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**Volume.** 4 Issue No. 3 (2025)

Online ISSN: 3006-2047 Print ISSN: 3006-2039

# Entrepreneurial Leadership and SME Performance: The Mediating Role of Innovative Work Behaviour and the Moderating Role of Learning Orientation

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#### Abstract

**Purpose** The study will examine the relationship between entrepreneurial leadership (EL) and performance of small and medium-sized enterprises (SMEs) (SP), and the mediating impact of innovative work behaviour (IWB) and moderating impact of organizational learning orientation (OL). It bridges gaps in the known information concerning the influence of innovation, leadership, and a learning orientation on small and medium-sized enterprises (SMEs)' performance in emerging economies

**Approach, Methodology and Design** The data was gathered using a structured questionnaire that employed validated measurement scales applied to 303 employees who work in manufacturing SMEs in Punjab, Pakistan. The validity and reliability of proposed correlations, mediation, and moderation effects were tested using partial least squares structural equation modelling (PLS-SEM).

**Finding** The findings suggest that organizational learning orientation is an antecedent of better innovation performance and a determinant of performance, and leadership fosters the creativity of employees, therefore, increasing SME performance.

**Practical Implications** The analysis demonstrates that small and medium-sized companies (SMEs) should pay attention to developing high organization learning orientation and applying entrepreneurial leadership styles. This plan will motivate the

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**Volume.** 4 Issue No. 3 (2025)

Online ISSN: 3006-2047 Print ISSN: 3006-2039

employees to become creative and ensure that their ideas are implemented, resulting in performance changes in the long run.

Value and Originality This paper is an empirical confirmation of a moderated mediation model, as it helps to understand the phenomenon of entrepreneurship and innovation by clarifying how learning orientation and entrepreneurial leadership work together to promote innovation-based SME performance in developing nations. Keywords: Entrepreneurship, SME, Organizational Learning, Innovative Work Behaviour, Entrepreneurial Leadership

**Keywords:** SME, Entrepreneurial Leadership, Innovation, Behaviour, Learning

### Introduction

Small and medium-sized enterprises (SMEs) are under immense pressure to be innovative and sustain their performance in the face of unpredictable market conditions and limited resources available (Habibullah and Kamal, 25). The emergence of several studies hints at the fact that the survival and success of SMEs are crucially determined by the type of leadership (Nguyen, 2021; Sawaean et al., 2020). EL is one of the types of leadership that has been paid much attention to. It is typified by risk-taking, initiative, pursuing new opportunities, and being responsive to new ideas. It is revealed that EL is positively related to IWB, which involves employees generating, selling, and implementing new ideas. Li et al. (2020) report that executives with entrepreneurial leadership practices can establish the psychological conditions that help lessen uncertainty, stimulating employees to engage in creative projects.

Similarly, Sarwoko (2020) discovered that with more creative self-efficacy, entrepreneurial leadership enhances the innovative work behaviour to a significant extent. IWB is important in its own right, although, in the case of SMEs, it is paramount to have a profitable, growing, competitive, and efficient firm. Research has also shown that IWB changes the effect of EL on output. In fact, Nguyen (2021) noted that EL significantly enhances SMEs' financial and non-financial performance by having higher innovation capacity. However, minimal information on the circumstances or situations may render these correlations either strong or weak. LO is one of these elements; it gauges how much a company values education, experimentation, sharing a common goal, and receiving constructive criticism (Mensah et al., 2021). Learning-focused organizations can better absorb leadership's efforts to promote innovation and turn them into performance outcomes. This is supported by research by Sawaean et al. (2020), which found that learning orientation strengthened the link between leadership and SME performance, and innovative capacity served as a bridge.

This model fills in many gaps in the research. First, while several studies validate the direct correlations between leadership, IWB, and performance (Li et al., 2020; Ercantan et al., 2024), there is a scarcity of research examining moderated mediation models that integrate performance, IWB, and a moderator such as leadership orientation. Second, most empirical research focuses on innovation capacity or

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Online ISSN: 3006-2047 Print ISSN: 3006-2039

technological capabilities as mediators; IWB (at the employee behaviour level) is hardly examined in SME performance models with a moderator. Third, performance evaluation in SMEs frequently depends on limited financial indicators; integrating learning orientation and innovation behaviour facilitates the assessment of both behavioural and cultural aspects that contribute to sustained performance. LO moderates the direct effect of IWB on SME Performance, meaning that when LO is high, the favourable effect of IWB on performance will be larger.

