

## Exploring the Role of Entrepreneurial Creativity in the Relationship Between Entrepreneurial Competencies and Firm Performance: A Quantitative Study

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### ABSTRACT

Entrepreneurial competencies play a crucial role in determining the success and sustainability of firms in dynamic business environments. These competencies comprising skills, knowledge, and behavioural attributes enable entrepreneurs to identify opportunities, innovate, and effectively manage resources. This paper examines the relationship between entrepreneurial competencies, entrepreneurial creativity and firm performance, emphasizing that entrepreneurial competencies are foundational capabilities that enhance creativity, which in turn leads to improved firm performance. Structural equation modeling is used to examine the hypotheses on a sample of 420 creative entrepreneurs in northern India. Mediation analysis is used in this study. Results indicate that entrepreneurial competencies influence entrepreneurial creativity that leads to firm performance. Empirical evidence suggests that entrepreneurs possessing higher levels of competencies tend to achieve superior firm performance in terms of growth, profitability, and market competitiveness. The study highlights the importance of developing and nurturing entrepreneurial competencies as a means of sustaining long-term business success and fostering innovation-driven growth

**Keywords** – Entrepreneurial competencies, Firm performance, Innovation, Business growth, Entrepreneurial creativity.

### 1. INTRODUCTION:

Entrepreneurship has become a key driver of innovation, job creation, and economic growth during a period when businesses are becoming more dynamic and competitive. Because of this, the entrepreneurs' own skills and creativity are a big part of what makes their businesses successful and long-lasting. (Man, Lau, & Snape, 2008; Mitchelmore & Rowley, 2010) Entrepreneurial competencies are seen to be one of the most essential things that affect how well a firm does. These talents, knowledge, and behavioral abilities help people appraise opportunities, come up with new ideas, and make strategic decisions. Entrepreneurs need to be able to adapt to new situations, manage their resources well, and help their businesses expand. Competencies alone may not guarantee enhanced performance unless complemented with entrepreneurial imagination. Individuals may come up with new ideas and solutions that make them more competitive by using their entrepreneurial creativity (Ward, 2004). Entrepreneurial creativity is very important for firm performance since it leads to new products, better processes, and flexible strategies that may help solve market difficulties (Fillis & Rentschler, 2010; Tang, Kacmar, & Busenitz, 2012). These writers say that entrepreneurial inventiveness is very important for how well a business does. Creative entrepreneurs often challenge the way things are done, look for new ways to do things, and turn ideas into enterprises that help others. This strategy, which is based on innovation, not only makes products and services more unique, but it also helps

to build a long-lasting competitive edge. Rauch and Frese (2007) assert that the interplay between entrepreneurial competencies and creativity is a significant area of research aimed at understanding how business leaders may achieve and sustain outstanding organizational performance. Mitchellmore and Rowley (2013) assert that, while the increasing scholarly focus on the subject, empirical research examining the combined impact of entrepreneurial traits and creativity on corporate success remains limited and fragmented. Most prior research examined these topics in isolation, so neglecting the potential synergistic relationship between them. To get a deeper comprehension of these processes, it is essential to do context-specific studies due to the disparities present across various industries, cultural settings, and firm sizes. The objective of this study is to investigate the interconnections among entrepreneurial skills, entrepreneurial innovation, and company success, therefore addressing existing knowledge gaps. The objective of this research is to examine the interactions among constructs to enhance the development of a more cohesive theoretical framework that elucidates the mechanisms through which entrepreneurs drive organizational performance and long-term sustainability.

