

The impact of entrepreneurial leadership on organizational performance: An empirical study in the non-profit sector



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ABSTRACT

The main purpose of this study is to examine the impact of entrepreneurial leadership and its dimensions—creative leadership, achievement orientation, and leadership motivation—on organizational performance in non-profit organizations. The study addresses the need for effective leadership models in a sector facing financial and regulatory challenges. A quantitative approach was adopted, and data were collected through a structured questionnaire distributed to employees in 140 non-profit organizations. Although the estimated sample size was 322, a total of 178 valid responses were obtained. The data were analyzed using Structural Equation Modeling (SEM) using SmartPLS. The results supported two of the three hypotheses. Creative leadership had a significant positive effect on organizational performance ($\beta = 0.293$, $t = 2.989$, $p = 0.003$), and leadership motivation showed the strongest positive effect ($\beta = 0.483$, $t = 4.905$, $p < 0.001$). However, achievement orientation did not have a significant effect ($\beta = 0.132$, $t = 1.509$, $p = 0.131$). These findings show that the dimensions of entrepreneurial leadership have different effects on organizational performance. The study provides practical implications for non-profit leaders and policymakers seeking to improve performance by strengthening motivation and creativity in leadership practices. It also contributes to the limited literature on entrepreneurial leadership in the Arab non-profit context by providing empirical evidence on the distinct effects of leadership dimensions on organizational performance and highlighting the strategic role of leadership in achieving sustainability in resource-constrained environments.

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1. Introduction

A key idea in contemporary management, entrepreneurial leadership, has an extraordinary capacity to guide people toward accomplishing corporate objectives using novel and unusual methods. To improve organizational performance, entrepreneurial leadership uses several essential instruments, such as motivation, accomplishment focus, and innovation. Thus, in dynamic and ever-

changing work contexts, it is essential to an organization's performance (Alanazi and Al-Matari, 2025; Bornman and Louw, 2023). Since nonprofit organizations frequently have limited resources and depend on creative management techniques to succeed, entrepreneurial leadership is crucial to attaining operational efficiency in these organizations. Due to the persistent difficulties that nonprofit organizations have, including their limited financial resources, dependency on contributions, and the need to attain administrative and financial sustainability, there is an increasing demand for entrepreneurial leadership in this sector (Paswan, 2025). Therefore, empowering staff members, encouraging them to innovate, and strengthening their feeling of belonging to the company, using an entrepreneurial leadership style in these businesses may help improve organizational performance

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(Alshahrani et al., 2025). Numerous recent studies have shown that entrepreneurial leadership enhances employee loyalty, fosters a creative work environment, and inspires employees to meet organizational goals to improve organizational performance (Bell and Bell, 2020). Furthermore, as the dedication and skills of workers are essential to the success of nonprofit organizations, organizational employee performance plays a critical role in accomplishing their objectives. Numerous elements, including the work environment, leadership style, and degree of encouragement and support given to staff, are associated with organizational success (McMurray et al., 2012). By promoting an innovative mindset, giving employees decision-making authority, and motivating them to produce favorable outcomes for the company, entrepreneurial leadership may significantly enhance employee performance in this situation. Extensive scientific investigation is necessary to gain a deeper understanding of the link between organizational performance and entrepreneurial leadership among nonprofit sector personnel in the Al-Jouf area.

The nonprofit sector faces several difficulties, including a lack of financing, heightened rivalry for grants, and the need to attain administrative and financial viability. With limited resources, leaders in these organizations must inspire staff members and accomplish the organization's objectives. This calls for efficient leadership techniques that guarantee resource efficiency and improve worker performance. Here, the value of entrepreneurial leadership becomes clear as a means of inspiring workers and raising output by building trust, fostering a flexible workplace, and enabling staff members to grow professionally and take on tasks effectively. A variety of issues affect the charity sector's organizational performance in Saudi Arabia, including low employee enthusiasm, a lack of creativity in administrative procedures, and a vague plan to accomplish organizational objectives. Given these difficulties, there is increasing interest in using entrepreneurial leadership to improve organizational performance and operational efficiency. Studies examining how entrepreneurial leadership affects workers' organizational performance in the non-profit sector are still lacking (Jaskiewicz et al., 2015).