## **Objective and Research Gap**

This study's goal is to assess the effect of EL on SP empirically.

Examine how IWB mediates the relationship between EL and performance.

Determine whether the relationship between IWB and Performance is influenced by LO.

#### **Contributions:**

It builds on previous research by putting EL, IWB, and LO into one model for SMEs. It clarifies when IWB is best and when they do not.

It helps SMEs and their leaders understand that leadership and innovation are important and how and when they improve performance.

This is how the rest of the paper develops. After reviewing the pertinent literature, Section 2 offers some suggestions. The data and methods are explained in Section 3. The results, including a moderation and mediation analysis, are presented in Section 4. The theoretical and practical implications, issues, and future research prospects are discussed in Section 5.

#### Literature review

The Resource-Based View (RBV) and Dynamic Capabilities Theory demonstrate how learning, leadership, and innovation may contribute to long-term success and serve as the foundation for this study. According to RBV, businesses gain a competitive edge through unique and non-replicable resources (Barney, 1991). One strategic resource that encourages employees to act creatively is EL. According to the Dynamic Skills Theory, organizations must constantly reorganize and modify their skills in response to changing environments (Teece, Pisano, & Shuen, 1997). SMEs benefit from EL because it gives them vision and risk-taking skills, which promote creative work practices as a dynamic talent that boosts output.

Furthermore, an LO creates the flexible environment needed to turn individual inventions into results for the whole company, strengthening the link between innovation and performance. Previous research has experimentally validated these correlations, demonstrating that EL promotes IWB and that a LO enhances its effect on performance (Ercantan, Eyüpoğlu, & Ercantan, 2024; Sarwoko et al., 2020).

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Online ISSN: 3006-2047 Print ISSN: 3006-2039

## **Entrepreneurial Leadership and Its Function in SMEs**

According to Matthews (2017), EL is a style of leadership that emphasizes creativity, risk-taking, and opportunity recognition. SMEs require this kind of leadership because they lack resources and must be able to adapt fast and generate new ideas (Nguyen, 2021). Conversely, EL differs from traditional leadership in fostering an atmosphere that rewards creative problem-solving and calculated risk-taking (Gupta et al., 2004). Numerous studies indicate that EL can profoundly impact an organization's performance, particularly by fostering employee innovation and establishing a vision for sustained growth (Ercantan et al., 2024). In the context of SMEs, EL is essential for addressing the difficulties posed by limited resources and fluctuating markets. It motivates workers to take chances, try out new ideas, and accept change, which makes the firm more adaptable and gives it an edge over its competitors (Li et al., 2020). These elements of EL are essential in SMEs, as these enterprises must depend on agility and resourcefulness to endure and expand in highly competitive and unpredictable settings (Nguyen, 2021).

## **Innovative Work Behaviour (IWB)**

IWB is developing, promoting, and implementing new ideas in a company (Janssen, 2000). It is seen as a primary catalyst for innovation within firms, especially among SMEs, where the imperative for innovation is critical to sustaining competitiveness. There is a strong link between EL and IWB. Studies have shown that entrepreneurial leaders make the workplace a place where workers feel free to develop new ideas and try new ways of doing things, which immediately improves their IWB (Sarwoko, 2020). Research indicates that EL enhances IWB by fostering innovative thinking and challenging established norms (Li et al., 2020). Entrepreneurial leaders frequently cultivate psychological safety and creative self-efficacy, which are crucial for people to proactively generate and implement innovative ideas (Sawaean & Ali, 2020). This connection is vital in SMEs since employees' creative behaviours directly help the business expand and stay in business. Additionally, IWB enhances an organization's inventive ability and serves as a mediator between leadership and performance. The organization is likelier to do well if its personnel are more creative (Janssen, 2000; Singh, 2025). So, IWB is important in turning EL into tangible results, like more profits, a bigger market share, and better operational efficiency.