### Theoretical background and hypotheses:

#### Entrepreneurial Competencies:

Entrepreneurial competencies refer to the knowledge, skills, abilities, and behavioral characteristics that enable entrepreneurs to effectively perform entrepreneurial tasks and achieve business objectives. Man et al. (2002)

conceptualized entrepreneurial competencies as a multidimensional construct comprising opportunity, relationship, strategic, conceptual, organizing, and commitment competencies. These competencies allow entrepreneurs to identify and exploit business opportunities, manage resources efficiently, and respond proactively to environmental uncertainties. Similarly, Mitchelmore and Rowley (2010) emphasized that entrepreneurial competencies integrate both personal attributes and functional managerial skills that collectively shape entrepreneurial performance. From a theoretical standpoint, the Resource-Based View (RBV) posits that firm-specific resources such as entrepreneurial competencies are valuable, rare, inimitable, and non-substitutable, thereby forming the foundation of sustainable competitive advantage (Barney, 1991). In the context of SMEs, where the entrepreneur plays a central decision-making role, competencies are often the most critical internal resource driving firm success. Empirical studies provide strong support for this assertion. Ahmad (2007), in a cross-cultural study of SMEs, found that higher entrepreneurial competencies significantly enhance business success. Likewise, Tehseen and Ramayah (2015) demonstrated that entrepreneurial competencies positively influence SME performance through improved strategic and operational effectiveness. Collectively, these studies establish entrepreneurial competencies as a fundamental driver of superior firm performance.

#### **Entrepreneurial Creativity:**

Entrepreneurial creativity is defined as the ability to generate novel and useful ideas that contribute to opportunity recognition, innovation, and business development (Amabile, 1996; Ward, 2004). In entrepreneurship research, creativity is viewed as the cognitive and behavioral capacity that enables entrepreneurs to discover new market opportunities, develop innovative products and services, and redesign business processes. Ward (2004) highlighted that entrepreneurial creativity emerges from the interaction between domain knowledge, cognitive processing, and environmental factors.

Zhou and Shalley (2003) emphasized that creativity is a key antecedent of innovation and organizational effectiveness, enabling firms to adapt and compete in dynamic environments. In the entrepreneurial context, creativity is particularly important because innovation activities in SMEs are largely driven by the entrepreneur's personal ideas and vision. Hamidi et al. (2008) empirically demonstrated that higher levels of creativity among entrepreneurs substantially enhance innovation outcomes and business growth. Furthermore, Zampetakis et al. (2011) found that creative thinking significantly influences entrepreneurial behaviour and opportunity exploitation. These findings underscore that entrepreneurial creativity is not only an individual cognitive trait but also a strategic capability that drives innovation and competitive advantage.

#### **Firm Performance:**

Firm performance represents the extent to which a firm achieves its financial and strategic objectives and is

commonly assessed using both financial and non-financial indicators. Venkatraman (1989) conceptualized firm performance as a multidimensional construct that includes profitability, sales growth, market share, and overall organizational effectiveness. In SME research, subjective performance measures are frequently used due to the limited availability of audited financial data (Wiklund & Shepherd, 2005). Empirical research consistently reports that superior firm performance is strongly influenced by the entrepreneur's human capital and strategic orientation. Wiklund and Shepherd (2005) demonstrated that entrepreneurial orientation and managerial capabilities significantly enhance small business performance. Moreover, firm performance is increasingly viewed from a dynamic capability perspective, where internal resources and capabilities enable firms to adapt to rapidly changing market conditions (Teece, 2007). This approach highlights that performance outcomes are not only the result of static resources but also of the firm's ability to integrate, reconfigure, and apply internal competencies in innovative ways.

#### **Hypotheses Formulation:**

##### **EC → E\_CRE:**

Entrepreneurial competencies also exert a direct influence on firm performance by enhancing the entrepreneur's ability to formulate effective strategies, manage operations efficiently, and respond proactively to environmental changes. From the resource-based view (RBV), competencies are considered valuable, rare, and inimitable resources that can generate sustainable competitive advantage and superior firm performance (Barney, 1991). In SMEs, the entrepreneur's competencies largely determine strategic direction and operational effectiveness, thereby strongly affecting financial and non-financial performance outcomes such as profitability, sales growth, and market share (Ahmad, 2007; Tehseen & Ramayah, 2015). Empirical evidence consistently confirms a positive association between entrepreneurial competencies and business performance across diverse industry and national contexts. Hence, a direct positive relationship between entrepreneurial competencies and firm performance is hypothesized.

