible practices. They have the skills, resources, and creative mindset to find workable solutions. This enhanced sense of capability directly translates into higher Perceived Behavioral Control (PBC) the belief that they can successfully perform the behavior. Therefore, we hypothesize:

H2: Innovation capability positively influences perceived behavioral control.

According to the TPB, Perceived Behavioral Control is a powerful motivator of intention. When an entrepreneur feels that they have the ability and resources to act responsibly (high PBC), they are much more likely to form the intention to do so. They are not held back by the fear that the task is too difficult or that they will fail. Thus, we propose:

H5: Responsible entrepreneurial intention is positively affected by Perceived Behavioral Control.

2.4 The Institutional and Social Pathway: Regulatory Support and Subjective Norms

The third pathway examines the Impact of external factors, specifically the role of formal government institutions and informal social pressures. Institutional theory suggests that organizations are influenced by the rules, norms, and beliefs of their environment (Obaji & Olugu, 2014).

Regulatory Support (RS) encompasses the legal frameworks, policies, and governmental initiatives aimed at promoting and facilitating responsible business practices (Verbivska et al., 2022). This includes things like environmental regulations, labor laws, tax incentives for green investments, and government-sponsored training programs. In theory, a supportive regulatory environment should signal to the business community that responsible behavior is valued and expected (Shah & Asghar, 2024) . This formal institutional pressure should shape the informal norms within the business community. If the government is actively supporting responsible practices, entrepreneurs should start to see it as a legitimate and important part of doing business. This, in turn, should increase the social pressure (Subjective Norms) they feel from their peers and other important contacts to conform to these expectations. Therefore, we hypothesize:

H3: Subjective norms are significantly enhanced by regulatory support.

As per the TPB, the beliefs and expectations of one's social circle are an important influence on intention. If an SME owner perceives that other business owners, customers, and community leaders expect them to act responsibly (high Subjective Norms), they will feel social pressure to do so. To maintain a good reputation and be seen as a legitimate member of the business community, they will be more likely to form an intention to adopt responsible practices. Thus, we hypothesize:

H6: Subjective norms positively influence the Intention to pursue Responsible Entrepreneurship.

2.5 The Mediating Mechanisms of the TPB

The extended model proposed in this study suggests that the core constructs of the TPB (Attitude, PBC, and SN) act as mediators (Altawallbeh et al., 2015; Setijanto & Bramantoro, 2019) . They are the psychological mechanisms through which the external and internal factors (EM, IC, and RS) influence the final intention (REI). To formally test these indirect effects, we propose the following mediation hypotheses:

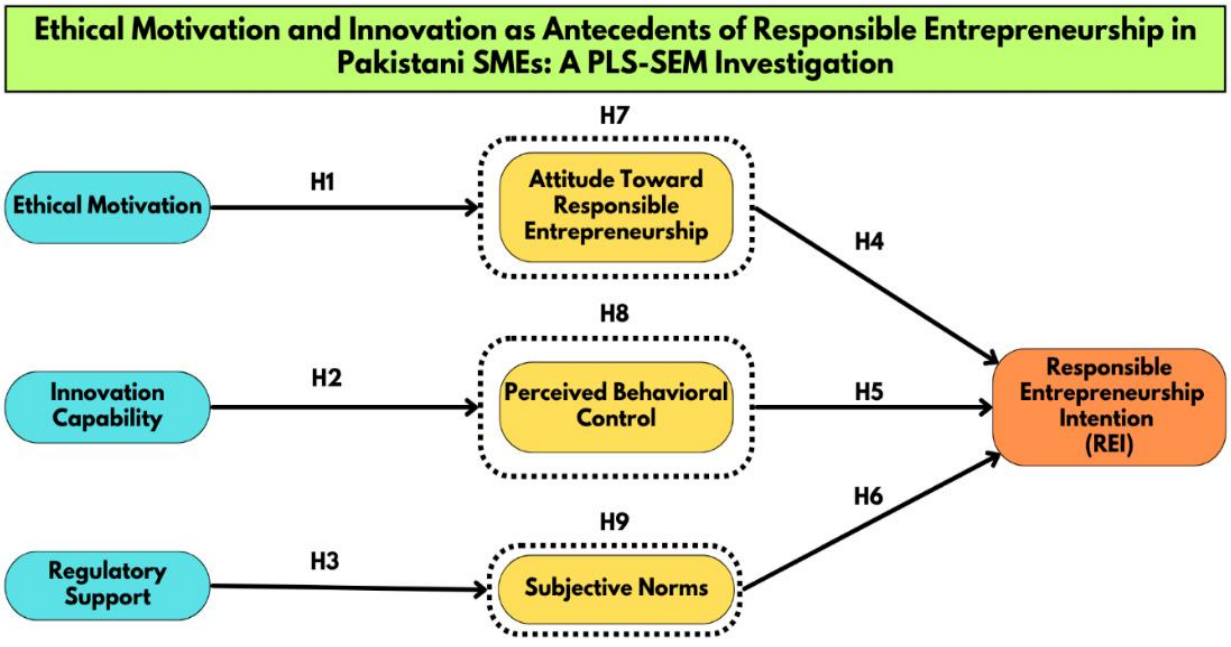
H7: The attitude toward responsible entrepreneurship serves as a mediator between ethical motivation and the intention to engage in responsible entrepreneurship.

H8: Perceived behavioral control acts as a mediating factor linking innovation capability with responsible entrepreneurial intention.

H9: Subjective norms function as an intermediary in the relationship between regulatory support and responsible entrepreneurial intention.

The complete conceptual framework, showing all the hypothesized relationships, is shown in Figure 1.

Figure 1: ***Purposed Conceptual Framework***



Note: Dotted boxes represent the mediating path.

3 RESEARCH METHODS

3.1 Research Design and Approach

This research adopted a quantitative design to empirically test the hypotheses derived from the theoretical framework (Chukwuedo & Uko-Aviomoh, 2015) . A cross-sectional survey approach was utilized, meaning data was gathered from respondents at a single point in time. This method is appropriate for exploring relationships among variables within a conceptual model and is widely applied in studies focusing on entrepreneurial intentions. The study aligns with the positivist paradigm, which posits that social phenomena can be examined objectively and that variable relationships can be measured and validated through statistical analysis (Hair et al., 2019).

PLS-SEM was selected based on multiple justifications. Initially, it represents a robust technique for examining intricate frameworks containing numerous constructs and pathways. Additionally, it employs a prediction-focused methodology, which corresponds with this research's objective of determining the primary factors influencing responsible entrepreneurial intention. Furthermore, PLS-SEM demonstrates effectiveness with data that may deviate from perfect normal distribution patterns and maintains reliability despite limited sample dimensions, establishing it as a dependable option for questionnaire-based investigations.

3.2 Data Collection

The study targeted owners and managers of Small and Medium-sized Enterprises (SMEs) operating in Pakistan. The classification of SMEs followed the criteria outlined by the Small and Medium Enterprises Development Authority (SMEDA) of Pakistan (SMEDA, 2025) . A purposive sampling approach was adopted to select appropriate respondents from multiple industries, such as manufacturing, textiles, construction, and agriculture/food.

Data collection was carried out using self-administered questionnaires, which were shared both physically and through online platforms with SME owners/managers across Country. To promote honest participation, respondents were assured that their responses would remain confidential and anonymous. After completing the data collection process, all questionnaires were reviewed for accuracy and completeness. A total of 488 valid responses were obtained and included in the final analysis.

4 RESULTS

4.1 Demographic Profile of Respondents

The final sample consisted of 488 SME owner/managers from Pakistan. The demographic characteristics of the respondents and their firms are summarized in Table 1. The sample is predominantly male (82. 6%), which is reflective of the general business ownership landscape in Pakistan. The largest age group is 36-45 years (36. 9%), followed by 26-35 years (26. 0%), indicating that the respondents are mostly experienced entrepreneurs in their mid-career stages. In terms of education, a majority hold a bachelor’s degree (45.9%) or a Master's degree (30.1%).