## **Organizational Learning Orientation**

According to Hurley and Hult (1998), LO is the extent to which an organization prioritises education, knowledge gain, and sharing. Particularly in innovation-driven businesses like SMEs, this construct has drawn attention as a potential mediator in the relationship between leadership and organizational outcomes. LO empowers firms to cultivate a learning culture, wherein people are motivated to perpetually enhance their abilities, disseminate knowledge, and cooperate on novel concepts (Mohammad, Sağsan, & Şeşen, 2024). Within the framework of the current model, LO is posited to modulate the association between IWB and SME performance. Sawaean and Ali (2020) assert that companies with a strong learning orientation are more adept at

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Online ISSN: 3006-2047 Print ISSN: 3006-2039

utilising creative work behaviours, converting them into enduring competitive advantages. This link indicates that a greater investment in learning techniques enhances an organization's ability to translate innovative ideas into performance enhancements. Organisational learning catalyzes innovation, guaranteeing employees' ingenuity is esteemed and implemented within the organisation (Kumar, Yakhlef, & Nordin, 2019).

### **SME Performance**

The Role of EL, IWB, and LO SME performance is generally measured by many metrics, including financial performance (e.g., ROI, profitability) and non-financial performance (e.g., innovation, market expansion, customer happiness) (Nguyen, 2021). For SMEs, performance is the most important thing, and many things affect it, such as leadership styles, innovation, and learning inside the firm. EL and IWB have been positively associated with enhanced performance results (Li et al., 2020). These studies demonstrate a direct influence of EL on performance via IWB; however, the involvement of LO as a moderator provides a more profound understanding of the diverse degrees of success businesses may encounter in converting innovation into performance outcomes. Companies focused on learning, like sharing knowledge and constantly getting better, tend to do better than companies that do not have that kind of culture. This shows how leadership, innovation, and learning work together to improve performance (Sawaean & Ali, 2020).

## **Hypothesis Development**

Entrepreneurial leaders (IWB) enrich the creative work of the people in an organization. It is found that entrepreneurial leaders can produce an environment conducive to innovation, and they pay attention to taking risks, creativity, and being autonomous. Among the examples of such work, it is possible to single out Kreiner et al. (2022), who found that self-efficacy is the mediating variable in the correlation between EL and innovative behaviour of workers in different countries. A similar study by Irshad et al. (2023) demonstrated that transformational and entrepreneurial leadership philosophies do improve the cognitive agility of the workers, which consequently triggers more inventive behaviours. Moreover, Irshad et al. (2023) state that the leadership can establish the organizational environment of innovation and intrinsic motivation as a moderator. These works demonstrate that successful entrepreneurial leadership promotes individual innovation and organizational ecosystem of innovation that promotes innovative thinking and development of innovative ways to enhance the performance and competitive strengths of an organization (Efawati et al., 2021). Therefore, it is hypothesized that:

H1: Entrepreneurial leadership positively influences innovative work behaviour. Innovative work practices are acknowledged as a significant aspect of employee productivity for small and medium-sized businesses. IWB participants are crucial for decreased new goods and procedures, which maintain and strengthen SMEs' competitive edge. Workers who participate in IWB demonstrate efficiency, inventiveness, and problem-solving abilities, which are critical for any firm to

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Online ISSN: 3006-2047 Print ISSN: 3006-2039

succeed. For instance, Efawati et al. (2021) show that IWB entrepreneurial leadership boosts business innovation and has a favourable correlation with the productivity and performance of SMEs. Additionally, IWB and SME performance were found to be directly positively correlated by Hussain et al. (2023), who also attributed the former as a key factor in the organization's efficiency and adaptability. The above instance highlights the need for SMEs to innovate as a prerequisite for competitive advantage. Employees must be encouraged to pursue creative and novel ideas, which, Jagdale (2024) argues, stand the test of time in the SME's competitive environment. Therefore, we propose that:

H2: There is a positive relationship between innovative work behaviour and the performance of an SME.

### Innovative Work Behaviour as a Mediator

Innovative work practices are important in mediating the performance of small and medium-sized businesses (SMEs) and EL. Creative and risk takers, the employees of an entrepreneurial leadership are directly affected by an inventive and conducive culture, thus fostering their innovative behaviours. These creative behaviours about the performance of SMEs enhance efficiency, flexibility and competitiveness. Efawati et al. (2021) demonstrated that EL positively affects IWB, mediates the leadership-SME- SME innovation correlation and improves performance. Another point that Jagdale (2024) mentioned is that IWB, as a mediator, enhances the sustainability and innovation of SMEs and their performance. This type of outcomes suggests that the role of innovative work behaviours as an impact of EL on the success of SMEs, and, consequently, the significance of IWB as a driver of organizational growth and longterm competitive advantage in SMEs become higher. Thus, we will propose the following hypothesis:

H3: IWB positively mediates the relationship between entrepreneurial leadership and SME performance.