**H1:** Entrepreneurial competencies significantly predict entrepreneurial creativity.

##### **EC → FP:**

Entrepreneurial creativity refers to the ability of entrepreneurs to generate novel and useful ideas related to product development, process improvement, and business model innovation (Amabile, 1996; Ward, 2004). Creativity enables firms to differentiate themselves in competitive markets and to respond effectively to changing customer needs and technological advancements. For SMEs, entrepreneurial creativity plays a crucial role in driving innovation, adaptability, and long-term sustainability. Creative entrepreneurs are more likely to introduce innovative products and services, improve processes, and explore unconventional market opportunities, all of which enhance firm performance (Zhou & Shalley, 2003; Hamidi, Wennberg, & Berglund, 2008). Accordingly, entrepreneurial creativity is expected to significantly influence firm performance.

**H2:** Entrepreneurial competencies significantly predict firm performance.

### **E\_CRE → FP:**

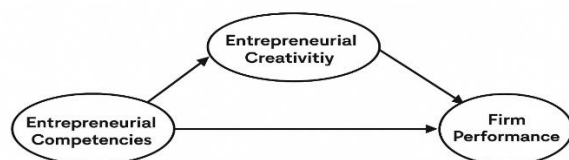
Although entrepreneurial competencies are expected to have a direct influence on firm performance, their impact is also theorized to operate indirectly through entrepreneurial creativity. Competencies equip entrepreneurs with the cognitive frameworks, skills, and behavioral dispositions required to engage in creative processes. These creative processes, in turn, lead to innovation outcomes that improve organizational efficiency, market responsiveness, and competitive positioning. This mediating mechanism is consistent with the resource-based view and dynamic capability theory, which suggest that internal resources influence firm performance through value-creating capabilities such as creativity and innovation (Teece, 2007; Barney, 1991). In line with prior empirical findings that identify creativity as a key pathway linking entrepreneurial capabilities to firm outcomes (Zampetakis et al., 2011; Hamidi et al., 2008), entrepreneurial creativity is expected to mediate the relationship between entrepreneurial competencies and firm performance.

**H3:** Entrepreneurial creativity significantly predicts firm performance.

### **EC → E\_CRE → FP:**

Although entrepreneurial competencies are expected to directly influence firm performance, their effect is also theorized to operate indirectly through entrepreneurial creativity. Entrepreneurial competencies equip entrepreneurs with the cognitive skills, knowledge base, and behavioral capabilities required to engage in creative thinking and innovative problem-solving (Man et al., 2002; Mitchelmore & Rowley, 2010). These competencies enhance the entrepreneur's ability to generate novel and useful ideas, which are essential for developing innovative products, improving processes, and adapting business strategies in competitive markets (Amabile, 1996; Ward, 2004).

**H4:** Entrepreneurial creativity mediates the relationship between entrepreneurial competencies and firm performance.



Source: Author's own work.

Overall, the hypotheses validate the conceptual model, emphasizing that entrepreneurial competencies are foundational capabilities that enhance creativity, which in turn leads to improved firm performance. This integrated relationship underscores the importance of developing

both competencies and creativity to ensure long-term entrepreneurial success.

## **METHODOLOGY:**

### **Sample Size and Data Collection:**

The target population of the study comprised owners of Micro enterprises. Data were collected using a structured, self-administered questionnaire. A non-probability (purposive or convenience) sampling technique was employed to reach active Micro enterprises that had been operating for at least three years. A total of 420 usable responses were obtained after screening for missing data and outliers. This sample size satisfies common guidelines for multivariate analysis and is adequate for PLS-SEM, which is considered suitable for complex models and medium sample sizes. Data were collected through face-to-face surveys and online surveys. Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM). The study focuses on prediction and theory development, examining the mediating role of entrepreneurial creativity in the relationship between entrepreneurial competencies and firm performance. The model includes multiple latent constructs and a mediation effect, making PLS-SEM appropriate for handling complex structural relationships.