The firms represented in the sample are mostly small, with 45.9% having between 11 and 50 employees and 38.1% having 1 to 10 employees. The textile sector is the most represented industry (34.0%),

followed by manufacturing (21.7%) and construction (19.9%). Geographically, most of the respondents are from Punjab (67.6%) and Sindh (22.3%), which are the two largest economic hubs in the country.

Table 1: Demographic Profile of Respondents (N=488)

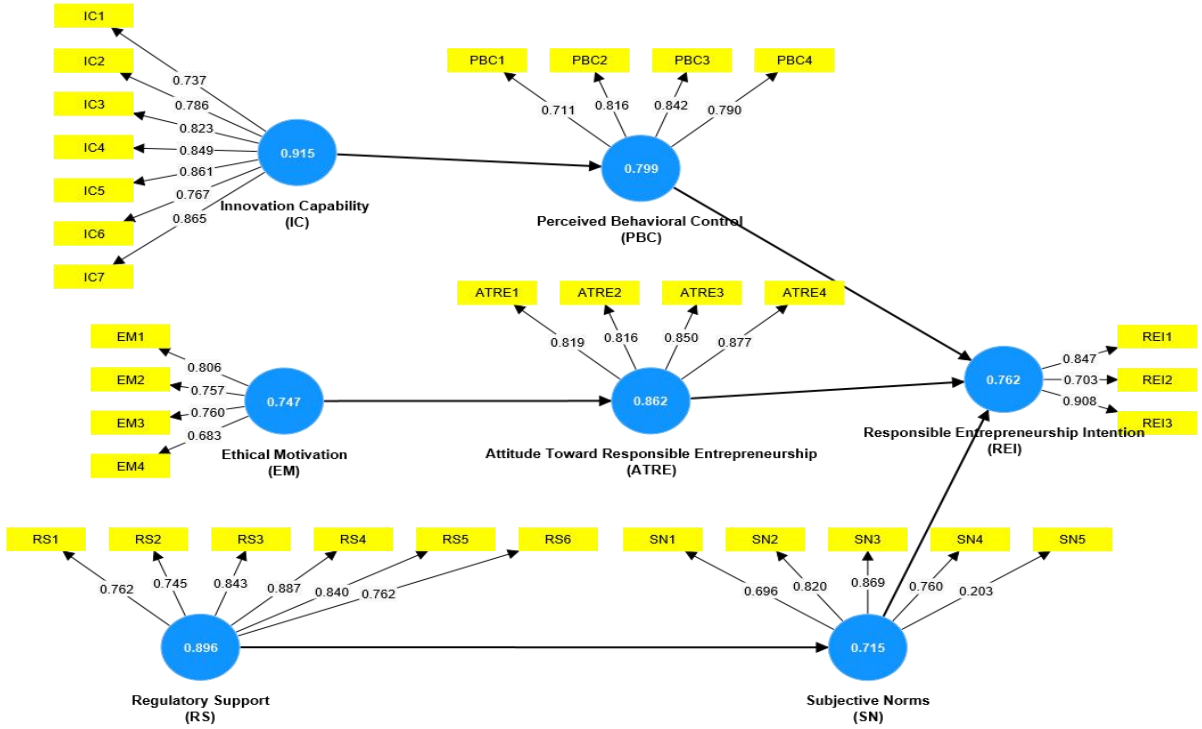
Variable	Category	Frequency	Percentage (%)
Gender	Male	403	82.6
	Female	84	17.2
	Prefer not to say	1	0.2
Age (Years)	18 - 25	45	9.2
	26 - 35	127	26.0
	36 - 45	180	36.9
	46 - 55	88	18.0
	Above - 55	48	9.8
Education Level	Secondary School	42	8.6
	Bachelor's Degree	224	45.9
	Master's Degree	147	30.1
	PhD	13	2.7
	Other	62	12.7
Number of Employees	1 - 10	186	38.1
	11 - 50	224	45.9
	51 - 100	58	11.9
	101 - 250	20	4.1
Industry Sector	Manufacturing	106	21.7
	Construction	97	19.9
	Textiles	166	34.0
	Agri/Food	119	24.4
Province	Sindh	109	22.3
	Punjab	330	67.6
	Baluchistan	19	3.9
	KPK	30	6.1