### Organizational Learning Orientation as a moderator.

LO is an important moderator in the relationship between IWB and SME performance. LO means continuous learning, sharing of knowledge, and flow of adaptive market changes by the organization, which aids in the performance efficacy of IWB. Studies indicate the favourable effect of performance achievements, which are a product of developing a learning-focused culture, where innovative behaviours are more beneficial. As an example, the learning orientation of the organization is a reinforcement of the IWB in the sustainability practices of the organization, and this aspect, in turn, improves the performance of the SMEs (Samal et al., 2025). Similarly, Efawati et al. (2021) also discovered that the linkage between IWB and innovation in SMEs is moderated by learning practices in the oldzation, leading to increased performance. This fact demonstrates that SMEs with a strong learning orientation can find it the easiest way to use the innovative behaviours of the workforce and achieve better efficiency, increased adaptability, and a competitive advantage against competition. Hence, it is proposed that:

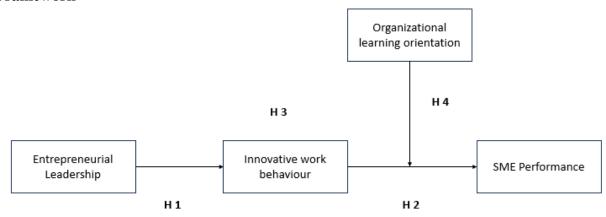
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Online ISSN: 3006-2047 Print ISSN: 3006-2039

H4: Organizational learning orientation has a positive moderating effect on the relationship between innovative work behaviour and performance of the SME.

#### Framework



**Source:** Author's work

## Methodology Participants

The study sample included 303 employees of small and medium enterprises (SMEs) in the manufacturing industry in Punjab, Pakistan. SMEs are the unit of analysis as they are the economic backbone of Pakistan and are undergoing the most severe challenges in leadership, innovation, and sustained performance. Respondents were the owners and managers, who were tasked with the hands-on operation of and innovation. A stratified random sampling method was used to capture all manufacturing subsectors (textiles, food processing, light engineering, and chemicals). Participation was voluntary, and confidentiality was maintained to minimize social desirability bias and increase the accuracy of responses.

## Methodology

The filing system utilized a cross-sectional survey method. During January and April 2025, structured questionnaires were physically given and emailed to the employees of manufacturing SMEs. A pilot test involving thirty participants was conducted before the survey to increase item clarity and reliability, and afterwards, changes were made. Three hundred fifty questionnaires were given, and 312 were returned, resulting in an 89% response rate. After eliminating careless answers and missing values, 303 answers were confirmed valid and used for analysis. Ethical permission was granted from the institutional review board, and all participants gave informed consent. Several procedural remedies were used to decrease standard method variance, including anonymity, randomized item order, and different scale anchors.

### **Data Collection**

Each dimension in document surveys was to be measured and rated using a 5-point Likert scale, with one representing strongly disagree and five strongly agree. The

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dependent variable of EL is assessed based on the following, on a 5-point scale: "My firm wants me to rethink how we do business" and "My firm often thinks of ways on how we can make our products/services better (Gupta et al., 2004). The mediating variable, IWB, is measured with the help of the 10-item scale developed by Rokkan et al. (2010). Among those elements, one may consider the following question: How did he put effort into developing new things?

LO, the moderating variable, was assessed using six items constructed by Zakic et al and Chen & Huang. They focused on the presence of a positively shared vision, open-mindedness, and a culture of learning in the organization. For the dependent variable(s) in the study, SME Performance was assessed using the seven items (Khalil et al., 2022) developed, "Satisfied with my personal financial position" or "I have achieved all my startup goals. To carry out hypothesis tests, to retain the power of the measurement model, all scales were pretested and their psychometric item parameters reliability (Cronbach's alpha, composite reliability) and convergence and discrimination validity (AVE and Fornell-Larcker criterion)- were carefully scrutinised and recorded.