### **Measures:**

The evaluation of all variables is grounded in previous research. A seven-point Likert scale was employed, with numerical values assigned to the following response categories: (7 = strongly agree, 6 = somewhat agree, 5 = agree, 4 = neutral, 3 = disagree, 2 = somewhat disagree, 1 = strongly disagree).

### **Entrepreneurial Competencies (EC)**

Entrepreneurial competencies were measured as a multidimensional construct capturing the entrepreneur's knowledge, skills, and behavioral attributes necessary for effective venture management. The scale was adapted from Man et al. (2002) and Mitchelmore and Rowley (2010), who developed widely used measures of entrepreneurial competencies for SME contexts. In this study, entrepreneurial competencies were assessed using seven items reflecting Conceptual Competencies, Organising Competencies, Ethical Competencies, Relationship Competencies, Technical Competencies, Opportunity Competencies and Commitment Competencies.

### **Entrepreneurial Creativity (E\_CRE)**

Entrepreneurial creativity was operationalized as the entrepreneur's ability to generate novel and useful ideas related to products, services, processes, or business models. The measurement scale was adapted from Amabile's (1996) componential theory of creativity and creativity items from Zhou and George (2001), which have been widely applied in organizational and entrepreneurial research.

### **Firm Performance (FP)**

Firm performance was measured using a subjective performance scale commonly used in SME research due to limited access to audited financial data (Venkatraman,

1989; Wiklund & Shepherd, 2005). The construct captured both financial and non-financial dimensions, such as sales growth, profitability, market share, and overall business success.

**Table 1. Summary of reliability and validity of measurement model**

Instrument/Items and constructs	Loadings	( $\alpha$ )	CR	AVE
<b>Relationship Competencies</b>				
EC_REL1: Develop long-term trusting relationships with others.	0.826	0.887	0.917	0.688
EC_REL2: Negotiate with others.	0.837			
EC_REL3: Maintain a personal network of work contacts.	0.837			
EC_REL4: Understand what others mean by their words and actions.	0.818			
EC_REL5: Communicate with others effectively.	0.830			
<b>Organising Competencies</b>				
EC_ORG1: Plan the operations of the business.	0.750	0.865	0.903	0.651
EC_ORG2: Plan the organization of different resources.	0.840			
EC_ORG3: Coordinate tasks and activities.	0.813			
EC_ORG4: Supervise subordinates.	0.803			
EC_ORG5: Delegate effectively.	0.824			
<b>Technical Competencies</b>				
EC_TECH1: Possess expertise in technical and relevant areas.	0.842	0.871	0.907	0.661
EC_TECH2: Use specific tools/techniques relevant to business.	0.801			
EC_TECH3: Have good basic knowledge in my business area.	0.787			
EC_TECH4: Utilize technical knowledge relevant to the business.	0.776			
EC_TECH5: Access and familiarity with different technical resources.	0.856			
<b>Ethical Competencies</b>				
EC_ETH1: Keep promises.	0.815	0.864	0.902	0.647
EC_ETH2: Engage in fair, open and honest marketing practices.	0.781			
EC_ETH3: Be honest and transparent in business dealings.	0.832			
EC_ETH4: Be committed to offering products or services at fair prices.	0.805			
EC_ETH5: Take responsibility and be accountable for own actions.	0.788			
<b>Commitment Competencies</b>				
EC_COMM1: Dedicate to make the venture work whenever possible.	0.819	0.848	0.898	0.687