The significance of this research stems from its emphasis on entrepreneurial leadership and its effect on organizational performance in the Kingdom of Saudi Arabia's Al-Jouf region's non-profit sector. This industry is expanding and is becoming increasingly involved in community development. Nevertheless, there are financial and organizational issues that require the use of contemporary leadership techniques that boost sustainability and efficiency. Given its role in boosting employee productivity and more effectively accomplishing institutional goals, research on the relationship between entrepreneurial leadership and organizational performance is urgently needed,

considering national trends that support the empowerment of non-profit organizations and their role in attaining development goals. This study's goal of addressing a knowledge vacuum in the literature on entrepreneurial leadership accounts for its scientific significance. This study is a qualitative contribution to the subject because it focuses on the non-profit setting, while earlier research has addressed this idea in the context of for-profit companies. Additionally, a theoretical model explaining the connection between organizational performance and aspects of entrepreneurial leadership—specifically, accomplishment orientation, leadership motivation, and creative leadership—is presented. Future research that aims to enhance performance by adopting successful leadership styles may make use of this paradigm. Considering the dearth of research on entrepreneurial leadership in a specific regional setting, this study offers trustworthy field data on which to build. Additionally, it advances the scientific knowledge of the variables affecting employee performance in the nonprofit sector, which aids in the creation of more potent plans to inspire staff members and boost their output and efficiency.

At an applied level, this study is significant because it can yield useful findings that can help nonprofit leaders adopt more effective leadership philosophies that improve employee performance and institutional commitment, both of which have a positive impact on the development goals of these organizations. These findings also make it easier for leaders in the Al-Jouf region's nonprofit sector to use entrepreneurial leadership techniques that meet the demands of the local workplace and offer workable answers to current problems. However, the conclusions of this study are a valuable tool for those engaged in the growth of the nonprofit sector, such as boards of directors, government organizations that regulate it, and decision-makers. To improve entrepreneurial leadership ideas and attain institutional sustainability, they can develop scientifically grounded tactics. Additionally, the research supports the attainment of Saudi Vision the 2030s objectives, which center on strengthening and empowering the nonprofit sector's role in national development. This is accomplished by offering a cutting-edge leadership style that complements the goals of the next stage and improves the operational effectiveness of organizations functioning in this crucial industry.

2. Literature review and development of hypotheses

Entrepreneurial leadership is now understood as a multifaceted construct that influences organizational innovation, adaptability, and performance rather than a collection of traits (Gupta et al., 2004; Fontana and Musa, 2017; Razzaque et al., 2024). Early research has focused on how entrepreneurial leaders influence innovation management, experiential entrepreneurship

education, and workplace learning. These studies highlight the role of leaders in encouraging creativity, opportunity recognition, and innovation within organizational settings (Bell and Bell, 2020; Fontana and Musa, 2017; Harrison et al., 2016; Newman et al., 2018). By investigating the ways in which leadership traits, such as drive, inventiveness, and creativity, affect workers' creative work practices, company performance, and long-term growth in various organizational contexts, more recent studies have expanded this viewpoint (Alshahrani et al., 2025; Hidayat, 2024; Joel and Oguanobi, 2024; Mutshidza et al., 2024; Razzaque et al., 2024). Simultaneously, an increasing number of studies have emphasized the value of strategic and entrepreneurial leadership in settings with limited resources and social or mission-driven objectives, such as healthcare organizations, social enterprises, and foundations (Bornman and Louw, 2023; Kruse et al., 2021; McMurray et al., 2012; Paswan, 2025). Nevertheless, despite this growing interest, most empirical research still focuses on small, commercial, or for-profit corporate environments, paying little attention to non-profit organizations in the Arab world. Since social mission objectives, changing governance frameworks, and larger national reform agendas influence leadership practices, the distinctive cultural, institutional, and operational features of non-profit organizations in Saudi Arabia are seldom captured by current research. This disparity emphasizes the need for research examining the ways in which entrepreneurial leadership traits function in Saudi non-profits and whether they have varying impacts on organizational success. By addressing this neglected field, the current research adds fresh empirical data on entrepreneurial leadership in Saudi non-profits and broadens the body of literature by placing these leadership practices in a non-Western, mission-driven setting.