Data Analysis
Table 1. Demography

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	212	69.97
	Female	91	30.03
Age (Years)	20–29	74	24.42
	30–39	118	38.94
	40–49	78	25.74
	50 and above	33	10.89
<b>Education Level</b>	Bachelor's degree	116	38.28
	Master's degree	132	43.56
	MPhil/PhD	55	18.15
Job Position	Supervisor/Officer	97	32.01
	Middle Manager	124	40.92
	Senior Manager/Head	82	27.06
Work Experience	Less than 5 years	86	28.38
	5–10 years	121	39.93
	Above 10 years	96	31.68
Firm Age	1–5 years	59	19.47
	6–10 years	104	34.32
	Above 10 years	140	46.20

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As revealed in the demographics of the respondents (N = 303), in Table 1, the participants were primarily male employees (69.97%), and female respondents represented 30.03% of the sample. The majority were aged 30 to 39 (38.94%) or aged 40 to 49 years (25.74%). With regards to the respondents' educational background, most earned master's degrees (43.56%), followed by bachelor's (38.28%) and MPhil/PhD (18.15%) holders. Concerning the employment positions, the largest group was middle managers (40.92%), followed by supervisors/officers (32.01%) and senior managers/heads (27.06%). Regarding employment duration, almost 40% of respondents had 5 to 10 years of experience, and 31.68% had more than 10 years. Lastly, most SMEs were more than 10 years (46.20%) established, 6-10 years (34.32%), and 5 years of age (19.47%) were relatively young firms.

**Table 2. Outer Loading** 

Variable	Values	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE
EL1	0.832				
EL2	0.838				
EL3	0.846	0.922	0.924	0.939	0.72
EL4	0.882	0.922	0.924	0.939	0.72
EL5	0.898				
EL6	0.792				
IWB1	0.783				
IWB10	0.867				
IWB2	0.826				
IWB3	0.848				
IWB4	0.829	0.952	0.954	0.959	0.699
IWB5	0.8	0.932	0.934	0.939	0.099
IWB6	0.881				
IWB7	0.862				
IWB8	0.799				
IWB9	0.861				
OL1	0.819				
OL2	0.842				
OL3	0.892	0.921	0.932	0.938	0.716
OL4	0.82	0.941	0.932	0.938	U./10
OL5	0.812				
OL6	0.887				

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SP1	0.874				
SP2	0.827				
SP3	0.891				
SP4	0.843	0.933	0.935	0.946	0.714
SP5	0.799				
SP6	0.841				
SP7	0.838				
OL x IWB	1				

EL= Entrepreneurial leadership; IWB= Innovative Work Behaviour; OL= Organizational Learning Orientation; SP= SME Performance

Convergent validity, construct reliability, and internal consistency reliability were assessed for the measurement model. All constructs were found to have the proper degree of reliability, as seen in Table 2, with Cronbach's alpha values over 0.70 and ranging between 0.921 and 0.952. Additionally, each construct's composite reliability scores (pa and pc) were above 0.90, confirming strong internal consistency. According to Hair et al. (2019), convergent validity is defined as each concept having average variance extracted (AVE) values higher than 0.70, with 0.50 as the baseline. For EL, item loadings of Cronbach's alpha and AVE were 0.922 and 0.72, respectively, and with item loadings of 0.792 and 0.898, demonstrating substantial reliability and convergence. IWB was also confirmed to be of high reliability, with a = 0.952 and factor loadings of 0.783 and 0.881, with AVE being 0.699, thus confirming the adequacy of the construct. Organizational Learning Orientation (OL) with Cronbach's alpha of 0.021 and loadings between 0.812 and 0.892 and AVE of 0.716, confirmed measurement strength. Also, SME Performance (SP) confirmed with  $\alpha = 0.933$  with loadings for 0.799 and 0.891 and AVE of 0.714, thus validating construct reliability and convergent validity.

The interaction term ( $OL \times IWB$ ) was also investigated as a moderator, and its single-item measure showed no multicollinearity or any loading concerns. Overall, the results from the measurement model indicate that the model did not violate any assumptions, confirming that all constructs are reliable and valid, which provides a solid basis for additional structural model analysis.