EC_COMM2: Refuse to let the venture fail whenever appropriate.	0.836			
EC_COMM3: Possess an extremely strong internal drive.	0.837			
EC_COMM4: Commit to long-term business goals.	0.824			
<b>Opportunity Competencies</b>				
EC_OPP1: Identify goods or services customers want.	0.814	0.858	0.904	0.701
EC_OPP2: Perceive unmet consumer needs.	0.850			
EC_OPP3: Actively look for products or services that provide real benefit to customers.	0.863			
EC_OPP4: Spot potential business opportunity and craft that into business opportunity.	0.821			
<b>Conceptual Competencies</b>				
EC_CON1: Translate ideas and observations into the business context.	0.829	0.911	0.931	0.692
EC_CON2: Take reasonable job-related risks.	0.818			
EC_CON3: Monitor progress toward objectives in risky actions.	0.839			
EC_CON4: Continually try to new processes and practices.	0.838			
EC_CON5: Explore new ideas.	0.826			
EC_CON6: Treat new problems as opportunities.	0.841			
<b>Entrepreneurial Competencies</b>				
Conceptual Competencies	0.811			
Organising Competencies	0.725			
Ethical Competencies	0.714			
Relationship Competencies	0.752			
Technical Competencies	0.756			
Commitment Competencies	0.739			
Opportunity Competencies	0.800			
<b>Entrepreneurial Creativity</b>				
E_CRE1: I usually search out new creative elements and inspiration, and then utilize those ideas in my creative business.	0.835	0.873	0.908	0.663
E_CRE2: I am not afraid to take risks.	0.802			
E_CRE3: I usually suggest new ways to achieve goals and objectives.	0.814			
E_CRE4: I often have fresh ideas.	0.841			
E_CRE5: In general, I am a good source of creative ideas.	0.780			
<b>Firm Performance</b>				
FP1: Enterprise success of our company over the past three years on profitability.	0.793	0.919	0.933	0.607



FP2: Enterprise success of our company over the past three years on sales growth.	0.824			
FP3: Enterprise success of our company over the past three years on return on investment.	0.786			
FP4: Enterprise success of our company over the past three years on cash flow.	0.771			
FP5: Enterprise success of our company over the past three years on market share.	0.809			
FP6: This business creates more jobs for local Community.	0.700			
FP7: This business obtains customer trust and confidence.	0.753			
FP8: This business is contributing to the community development.	0.776			
FP9: This business has satisfied customers.	0.792			

Source: Author's calculations.

The measurement model for entrepreneurial competencies, entrepreneurial creativity, and firm performance was assessed using confirmatory factor analysis, yielding robust results across reliability and validity metrics. All constructs demonstrated strong internal consistency, with Cronbach's alpha and composite reliability (CR) values exceeding the recommended threshold of 0.70—for example, Relationship Competencies ( $\alpha = 0.887$ , CR = 0.917), Organising Competencies ( $\alpha = 0.865$ , CR = 0.903), and Firm Performance ( $\alpha = 0.919$ , CR = 0.933).

Convergent validity was further supported by high factor loadings, which ranged from 0.700 to 0.863, and by average variance extracted (AVE) values above 0.60 for each construct (e.g., Technical Competencies, AVE = 0.661). These results indicate that the measured items reliably and validly represent their intended constructs, and that the constructs themselves possess sufficient explanatory power for their respective indicators.

Moreover, the second-order construct of Entrepreneurial Competencies was supported by strong loadings (0.714–0.811) from its first-order dimensions including conceptual, organising, ethical, relationship, technical, commitment, and opportunity competencies validating its role as a higher-order latent factor within the model.

In summary, the measurement model demonstrates excellent psychometric properties, providing a solid foundation for subsequent hypothesis testing using structural equation modeling. All scales are reliable and exhibit satisfactory convergent validity, confirming the suitability of the constructs for assessing the interrelationships among entrepreneurial competencies, creativity, and firm performance in entrepreneurial research contexts.