Although entrepreneurial leadership has been extensively studied in SMEs, family businesses, innovation-driven organizations, and entrepreneurial ecosystems (Gupta et al., 2004; Harrison et al., 2016; Joel and Oguanobi, 2024), the literature shows a distinct concentration of empirical studies in commercial and profit-oriented contexts. Very little research has been conducted on entrepreneurial leadership in non-profit organizations, especially in Arab nations, where organizational structures, performance metrics, and leadership standards are very different from those in the private sector (McMurray et al., 2012; Bornman and Louw, 2023). Furthermore, research has shown that creativity, motivation, and leadership-driven innovation can improve performance (Alshahrani et al., 2025; Fontana and Musa, 2017; Razzaque et al., 2024). However, few studies have examined whether these leadership traits function similarly in volunteer- and mission-driven settings, such as Saudi non-profits.

Entrepreneurial leadership has emerged as a central concept in management and organizational

behavior research, particularly in environments with fluctuating needs and limited resources. Entrepreneurial leadership has been extensively studied in the context of profit-driven organizations, but its relevance and impact in the non-profit sector are increasingly being recognized. This sector, particularly in developing countries, requires innovative and assertive leadership approaches to increase its operational effectiveness and ensure long-term sustainability. This study examines the relationship between entrepreneurial leadership and organizational performance in non-profit organizations, focusing on three main areas: creative leadership, success orientation, and leadership motivation. These elements are well recognized in the literature as significant drivers of organizational strategy renewal and adaptability. By evaluating the pertinent literature and developing hypotheses that reflect the expected relationships between the aspects under study, this section expands on the theoretical foundations of leadership and performance.

Mutshidza et al. (2024) examined the impact of entrepreneurial leadership traits, such as originality, risk-taking, and proactive decision-making. Their qualitative findings demonstrate the value of transformational and collaborative leadership in improving both financial and non-financial performance, as well as fostering innovation and customer satisfaction. Consequently, Joel and Oguanobi (2024) highlighted the importance of entrepreneurial leadership for the long-term survival and prosperity of startups and SMEs. According to their study, strategies that emphasize team empowerment, innovative culture, and risk management significantly enhance organizational performance.

Razzaque et al. (2024) empirically showed that entrepreneurial leadership traits such as drive, creativity, and emotional intelligence promote corporate success and sustained development, especially during times of crisis. Notably, most qualities have a positive impact on sustainable development, whereas innovation surprisingly has a negative effect, suggesting a context-dependent relationship. Hidayat (2024) found that workers' innovative behavior in state-owned enterprises is positively impacted by both digital and entrepreneurial leadership. This study demonstrated how digital skills might act as moderators in enhancing the impact of organizational innovation and entrepreneurial leadership. This is supported by the findings of Kruse et al. (2021), who urged more research into the industrial and cultural elements that impact the outcomes of entrepreneurial leadership. Other studies, such as those by Fontana and Musa (2017) and Gupta et al. (2004), also highlight the need to develop reliable measuring tools and refine theoretical models to better understand the complex nature of entrepreneurial leadership. Harrison et al. (2016) released a multidimensional scale that includes vision, creativity, risk-taking, and influence, whereas

Newman et al. (2018) linked transformational leadership with innovation via psychological empowerment processes in the public sector.

These studies highlight the value of entrepreneurial leadership in improving organizational performance through a range of traits and features. However, there is a glaring dearth of empirical research on the non-profit sector, particularly in some regions, such as northern Saudi Arabia. This study aims to bridge this gap by focusing on the three primary aspects of entrepreneurial leadership—creative leadership, success orientation, and leadership motivation—and how they affect organizational performance in non-profit organizations. Based on the reviewed materials, the following ideas were proposed:

H1: Creative leadership has a positive effect on organizational performance in non-profit organizations.