Table 3. Discriminant Validity

its	EL	IWB	OL	SP	OL x IWB
EL					
IWB	0.704				
OL	0.178	0.085			
SP	0.694	0.729	0.283		
OL x IWB	0.038	0.093	0.031	0.203	

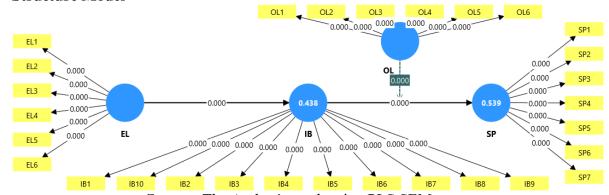
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Online ISSN: 3006-2047 Print ISSN: 3006-2039

The correlation of the variables of the study is represented in Table 3. For IWB, EL had positive relationships with IWB (r=0.704) and SME Performance (SP) (r=0.694), meaning that EL is crucial in encouraging innovation and improving the outcomes of the firm. IWB also had a strong positive correlation with SME Performance (SP), confirming its mediating role (r=0.729). EL, mentioned before, corroborated with OL (r=0.178) and IWB (r=0.085), displayed positive weak correlations with OL and SP, with a positive moderate correlation (r=0.283). For the interaction term OL × IWB, small positive correlations were exhibited with the core variables, and of these, the most significant correlation was with SP (r=0.203). The correlation skirts the relationships and supports the hypothesized relationships, indicating no multicollinearity issues.

## **Structure Model**



**Source:** The Author's work using PLS SEM Figure 2

**Table 4. Path Coefficient** 

Paths	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
EL -> IWB	0.662	0.664	0.031	21.279	0
IWB -> SP	0.66	0.661	0.031	21.295	0
OL -> SP	0.214	0.217	0.041	5.2	0
OL x IWB -> SP	0.136	0.135	0.037	3.688	0

In the report listed as Table 4, the structural path coefficients are illustrated alongside the metrics of their significance. It is shown in the findings that the effect of EL on IWB is positive and strong ( $\beta = 0.662$ , t = 21.279, p < 0.001), thus confirming the

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notion that Employee Innovation is fostered. Furthermore, IWB is a strong predictor of SP ( $\beta=0.660$ , t=21.295, p<0.001), thus verifying the latter's and IWB's mediating role in the model. It is also the case that OL has a positive and significant effect on SP ( $\beta=0.214$ , t=5.200, p<0.001), illustrating its value in improving firm performance. In addition, the term OL x IWB positively and significantly predicts SP ( $\beta=0.136$ , t=3.688, p<0.001), demonstrating the OL's moderating effect in the model as a connector of the IWB to Performance.

In so doing, the path coefficients confirm the hypothesized relationships with strong evidence, and with respect to OL's effect, which is organizational learning orientation, drives innovation from entrepreneurial leadership, which is then added to the SME performance.

Table 5. Total Effect

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
EL -> IWB	0.662	0.664	0.031	21.279	0
EL -> SP	0.437	0.439	0.033	13.23	0
IWB -> SP	0.66	0.661	0.031	21.295	0
OL -> SP	0.214	0.217	0.041	5.2	0
OL x IWB	0.136	0.135	0.037	3.688	0

The overall impacts of the structural model are shown in Table 5. Both its direct and indirect function in improving company outcomes is confirmed by the results, which show that Entrepreneurial Leadership (EL) strongly influences both IWB ( $\beta=0.662,$  t = 21.279, p < 0.001) and SME Performance (SP) ( $\beta=0.437,$  t = 13.230, p < 0.001). SP is significantly impacted by IWB ( $\beta=0.660,$  t = 21.295, p < 0.001), confirming its mediating role. Furthermore, OL's significance as a performance enhancer is further supported by the fact that it has a substantial positive overall influence on SP ( $\beta=0.214,$  t = 5.200, p < 0.001). The moderating effect of learning orientation in strengthening the IWB–SP linkage is demonstrated by the interaction term (OL × IWB), which also shows a significant effect on SP ( $\beta=0.136,$  t = 3.688, p < 0.001). Overall, the study of the total effects shows that OL magnifies the influence of entrepreneurial leadership, which improves SME performance both directly and indirectly through innovation.