**Table 2. Discriminant Validity**

Variables	1	2	3	4	5	6	7	8	9
1. <b>Commitment Competencies</b>	0.829								
2. <b>Conceptual Competencies</b>	0.502	0.832							
3. <b>Ethical Competencies</b>	0.533	0.476	0.805						
4. <b>Opportunity Competencies</b>	0.543	0.541	0.531	0.837					
5. <b>Organising Competencies</b>	0.462	0.469	0.369	0.631	0.807				
6. <b>Relationship Competencies</b>	0.397	0.662	0.409	0.523	0.47	0.83			
7. <b>Technical Competencies</b>	0.594	0.475	0.533	0.532	0.491	0.436	0.813		
8. <b>Entrepreneurial Creativity</b>	0.35	0.658	0.37	0.457	0.381	0.483	0.324	0.815	
9. <b>Firm Performance</b>	0.407	0.513	0.364	0.486	0.406	0.486	0.428	0.464	0.779

Source: Author's calculations.

Discriminant validity assesses the extent to which each construct is distinct from the others in the model. In Table 2, the square roots of AVE values (shown in bold on the diagonal) are compared with the correlations among constructs (off-diagonal elements). According to Fornell and Larcker's (1981) criterion, discriminant validity is established when the square root of AVE for each construct is greater than its correlations with other constructs. From the table: Each construct's diagonal value ( $\sqrt{\text{AVE}}$ ) such as Commitment Competencies (0.829), Conceptual Competencies (0.832), and Ethical Competencies (0.805) — is greater than any of its corresponding inter-construct correlations in the same row and column. For instance, the diagonal value for Relationship Competencies (0.830) exceeds all its correlations with other constructs (ranging from 0.397 to 0.662). Similarly, Firm Performance (0.779) shows a higher square root of AVE than any of its correlations with

other variables (maximum 0.513). These results confirm that the constructs are conceptually and empirically distinct, minimizing the issue of multicollinearity among them. The results of the discriminant validity analysis indicate that all constructs in the model—Commitment, Conceptual, Ethical, Opportunity, Organising, Relationship, and Technical Competencies, along with Entrepreneurial Creativity and Firm Performance—satisfy the Fornell–Larcker criterion. Hence, discriminant validity is well established, suggesting that each construct captures a unique aspect of entrepreneurial competencies and firm performance, without significant overlap.

**Table 3. Value of *r*-square and adjusted *r*-square**

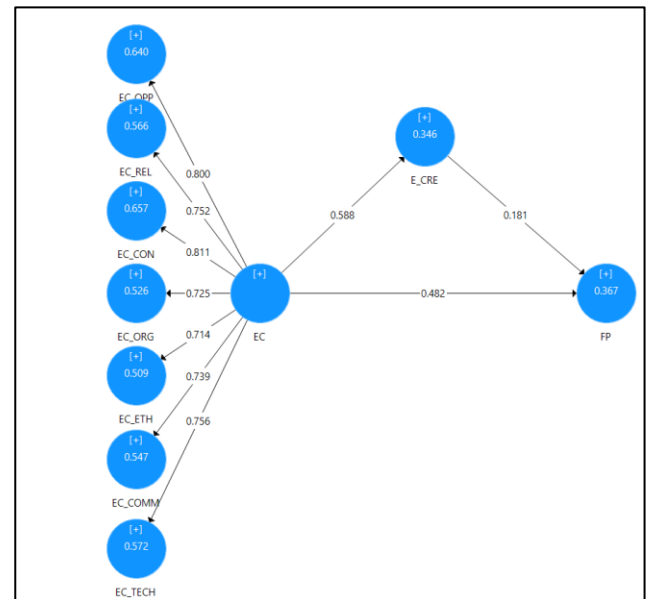
Variables	<i>r</i> -square	Adjusted <i>r</i> -square
Entrepreneurial Creativity	0.346	0.344
Firm Performance	0.367	0.364

Source: Author's calculations.

Table 3. displays the R-square ( $R^2$ ) and Adjusted R-square (Adj.  $R^2$ ) values for the endogenous constructs *Entrepreneurial Creativity (E\_CRE)* and *Firm Performance (FP)* to assess the explanatory strength of the proposed model. The R-square value indicates the proportion of variance in each dependent variable that is explained by its corresponding independent variables, while the Adjusted R-square accounts for model complexity and sample size, providing a more accurate measure of explanatory power.