H2: Achievement orientation has a positive effect on organizational performance in non-profit organizations.

H3: Leadership motivation has a positive effect on organizational performance in non-profit organizations.

3. Methodology and research design

3.1. Data analysis and results

This chapter presents the statistical analysis and conclusions of the research investigating the connection between organizational performance and entrepreneurial leadership attributes in the non-profit sector in the Al-Jouf area of Saudi Arabia. In line with current organizational research techniques, the analytical approach uses a two-stage methodology (Hair et al., 2019; Sarstedt et al., 2022). First, descriptive statistics, demographic analysis, and reliability evaluation of the measurement tools were conducted using IBM SPSS version 29.0. Second, the suggested hypotheses were tested, and the theoretical model was validated using SmartPLS 4.0, for partial least squares structural equation modeling (PLS-SEM) (Hair et al., 2019). According to the recognized principles of PLS-SEM in organizational behavior research, this method guarantees a thorough analysis of the measurement characteristics and structural linkages inside the study model (Al-Ruwaili et al., 2024; Henseler et al., 2016).

3.2. Demographic profile analysis

Table 1 shows the demographic details of the 178 research participants. Male participants comprised most of the sample (68.5%, $n = 122$), while female respondents comprised 31.5% ($n = 56$). According to age distribution, individuals between the ages of 25 and 35 constituted the largest group (31.5%, $n = 56$), followed by those over 45 (27.5%, $n = 49$). In terms

of educational background, most participants had bachelor's degrees (63.5%, $n = 113$), while 15.7% ($n = 28$) had master's degrees. The distribution of job fields was dominated by administrative responsibilities (46.6%, $n = 83$), field labor (25.3%, $n = 45$), and supervisory posts (18.0%, $n = 32$).

Table 1: Demographic characteristics of study participants

Characteristic	Category	n	%
Gender	Male	122	68.5
	Female	56	31.5
Age	< 25	33	18.5
	25-35	56	31.5
	36-45	40	22.5
	> 45	49	27.5
Educational background	High school	2	1.1
	Diploma	29	16.3
	Bachelor's degree	113	63.5
	Master's degree	28	15.7
	Student	6	3.4
Work field	Administrative	83	46.6
	Supervisory	32	18.0
	Field work	45	25.3
	Other*	18	10.1

N = 178; *: Includes students, entrepreneurs, board members, retired individuals, and job seekers

3.3. Descriptive statistics

Descriptive statistics were calculated for each research variable to investigate distributional features, variability, and central trends. Table 2 shows the means and standard deviations for each of the four constructs (creative leadership, achievement orientation, leadership motivation, and organizational performance). Each item is scored on a five-point Likert scale, with 1 denoting "strongly disagree" and 5 denoting "strongly agree." The findings show consistently high mean scores (range, 4.43 to 4.75) for all factors, indicating that participants strongly agreed on organizational performance and entrepreneurial leadership techniques in their firms. Overall, creative leadership had the highest meaning ($M = 4.62$, $SD = 0.63$), followed by leadership motivation ($M = 4.55$, $SD = 0.65$), accomplishment orientation ($M = 4.60$, $SD = 0.59$), and organizational performance ($M = 4.65$, $SD = 0.54$). Regarding the existence of entrepreneurial leadership practices in their firms, respondents strongly agreed, as seen by the comparatively low standard deviations across all dimensions.

3.4. Measurement model assessment

Before testing the structural relationships, the measurement model was evaluated to ensure the reliability and validity of the constructs. The assessment followed established guidelines for PLS-SEM analysis to examine internal consistency reliability, convergent validity, and discriminant validity (Hair et al., 2019; Henseler et al., 2016).

3.4.1. Internal consistency reliability

Cronbach's alpha, composite reliability (CR), and rho_A coefficients were used to evaluate the dependability of internal consistency (Fornell and

Larcker, 1981; Sarstedt et al., 2022). All constructions had values between 0.856 and 0.912, above the suggested cutoff of 0.70 for Cronbach's alpha (Nunnally and Bernstein, 1994). The composite dependability ratings are above the 0.70 criterion and varied from 0.889 to 0.930 (Hair et al., 2010). The internal consistency of all constructs was confirmed by the rho_A values, which varied from 0.858 to 0.925, and provided a more precise reliability estimate for PLS-SEM (Dijkstra and Henseler, 2015).