Table 6. R-Square

Variables	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
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Online ISSN: 3006-2047 Print ISSN: 3006-2039

Innovative Work Behaviour	0.438	0.441	0.041	10.661	0
SME Performance	0.539	0.546	0.039	13.66	0

Table 6 displays the model's explanatory power. The results show that Entrepreneurial Leadership accounts for 43.8% of the variation in IWB (R2 = 0.438, p < 0.001). Similarly, the combined variables (EL, IWB, OL, and OL × IWB) account for 53.9% of the variation in SME Performance (SP) (R2 = 0.539, p < 0.001). These values demonstrate moderate to high explanatory power, supporting the proposed model's ability to pinpoint the components of innovation and success in SMEs.

Table 7. R-Square Adjusted

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
Innovative Work Behaviour	0.436	0.44	0.041	10.581	0
SME Performance	0.535	0.541	0.04	13.409	0

The adjusted R<sup>2</sup> results, which are shown in Table 7, indicate how reliable the model's explanatory capability is. Predictors accounted for 43.6% of the IWB (Adj.  $R^2 = 0.436$ , p < 0.001) and 53.5% of the SP (Adj.  $R^2 = 0.535$ , p < 0.001). These results are slightly lower than the unadjusted R2, which suggests the model is strong and not likely to be overfit, showing strong explanatory power for both the innovation and performance results.

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## **Slope Analysis**

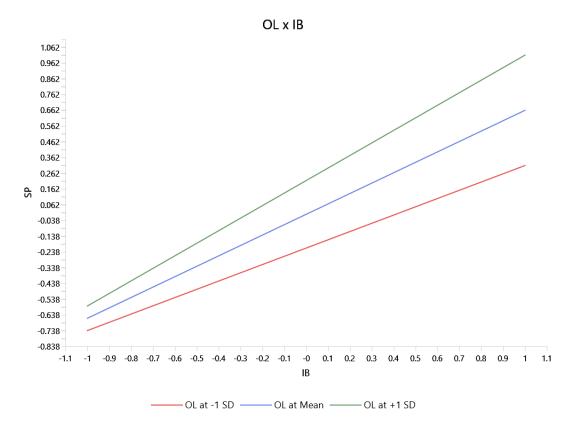


Figure 3

Figure 3 demonstrates how OL impacts the relationship between IWB and SP. The slope is strongest when OL is high (increased by one standard deviation), which indicates that IWB is stronger in the presence of learning orientation, which is highly positively correlated with OL. IWB strongly impacts SP. At the mean OL level, the relationship is still positive and significant. However, at low OL levels (less than one standard deviation), the relationships in the model are still positive but weak. This shows that OL moderates the IWB–SP relationship, which confirms the hypothesis that OL is a significant moderator in the model.

Table 8. Model Fit

	Saturated model	Estimated model
SRMR	0.038	0.055
d_ULS	0.642	1.311
d_G	0.331	0.351
Chi-square	567.539	590.447

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NFI	0.922	0.919
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Both saturated and estimated models are shown in Table 8, where the findings show an estimated model SRMR value of 0.055 and a saturated model SRMR value of 0.038, as supported by model fit criteria. These findings show a decent fit because they both fall below the 0.08 criterion. Model adequacy is confirmed by the fact that the d\_ULS and d\_G are within range. The model fit Chi-squares 567.539 and 590.447 are both considered significant, although this variance is expected due to sample size sensitivity. Lastly, the NFI model fit indices, 0.922 and 0.919, are both above the required 0.90, thus confirming the structural model has a satisfactory fit.

### Discussion

In this chapter, I delve deeper into the results outlined in the previous chapter. I do this to specifically focus on the different connections described in the conceptual framework. The structure contains four distinct hypotheses, which are to be tested: H1 (EL, IWB), H2 (IWB, SP), H3 (EL, LO), and H4 (LO, SP). Throughout the model, all the paths displayed positive and significant ties, supporting the hypothesised linkages. In this section, the researcher will cover the results concerning the previous studies, consequences for managers, and directions for future studies.

The hypothesis that entrepreneurial leaders stimulate and promote an innovative work behaviour within their organization is validated positively and powerfully. This shows that entrepreneurial leaders play a significant part within the confines of small and medium enterprises. Having an entrepreneurial and forward-thinking mindset, takes calculated risks, and is a planner motivates workers to think and exhaust ways to help the organization achieve its objectives. This is in line with several studies (Gupta et al., 2014) that state the entrepreneurial factor within an organization determines the leadership style that will best foster creativity and ideation within the firm. An entrepreneurial leader will likely foster an environment that embraces calculated risks conducive to experimentation, has no penalty for failure, and celebrates success. Thus, there is a need to rethink the leadership approach an institution uses, as it is likely to determine the innovative work behaviour exhibited.