For Entrepreneurial Creativity, the  $R^2$  value of 0.346 implies that 34.6% of its variance is explained by *Ethical Competencies (EC\_ETH)*. The Adjusted  $R^2$  value (0.344) shows minimal reduction, indicating that the model is stable and not over-specified. Similarly, the Firm Performance construct exhibits an  $R^2$  value of 0.367, suggesting that 36.7% of the variance in firm performance is explained collectively by *Ethical Competencies (EC\_ETH)* and *Entrepreneurial Creativity (E\_CRE)*. The Adjusted  $R^2$  value (0.364) further supports the robustness of the model's predictive capacity.

According to Hair et al. (2019),  $R^2$  values of around 0.25 (weak), 0.50 (moderate), and 0.75 (substantial) indicate the predictive strength of structural models. Hence, the obtained  $R^2$  values indicate a moderate explanatory power, implying that the hypothesized model reasonably explains the variations in the dependent variables.



Source: Author's work.

The above Figure depicts the structural equation model demonstrating the relationships among Entrepreneurial Competencies (EC), Entrepreneurial Creativity (E\_CRE), and Firm Performance (FP). Entrepreneurial Competencies were modeled as a higher-order construct comprising seven dimensions Opportunity, Relationship, Conceptual, Organizing, Ethical, Commitment, and Technical Competencies. All standardized loadings ranged from 0.714 to 0.811, exceeding the 0.70 benchmark, thereby confirming the construct's reliability and convergent validity. Conceptual (0.811) and Commitment (0.756) Competencies exhibited the highest loadings, underscoring their critical role in entrepreneurial effectiveness. The structural paths revealed that EC exerted a strong positive influence on both E\_CRE ( $\beta = 0.588$ ) and FP ( $\beta = 0.482$ ), indicating that well-developed competencies enhance creativity and directly improve firm outcomes. The path from E\_CRE to FP ( $\beta = 0.181$ ) was positive but comparatively weaker, suggesting that while creativity contributes to performance, its effect is secondary to that of competencies. The model's explanatory power was moderate, with  $R^2 = 0.346$  for E\_CRE and  $R^2 = 0.367$  for FP, indicating that EC accounts for 34.6% of the variance in creativity and, together with creativity, explains 36.7% of the variance in firm performance.

### Interpretation of Structural Model Results

**Table 4. SEM – Structural Relationships – Conceptual Model**

Hyp othe sis	Hypothe sized Path	Regressi on Weights	S. E.	t- val ue	p- val ues	Res ults
$H_1$	EC $\rightarrow$ E_CRE	0.588	0.037	15.706	0.000	Acc ept ed
$H_2$	EC $\rightarrow$ FP	0.482	0.054	8.917	0.000	Acc ept ed

$H_3$	$E\_CRE \rightarrow FP$	0.181	0.060	2.989	0.003	Accepted
$H_4$	$EC \rightarrow E\_CRE \rightarrow FP$	0.106	0.037	2.866	0.004	Accepted

Source: Author's calculations.

Table 4. presents the results of the Structural Equation Modeling (SEM) that tests the hypothesized relationships among Entrepreneurial Competencies (EC), Entrepreneurial Creativity (E\_CRE), and Firm Performance (FP). The findings reveal that all proposed hypotheses (H1–H4) are statistically significant, thus providing strong empirical support for the conceptual framework of the study.

#### H1(EC→E\_CRE):

The path coefficient between EC and E\_CRE is 0.588, with a t-value of 15.706 and  $p < 0.001$ , indicating a highly significant positive relationship. This suggests that entrepreneurs possessing higher levels of competencies such as opportunity recognition, strategic thinking, leadership, and commitment tend to exhibit stronger creative capabilities. In other words, well-developed competencies enhance an entrepreneur's ability to generate innovative ideas and solutions, which are essential for venture success and sustainability. This finding aligns with prior studies emphasizing that creativity often stems from accumulated knowledge, experience, and skill mastery.