Note: Percentages may not sum to 100 due to rounding.

4.2 Assessment of the Measurement Model

Before testing the hypotheses, the measurement model was assessed to ensure the reliability and validity of the constructs (Hair et al., 2019). This involves checking if the survey items consistently and accurately measure the concepts they are supposed to measure. The results are shown in Figure 2 and Tables 2 and 3.

Figure 2: Measurement Model Assessment



Note: This figure displays the outer loadings for each indicator and the R^2 values for the endogenous constructs.

Reliability of the constructs was evaluated using Cronbach's Alpha (α) and Composite Reliability (rho_.c) As presented in Table 2, all Cronbach's Alpha values exceeded the suggested minimum threshold of 0.70, with Subjective Norms slightly above the cutoff at 0.715. Nevertheless, Composite Reliability which is regarded as a more rigorous indicator within the PLS-SEM framework was greater than 0.80 for all constructs, demonstrating strong internal consistency.

Convergent validity, which reflects the degree to which items measuring the same construct are highly correlated, was assessed using outer loadings and the Average Variance Extracted (AVE). For most indicators, the outer loadings exceeded the recommended threshold of 0.70, confirming strong item reliability within the constructs. A few items, such as EM4 (0.683), have loadings slightly below this but are still considered acceptable. The AVE for all constructs is above the recommended value of 0.50, which confirms that, on average, each construct explains more than half of the variance of its indicators. Overall, the results provide strong support for the reliability and convergent validity of the measurement model.

Table 2: Construct Reliability, Convergent Validity, and Outer Loadings

Construct	Item	Outer Loading	Cronbach's Alpha (α)	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
(ATRE)	ATRE 1	0.819	0.862	0.868	0.906	0.707
	ATRE 2	0.816				
	ATRE 3	0.850				
	ATRE 4	0.877				
(EM)	EM 1	0.806	0.747	0.762	0.839	0.567
	EM 2	0.757				
	EM 3	0.760				
	EM 4	0.683				
(IC)	IC 1	0.737	0.915	0.921	0.932	0.663
	IC 2	0.786				
	IC 3	0.823				
	IC 4	0.849				
	IC 5	0.861				
	IC 6	0.767				
	IC 7	0.865				
(PBC)	PBC 1	0.711	0.799	0.798	0.870	0.626
	PBC 2	0.816				
	PBC 3	0.842				
	PBC 4	0.790				
(RS)	RS 1	0.762	0.896	0.923	0.918	0.653
	RS 2	0.745				
	RS 3	0.843				
	RS 4	0.887				
	RS 5	0.840				
	RS 6	0.762				
(REI)	REI 1	0.847	0.762	0.810	0.862	0.678
	REI 2	0.703				
	REI 3	0.908				
(SN)	SN 1	0.696	0.715	0.818	0.820	0.506
	SN 2	0.820				
	SN 3	0.869				
	SN 4	0.760				

Note: Values extracted from the SmartPLS validity analysis report

Discriminant validity confirms that the constructs in the model are conceptually and statistically distinct. It was evaluated using the Heterotrait-Monotrait (HTMT) ratio of correlations, as shown in Table 3. Based on the strict criterion, HTMT values should remain below 0.85. All reported values fall within this range, indicating that each construct is clearly differentiated from the others.