Table 2: Descriptive statistics for study variables

Construct	Item	M	SD
Creative leadership	CL1	4.75	0.53
	CL2	4.65	0.59
	CL3	4.51	0.82
	CL4	4.52	0.69
	CL5	4.55	0.74
	CL6	4.58	0.61
	CL7	4.71	0.55
	CL8	4.71	0.50
Achievement orientation	Overall	4.62	0.63
	A01	4.63	0.57
	A02	4.60	0.60
	A03	4.58	0.62
	A04	4.58	0.68
	A05	4.55	0.61
	A06	4.63	0.53
	A07	4.62	0.55
Leadership motivation	A08	4.62	0.56
	Overall	4.60	0.59
	LM1	4.43	0.82
	LM2	4.63	0.60
	LM3	4.66	0.57
	LM4	4.48	0.74
	LM5	4.51	0.72
	LM6	4.62	0.51
Organizational performance	LM7	4.52	0.62
	Overall	4.55	0.65
	OP1	4.54	0.66
	OP2	4.70	0.46
	OP3	4.67	0.50
	OP4	4.65	0.50
	OP5	4.65	0.52
	OP6	4.70	0.46
Overall	4.65	0.54	

N = 178; M: Mean; SD: Standard deviation; Scale: 1 = Strongly Disagree, 5 = Strongly agree; Overall construct means are calculated as the average of all items within each construct

3.4.2. Convergent validity

Table 3 illustrates how factor loadings and average variance extracted (AVE) were used to assess convergent validity (Fornell and Larcker, 1981). Although 0.708 is the optimal threshold for factor loadings (Hair et al., 2019), several items showed loadings in the range of 0.50 to 0.70. When composite reliability surpasses 0.70, factor loadings beyond 0.50 are deemed appropriate in exploratory research settings (Hulland, 1999; Sarstedt et al., 2022). More precisely, CL2 (0.674), CL3 (0.663), CL6 (0.718), CL7 (0.687), CL8 (0.581), LM1 (0.653), LM6 (0.715), OP1 (0.688), and OP8 (0.544) were above the acceptable minimum level of 0.50, but below the 0.708 criterion (Bagozzi and Yi, 1988). Since these items supported the content validity of the constructs and their removal did not significantly increase construct reliability, they were retained. Convergent validity was confirmed for all constructs

with AVE values ranging from 0.502 to 0.630, over the 0.50 criterion (Fornell and Larcker, 1981). No collinearity issues were found among the indicators because all VIF values were below the 5.0 criterion (Sarstedt et al., 2022).

3.4.3. Discriminate validity

The Fornell-Larcker criteria (Table 4) and heterotrait-monotrait ratio (HTMT) (Dijkstra and Henseler, 2015) (Table 5) were used to evaluate discriminant validity. Since the square root of each construct's AVE was greater than its correlation with other constructs, the Fornell-Larcker criterion was met (Fornell and Larcker, 1981). Except for the link between leadership motivation and accomplishment orientation (HTMT = 0.849), which stayed below the liberal barrier of 0.90, the majority of the HTMT values, which varied from 0.532 to 0.849, were below the conservative criterion of 0.85. Since each item loaded highest on its corresponding concept, cross-loading analysis further validated the discriminant validity. Fig. 1 shows the factor loadings and structural interactions among the constructs and provides a visual representation of the measurement model findings.

3.5. Structural model assessment

After confirming the adequacy of the measurement model, it was evaluated to test the proposed hypotheses. The assessment included the examination of collinearity, path coefficient significance, coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2), as recommended by Henseler et al. (2016) and Sarstedt et al. (2022).

3.5.1. Collinearity assessment

Prior to evaluating the structural model, collinearity among predictor constructs was assessed using the variance inflation factor (VIF) values. All VIF values were well below the threshold of 5.0 (Hair et al., 2019), with achievement orientation (VIF = 2.61), creative leadership (VIF = 1.451), and leadership motivation (VIF = 2.353) indicating no collinearity concerns among the predictor variables.