#### H2(EC→FP):

The direct impact of EC on FP is also positive and significant ( $\beta = 0.482$ ,  $t = 8.917$ ,  $p < 0.001$ ). This result indicates that entrepreneurial competencies directly contribute to superior firm performance. Entrepreneurs who demonstrate strong managerial, conceptual, and ethical competencies are more capable of making effective strategic decisions, optimizing resources, and sustaining competitive advantage. Hence, EC acts as a key determinant of firm success and operational efficiency.

#### H3(E\_CRE→FP):

Entrepreneurial creativity exerts a positive influence on firm performance ( $\beta = 0.181$ ,  $t = 2.989$ ,  $p = 0.003$ ). This suggests that creativity enhances a firm's ability to innovate, adapt to environmental changes, and differentiate itself in competitive markets. Creative entrepreneurs introduce novel products, services, or processes that improve customer satisfaction and profitability.

#### H4(EC→E\_CRE→FP):

The mediating path shows a significant indirect effect ( $\beta = 0.106$ ,  $t = 2.866$ ,  $p = 0.004$ ), confirming that E\_CRE partially mediates the relationship between EC and FP. This indicates that while competencies have a direct effect on performance, their impact is further strengthened through creativity. Thus, entrepreneurial creativity serves as a vital mechanism translating competencies into tangible business outcomes.

Overall, the findings confirm that entrepreneurial competencies are foundational to fostering creativity and

enhancing performance. All hypothesized relationships (H1–H3) were supported, demonstrating that competencies not only drive entrepreneurial creativity but also directly and indirectly influence firm performance.

#### Conclusion:

The structural model illustrates the relationships among entrepreneurial competencies (EC), entrepreneurial creativity (E\_CRE), and firm performance (FP). The model shows that entrepreneurial competencies have a significant positive influence on entrepreneurial creativity, indicating that entrepreneurs who possess higher levels of competencies—such as opportunity recognition, relationship management, conceptual, organizational, ethical, communication, and technical skills—are more capable of generating creative and innovative ideas. In turn, entrepreneurial creativity positively contributes to firm performance, suggesting that creative thinking and innovation enable firms to achieve better business outcomes, adapt to changing environments, and maintain competitiveness. Additionally, entrepreneurial competencies also have a direct positive impact on firm performance, implying that well-developed competencies not only enhance creativity but also directly improve organizational effectiveness, productivity, and growth. Overall, the model highlights both the direct and indirect pathways through which entrepreneurial competencies enhance firm performance, with entrepreneurial creativity serving as a partial mediating variable that strengthens this relationship.

#### Research gap:

Despite the substantial body of literature examining entrepreneurial competencies, entrepreneurial creativity, and firm performance independently, several important gaps remain. First, although numerous studies have confirmed the direct effect of entrepreneurial competencies on firm performance (Ahmad, 2007; Tehseen & Ramayah, 2015), limited empirical research has simultaneously examined entrepreneurial creativity as a mediating mechanism in this relationship. Most existing studies treat creativity either as an antecedent of innovation or as an outcome of individual traits, rather than as a process variable that explains how competencies translate into performance outcomes. Second, much of the existing research on entrepreneurial creativity has been conducted in developed economies and educational contexts (Hamidi et al., 2008; Zhou & Shalley, 2003), with comparatively fewer studies focusing on SMEs in emerging economies, where institutional constraints, resource scarcity, and market turbulence may alter the competencies–creativity–performance dynamics. Third, prior studies have largely employed fragmented analytical approaches, focusing on bivariate relationships rather than testing a comprehensive mediation model using Structural Equation Modeling (SEM). Accordingly, this study addresses these gaps by empirically examining the mediating role of entrepreneurial creativity in the relationship between entrepreneurial competencies and firm performance using a PLS-SEM approach in the SME context of an emerging economy. By doing so, the study contributes to entrepreneurship theory by clarifying the mechanism through which competencies influence



performance and offers practical insights for entrepreneurship development and SME policy formulation

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