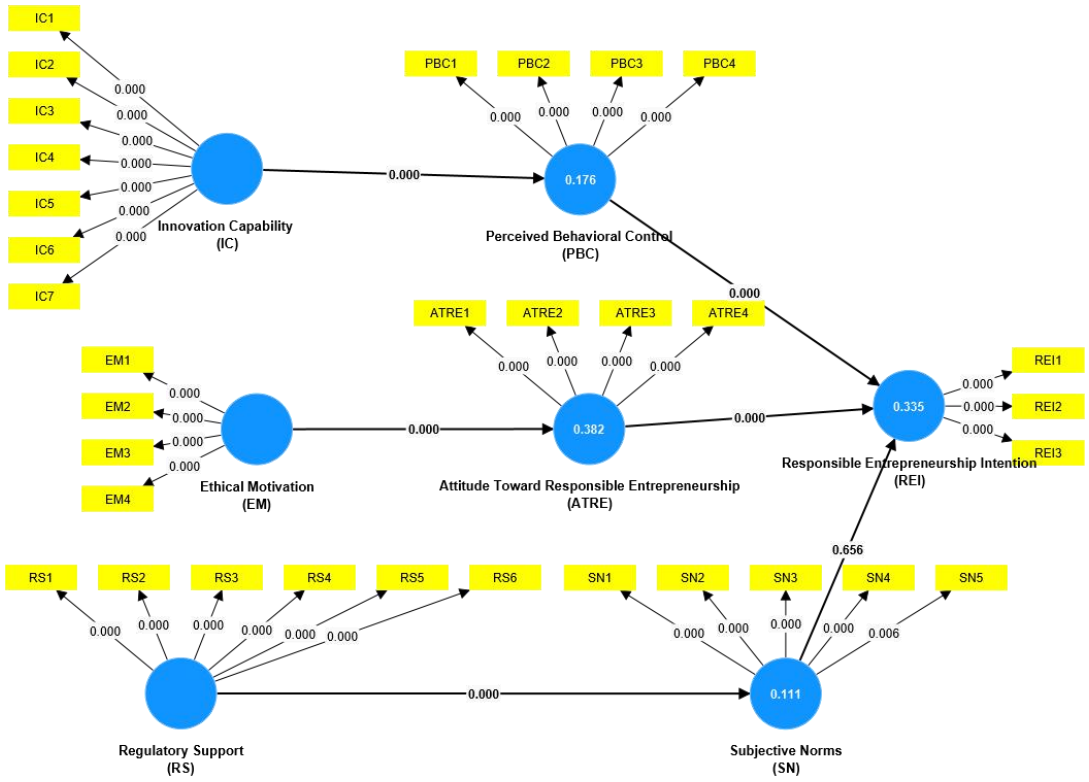
Table 3: Discriminant Validity (Heterotrait-Monotrait Ratio - HTMT)

	ATRE	EM	IC	PBC	RS	REI	SN
ATRE							
EM	0.748						
IC	0.560	0.677					
PBC	0.473	0.540	0.481				
RS	0.033	0.078	0.053	0.062			
REI	0.595	0.728	0.723	0.589	0.057		
SN	0.061	0.077	0.066	0.103	0.371	0.072	

4.3 Assessment of the Structural Model

After validating the measurement model, the structural model was evaluated to examine the proposed research hypotheses. The results are shown in Figure 3 and summarized in Table 4.

Figure 3: Structural Model Results with Path Coefficients and p-values



Note: This figure displays the path coefficients (β) and p-values for the structural relationships.

The model's explanatory power was assessed through the coefficient of determination (R^2). For the ultimate dependent construct, Responsible Entrepreneurial Intention (REI), the R^2 value was 0.335, indicating that the model accounts for 33.5% of the variance in REI. This is considered a moderate level

of explanatory power. The R^2 values for the mediating variables were 0.382 for Attitude (ATRE), 0.176 for Perceived Behavioral Control (PBC), and 0.111 for Subjective Norms (SN).