3.5.2. Path coefficients and hypothesis testing

The structural model was evaluated using bootstrapping with 5,000 subsamples to assess the significance of the path coefficients (Hair et al., 2019). Table 6 presents the results of hypothesis testing, including path coefficients, t-statistics, p-values, and confidence intervals. Based on these findings, two of the three theories were validated. H1 was supported by the strong, beneficial impact of creative leadership on organizational performance ($\beta = 0.293$, $t = 2.989$, $p = 0.003$). The greatest

significant correlation between leadership motivation and organizational performance ($\beta = 0.483$, $t = 4.905$, $p < 0.001$) supports H3. Nevertheless, H2 was not supported by the lack of discernible impact on organizational performance (β

$= 0.132$, $t = 1.509$, $p = 0.131$). Fig. 2 shows the path coefficients and their significance levels for each factor loading as well as the t-statistics for the structural model findings.

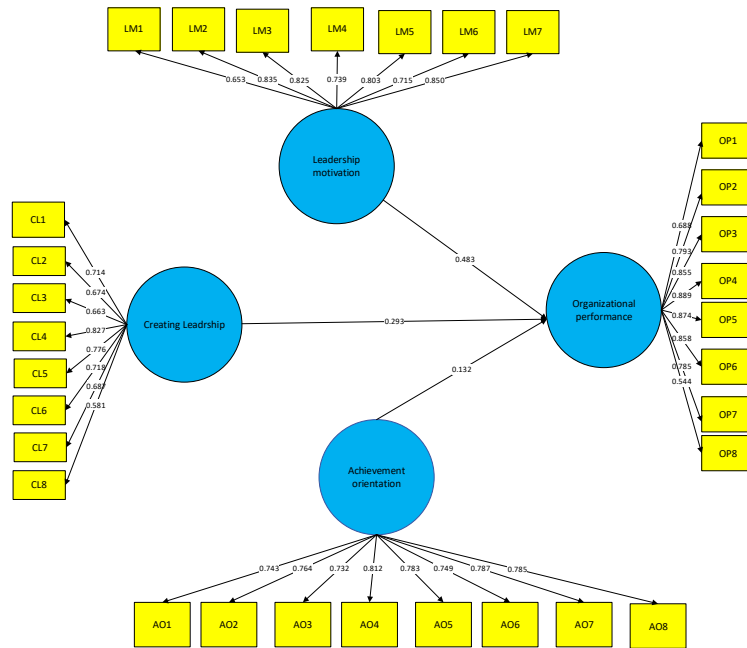


Fig. 1: Measurement model with factor loadings

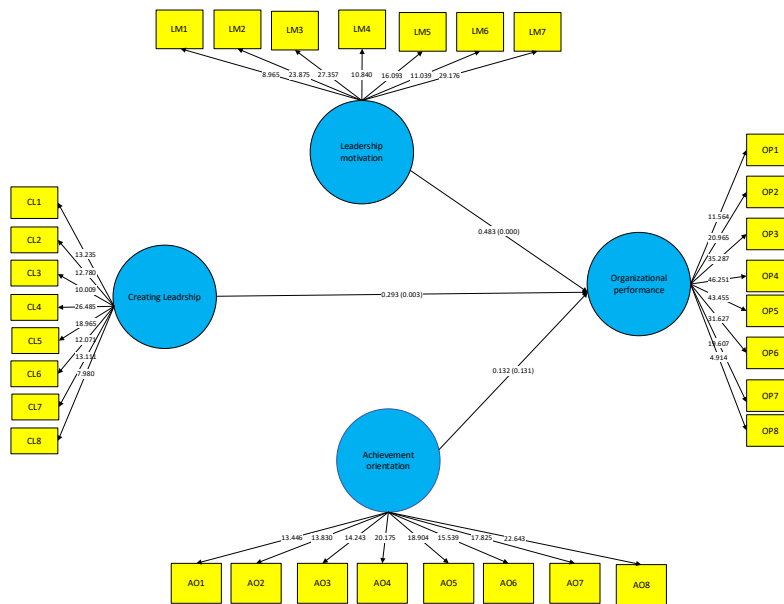


Fig. 2: Structural model with path coefficients and t-statistics

Fig. 2 provides a comprehensive view of the structural model, which displays both the measured and structural components. Fig. 2 shows the t-statistics for all factor loadings, confirming the reliability of the measurement model and highlighting the path coefficients with their respective significance levels.