The gap in the literature that discusses the role of work behaviour in strategic implementation has been filled with the third hypothesis. Having innovative work behaviour positively contrIWButes to an SME's performance. Thus, it validates that innovation is a vital driver for the success of an SME. Employees help the firm achieve a competitive and better overall performance if they participate in the implementation of innovative behaviours such as ideation, new problem approaches, and proactive process changes.

The outcome confirms earlier research that innovation is pivotal to success in business, particularly in small to medium-sized enterprises (Damanpour, 1991; Farr & Ford, 1990, among others). Market changes, new products, and optimized efficiencies are all results of enhanced performance that result from encouraging innovative work

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behaviour. Growth and profitability in innovative SMEs depend on an innovation-driven culture, which is vital to this performance.

In small and medium-sized businesses (SMEs), managerial leaders take the initiative to foster a learning culture, according to hypothesis 3, which suggests a positive relationship between entrepreneurial leadership and organizational learning orientation. Entrepreneurial leaders focus on knowledge, risk, and adaptive behaviours, which increases the likelihood of learning encouragement in the organization. This finding reveals the capacity of entrepreneurial leaders to emphasize not just innovation but the imperative to achieve a high learning organization. This is consistent with the leadership of the organization that sought to enable learning in it (Senge, 1990). Entrepreneurial leaders focusing strategically on sharing knowledge, experimentation, and flexIWBility will strengthen the development of an organizational learning orientation, which SMEs need to survive and grow in a competitive setting.

The performance of small and medium-sized businesses and the forecast of SME development coverage could be used to support hypothesis four. According to Argument H4, the key to success for SMEs will be their capacity to pick up new skills and adjust to both internal and external changes. In the course of an organization's life, changes in the internal and external environment may necessitate ceaseless learning. In the case of SMEs, capturing, retaining, learning, and evaluating new and core knowledge metrics is crucial.

The finding is in tune with the available literature on the affirmative relation of organizational learning to the performance of SMEs; more specifically, learning organizations are more agile and responsive. They are able to respond to uncertainties and external challenges with more efficiency. This is the reason why organizational learning is an essential component in the strategy to enhance the performance of SMEs.

## **Managerial Implications**

The findings of this research are highly essential to the managers and executives of small and medium-sized businesses (SMEs). First of all, the results show that entrepreneurial leaders are significant in creating an environment of innovative and supportive learning and development. SME leaders must work on the acquisition of the right entrepreneurial qualities, including vision, risk-taking and flexIWBility, as one of the means of ensuring innovation and organizational learning. Second, outcomes in this paper indicate the need to have innovation as a source of value. It is noteworthy that SME managers can think, explore and execute new ideas and perform through the creation of value amongst the employees. This will not only result in better performance of the organization but it will give the organization more opportunities to survive in the dynamic business environment. Finally, the findings of this paper highlight the fact that organizational learning culture needs to be developed. SME managers have to build systems and structures that are interested in knowledge dissemination, joint value creation and a culture of continuous improvement. In this

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regard, the learning culture formation is likely to amass the organizational agility and performance to a significant extent.

#### **Limitations and Future Research Directions**

The present work also has numerous limitations despite the valuable insights it provides. To begin with, it cannot be assumed that there is a causal relationship because it has a cross-sectional design. Future studies can take the form of longitudinal designs to assess the changes in these associations over time. Moreover, the research concentrates exclusively on the SMEs in one region, which may undermine the external validity of the findings. Future studies can expand the boundaries of the research to include SMEs across regions and different industries to achieve a comprehensive understanding of such relationships. Future studies can examine any moderating or mediating effects not mentioned in the mentioned focus relationships and include the organizational culture, employee motivation and the relative position of the external market on the entrepreneurial leadership, innovative work behaviour, organizational learning orientation and SME performance.

#### Conclusion

The research study has also shown that there is a strong positive relationship between EL and the success of the SMEs together with innovative work practices and organizational learning orientation. The findings of our research can be added to the existing body of literature on the impact of innovation and leadership on the growth of small and medium-sized enterprises. By fostering innovation, entrepreneurial leadership, and a culture of learning in the company, the SME managers would enhance performance and make the organization sustainable.

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