Table 4: Structural Model Results

Hypothesis	Path	Path Coefficient (β)	T Statistics	P Values	Decision
H1	EM → ATRE	0.618	16.807	0.000	Supported
H2	IC → PBC	0.420	10.084	0.000	Supported
H3	RS → SN	-0.334	9.022	0.000	**Not Supported**
H4	ATRE → REI	0.369	8.675	0.000	Supported
H5	PBC → REI	0.322	7.295	0.000	Supported
H6	SN → REI	0.015	0.446	0.656	**Not Supported**

Note: The relationship for H3 is significant but in the opposite direction of what was hypothesized.

The results in Table 4 show strong support for most of the hypothesized relationships. **H1** and **H2** are strongly supported, indicating that Ethical Motivation is a powerful predictor of Attitude (β= 0.618, p< 0.001) and Innovation Capability is a strong predictor of Perceived Behavioral Control (β= 0.420, p < 0.001). H4 and H5 are also strongly supported, confirming that Attitude (β=0. 369, p< 0.001) and Perceived Behavioral Control (β= 0.322, p< 0.001) are significant drivers of Responsible Entrepreneurial Intention.

However, the hypotheses related to the institutional and social pathway were not supported as expected. **H3** was not supported, as Regulatory Support was found to have a significant *negative* effect on Subjective Norms (β= −0.334, p< 0.001). Furthermore, **H6** was not supported, as Subjective Norms had no significant influence on Responsible Entrepreneurial Intention (p=0.656).

4.4 Mediation Analysis

The results for the mediation hypotheses H7, H8, and H9 are presented in Table 5, based on the analysis of specific indirect effects.

Table 5: Mediation Analysis

Hypothesis	Indirect Path	Path Coefficient (β)	T Statistics	P Values	Decision
H7	EM → ATRE → REI	0.228	7.209	0.000	Supported
H8	IC → PBC → REI	0.135	5.322	0.000	Supported
H9	RS → SN → REI	-0.005	0.436	0.663	**Not Supported**

The mediation analysis confirms the mechanisms for the first two pathways. **H7** is supported, showing that Attitude significantly mediates the relationship between Ethical Motivation and REI (β= 0.228, p < 0.001). **H8** is also supported, with Perceived Behavioral Control significantly mediating the relationship between Innovation Capability and REI (β= 0.135, p< 0.001). As expected from the direct effects results, **H9** is not supported, as the indirect effect of Regulatory Support on REI through Subjective Norms is non-significant.

5. DISCUSSION

5.1 Interpretation of the Main Findings

This study set out to answer three key research questions regarding the drivers of responsible entrepreneurial intention among Pakistani SME owners. The findings provide clear and nuanced answers to each.

Answer to RQ1: The Power of Personal Conviction The first research question asked how an SME owner's ethical motivation influences their intention. The findings show a strong and positive relationship, highlighting that the personal conviction pathway is a primary driver of REI. The strong support for this pathway H1, H2 and H7 shows that the ethical motivation of an entrepreneur is the foundation of their intention to act responsibly. This internal moral compass directly shapes a positive attitude toward RE, which then becomes a powerful driver of intention. This suggests that for Pakistani SME owners, responsible entrepreneurship is not just a strategic choice but a deeply personal one, rooted in their own values. This finding aligns with research that emphasizes the role of an entrepreneur's personal values in shaping their firm's social and ethical orientation (Fayolle et al., 2014; Paramita et al., 2022).

Answer to RQ2: The Importance of Firm Capability The second research question explored the role of innovation capability. The results demonstrate that the capability pathway is also a critical antecedent of REI. The strong support for this pathway H4, H5 and H8 highlights the importance of self-efficacy. The results show that having a strong innovation capability gives entrepreneurs the confidence and perceived control needed to pursue responsible goals. In a country where SMEs face constant operational and financial hurdles, the ability to innovate provides a practical pathway to responsible action. It allows entrepreneurs to see social and environmental problems not as insurmountable barriers, but as challenges that can be solved with creativity and new approaches. This finding is consistent with literature that links innovation to SME performance and sustainability in developing countries (Le et al., 2023; Ndesaulwa & Kikula, 2016).