3.5.3. Coefficient of determination (R^2)

The coefficient of determination (R^2) for organizational performance was 0.610, indicating that the three entrepreneurial leadership

dimensions collectively explained 61.0% of the variance in organizational performance (Table 7). The adjusted R^2 value of 0.604 demonstrates the model's substantial explanatory power (Cohen, 1988), exceeding the threshold of 0.26 for large effect sizes in behavioral sciences (Hair et al., 2019).

3.5.4. Effect sizes (f^2)

The effect sizes (f^2), as shown in Table 6, were calculated to assess the relative impact of each predictor construct on the endogenous variable (Cohen, 1988). Leadership motivation demonstrated

a large effect size ($f^2 = 0.255$), indicating substantial influence on organizational performance. Creative leadership showed a medium effect size ($f^2 = 0.151$),

while achievement orientation exhibited a small effect size ($f^2 = 0.017$), consistent with its nonsignificant path coefficient.

Table 3: Measurement model assessment results

Construct	Item	Factor loading	Cronbach's α	rho_A	CR	AVE
Achievement orientation	A01	0.743	0.902	0.908	0.921	0.593
	A02	0.764				
	A03	0.732				
	A04	0.812				
	A05	0.783				
	A06	0.749				
	A07	0.787				
	A08	0.785				
Creative leadership	CL1	0.714	0.856	0.858	0.889	0.502
	CL2	0.674*				
	CL3	0.663*				
	CL4	0.827				
	CL5	0.776				
	CL6	0.718*				
	CL7	0.687*				
	CL8	0.581*				
Leadership motivation	LM1	0.653*	0.890	0.901	0.914	0.604
	LM2	0.835				
	LM3	0.825				
	LM4	0.739				
	LM5	0.803				
	LM6	0.715*				
	LM7	0.850				
Organizational performance	OP1	0.688*	0.912	0.925	0.930	0.630
	OP2	0.793				
	OP3	0.855				
	OP4	0.889				
	OP5	0.874				
	OP6	0.858				
	OP7	0.785				
	OP8	0.544*				

CR: Composite reliability; AVE: Average variance extracted; *: Factor loadings below 0.708 but above 0.50, retained following Hulland (1999) and Hair et al. (2019) recommendations

3.5.5. Predictive relevance (Q^2)

The Stone-Geisser Q^2 value was calculated using a blindfolding procedure to assess the model's predictive relevance (Geisser, 1974; Stone, 1974). The Q^2 value for organizational performance was 0.364, substantially exceeding zero, indicating the strong predictive relevance of the model (Hair et al., 2019). Additionally, the $Q^2_{predict}$ value of 0.553 further confirms the model's out-of-sample predictive capability (Shmueli et al., 2019) (Table 7).

3.5.6. Model fit assessment

Although PLS-SEM does not require traditional goodness-of-fit indices, several approximate fit measures have been evaluated (Henseler et al., 2016). Table 8 shows that the standardized root mean square residual (SRMR) value of 0.103 slightly exceeded the recommended threshold of 0.08, suggesting a modest model fit. The normed fit index (NFI) of 0.547 fell below the desired threshold of 0.90, indicating potential areas for model improvement. However, these indices should be interpreted cautiously in PLS-SEM contexts, as the primary focus remains on their predictive relevance and explanatory power (Hair et al., 2019).

4. Discussion

The findings of this study provide crucial new information on how aspects of entrepreneurial

leadership affect organizational success in Saudi non-profits. First, the results demonstrate that creative leadership significantly and favorably affects organizational performance.