Answer to RQ3: The Paradox of Institutional Support The third research question examined the influence of the external institutional environment. Here, the study uncovered its most striking and contextually significant finding: the failure of the institutional and social pathway. The hypothesis that Regulatory Support would positively influence Subjective Norms (H3) was not only rejected, but the relationship was found to be significant in the opposite direction ($\beta = -0.334$). This paradoxical result suggests that when Pakistani SME owners perceive more government support, the social norm among their peers to act responsibly weakens. This is a profound finding that challenges the conventional wisdom that government support is always beneficial.

This counterintuitive result can be understood through the lens of Pakistan's institutional environment, which is often characterized by a deep and pervasive public distrust in government institutions (Kamal, 2020; Mehmood et al., 2025). Decades of political instability, inconsistent policies, and corruption have created a climate of cynicism. In such an environment, government initiatives, even those intended to be supportive, may be viewed with suspicion. Entrepreneurs might perceive "regulatory support" not as genuine assistance but as another layer of bureaucracy, a potential avenue for corruption, or a symbolic gesture with no real substance (Rizvi, 2016) . This phenomenon is known in institutional theory as "decoupling," where organizations adopt policies for legitimacy but do not change their actual practices (Khan & Lockhart, 2022). When entrepreneurs share this cynical view, it can foster a negative subjective

norm. They may advise each other to ignore, avoid, or find ways around these regulations, believing that engaging with the formal system is more trouble than it is worth.

This interpretation is strengthened by the complete lack of a relationship between Subjective Norms and Responsible Entrepreneurial Intention (H6). If the prevailing social consensus among SME peers does not value or prioritize genuine responsible practices perhaps due to the cynicism mentioned above or the overwhelming pressure to simply survive then this social pressure loses its power to influence an individual's intention. Entrepreneurs may conclude that in their high-stakes environment, they cannot rely on the opinions of others or the promises of the state. Instead, they must fall back on their own personal convictions (their ethical motivation) and their own tangible abilities (their innovation capability). This shows a strong sense of individualism and self-reliance, born out of a challenging and untrustworthy external environment.

5.2 Theoretical Contributions

This study makes several important contributions to theory. First, it contributes to the Theory of Planned Behavior by testing its applicability in a non-Western, emerging economy context and for a pro-social behavior like responsible entrepreneurship. The findings show that while the personal cognitive components of the TPB (Attitude and PBC) are robust and function as predicted, the social component (Subjective Norms) can be neutralized or even operate paradoxically. This highlights the critical importance of institutional context in shaping how social influence works. The study suggests that in environments with low institutional trust, the TPB's social pathway may be a weak or unreliable predictor of intention.

Second, the research contributes to institutional theory by providing micro-level, empirical evidence of how formal institutions can shape informal norms in an unexpected way. The negative relationship between regulatory support and subjective norms offers a clear example of a cynical response to institutional pressures. It shows that the intentions of policymakers can be subverted at the ground level if trust is absent, leading to outcomes that are the opposite of what was intended. This provides a valuable psychological perspective on the concept of institutional decoupling.

5.3 Practical and Policy Implications

The findings of this study have significant practical implications for policymakers, SME owners, and support organizations in Pakistan.

For Policymakers: The most important message is that policy design must go beyond simply creating regulations and support programs. The negative effect of perceived regulatory support is a strong warning that if policies are not seen as credible, transparent, and genuinely helpful, they can be counterproductive. To foster a culture of responsible entrepreneurship, the government must first focus on building trust. This involves simplifying bureaucratic procedures, reducing corruption, and ensuring that policies are implemented consistently and fairly. Instead of top-down mandates, policymakers should consider co-creating policies with SME associations to ensure they are practical and address the real challenges faced by businesses. Furthermore, policies aimed at directly enhancing the innovation capability of SMEs such as providing access to technology, R&D support, and skills training may be a more effective route to promoting responsible practices than direct regulation.

For SME Owners and Managers: The results are empowering for entrepreneurs. They show that the most powerful drivers of responsible entrepreneurship are internal to the firm and the individual. SME owners should recognize that their personal ethical leadership sets the tone for the entire organization. Cultivating a strong ethical culture is not just a "nice to have" but a core driver of responsible action. Similarly, investing in the firm's innovation capability is not just a strategy for commercial success but also a way to build the capacity for social and environmental responsibility. Entrepreneurs should proactively seek ways to innovate in their processes and products to solve sustainability challenges, rather than waiting for external pressure or support.

For Support Organizations: Non-governmental organizations (NGOs), business associations, and academic institutions can play a crucial role. Since formal government support is perceived negatively and peer pressure is ineffective, these organizations can create alternative platforms for support. They can foster genuine peer-to-peer networks that are built on shared values and trust, where entrepreneurs can learn from each other's successes in implementing responsible practices. They can also provide practical, hands-on training and resources focused on building innovation capabilities specifically for social and environmental problem-solving.

6. CONCLUSION AND FUTURE DIRECTIONS

6.1 Concluding Remarks

This study investigated the ethical, innovative, and institutional factors that shape the intention of Pakistani SME owner/managers to engage in responsible entrepreneurship. The results of the PLS-SEM analysis paint a clear picture: in the complex and challenging business environment of Pakistan, responsible entrepreneurial intention is forged not by external institutional rules or social pressures, but by the internal forces of an entrepreneur's personal ethical conviction and their firm's tangible innovation capability.

The research confirms that entrepreneurs who are ethically motivated develop a positive attitude toward responsible practices, which strongly drives their intention. Likewise, entrepreneurs who possess the ability to innovate feel a greater sense of control, which also powerfully encourages their intention to act responsibly. Most critically, the study reveals a deep-seated skepticism toward formal institutions, where perceived government support paradoxically weakens positive social norms among peers. This institutional distrust, combined with the ineffectiveness of social pressure, underscores that for Pakistani SMEs, the path to responsible entrepreneurship is one of self-reliance, guided by an internal moral compass and powered by the engine of innovation.

6.2 Limitations of the Study

While this study provides valuable insights, it is important to acknowledge its limitations.

i. First, the use of a cross-sectional research design means that the data was collected at a single point in time. While this allows for the examination of relationships between variables, it cannot establish causality. For example, it is possible that the intention to be responsible also drives entrepreneurs to become more innovative over time.
ii. Second, the study relies on self-reported data for all variables, including intentions, attitudes, and perceptions. This introduces the possibility of biases, such as social desirability bias, where respondents may answer in a way that they believe is socially acceptable rather than completely

truthfully. However, the fact that the study found several non-significant and even negative relationships suggests that respondents were not simply trying to present a positive image.

iii. Finally, while efforts were made to collect data from across Pakistan, the **sample** was based on purposive sampling and may not be perfectly representative of all SMEs in every sector and province of the country.

6.3 Avenues for Future Research

The findings and limitations of this study open several interesting avenues for future research.

i. A **longitudinal study** could be conducted to track SME owners over time. This would help to establish causality more clearly and to see how intentions translate into actual responsible behaviors.
ii. **Qualitative research**, such as in-depth interviews or case studies with SME owners, would be very valuable. This could provide a deeper understanding of the reasons behind the negative perception of regulatory support and explore the cynicism and distrust that the quantitative data suggests.
iii. **Comparative studies,** could be conducted in other emerging economies. This would help to determine whether the "institutional distrust" effect found in this study is unique to the Pakistani context or if it is a more widespread phenomenon in countries with similar institutional challenges.
iv. Future research could also explore other potential antecedents of responsible entrepreneurial intention, such as specific psychological traits of the entrepreneur (e.g., empathy, locus of control), the role of education and training, or the influence of specific market-based pressures from customers and supply chain partners.

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