Table 4: Fornell-Larcker criterion

Construct	AO	CL	LM	OP
AO	0.770			
CL	0.550	0.708		
LM	0.755	0.476	0.777	
OP	0.658	0.595	0.722	0.793

Diagonal values (in bold) represent the square root of AVE; Off-diagonal values represent inter-construct correlations

Table 5: Heterotrait-Monotrait ratio (HTMT)

Construct	AO	CL	LM	OP
AO				
CL	0.600			
LM	0.849	0.532		
OP	0.706	0.645	0.769	

HTMT values below 0.85 indicate adequate discriminant validity

This is consistent with other studies showing that leaders may improve organizational results, especially in dynamic or resource-constrained contexts, by fostering creativity, fresh ideas, and adaptable thinking. Creativity is a useful leadership tool that promotes operational development and stakeholder involvement in the Saudi non-profit sector, as organizations are required to provide social value while adjusting to modernization regulations and Vision 2030 efforts. Likewise, leadership motivation was found to have a major impact on performance, which is in line with research that highlights how a leader's zeal, tenacity, and proactive actions shape team loyalty and

organizational effectiveness. In Saudi Arabia, nonprofits often deal with issues such as a lack of finances, reliance on volunteers, and administrative restrictions. Motivated leaders may be very

important in these situations for boosting spirit, inspiring groups, and guaranteeing consistent performance despite these challenges.

Table 6: Structural model results and hypothesis testing

Hypothesis	Path	β	SD	t-value	p-value	f^2	95% CI	Decision
H1	CL → OP	0.293	0.098	2.989	0.003**	0.151	[0.085, 0.467]	Supported
H2	AO → OP	0.132	0.088	1.509	0.131	0.017	[-0.022, 0.323]	Not Supported
H3	LM → OP	0.483	0.099	4.905	0.000***	0.255	[0.277, 0.668]	Supported

β : path coefficient; **: p < 0.01; ***: p < 0.001

Table 7: Model assessment summary

Criterion	Value	Threshold	Interpretation
R ² (organizational performance)	0.610	> 0.26 (large)	Substantial
Adjusted R ²	0.604	> 0.26 (large)	Substantial
Q ² (organizational performance)	0.364	> 0	Strong predictive relevance
Q ² _predict	0.553	> 0	Strong out-of-sample prediction

Table 8: Model fit indices

Fit measure	Value	Threshold	Interpretation
SRMR	0.103	< 0.08	Modest fit
NFI	0.547	> 0.90	Below threshold
RMS Theta	0.175	< 0.12	Above threshold

Fit indices should be interpreted cautiously in PLS-SEM, with primary focus on predictive relevance and explanatory power

Contrary to previous studies, achievement orientation did not significantly affect organizational performance; this finding may be explained by environmental variables. In many non-profit settings, especially in the Arab world, the focus is often on social impact, community service, and mission fulfillment, rather than quantifiable performance results or competitive success. As a result, leaders may place more importance on relational, motivating, and creative behaviors than on performance-pressuring goal-driven strategies common in for-profit environments. Clear performance measurements and accountability procedures, which are sometimes lacking in non-profit organizations, may also be necessary for accomplishment orientation. This could reduce the discernible impact of achievement-oriented leadership on output. Because Saudi non-profits depend more on principles, motivation, and group participation than on achievement-focused leadership styles, this non-significant finding may represent a cultural and sectoral reality. Therefore, the difference between the significant and non-significant paths emphasizes how entrepreneurial leadership functions in this setting in a complex manner.

5. Conclusion

The goal of this research is to investigate the effects of EL and its three dimensions—creative leadership, accomplishment orientation, and leadership motivation—on the performance of nonprofit organizations located in the Al-Jouf area of Saudi Arabia. This research investigates the increasing need for successful leadership models within an industry confronted with a multitude of organizational and financial issues. In this research, a quantitative methodology was used, which included the distribution of a structured

questionnaire to workers of one hundred and forty non-profit organizations. This questionnaire yielded one hundred and seventy-eight answers that were sufficiently valid to be included in the analysis. The data were analyzed, and the hypotheses were tested using SmartPLS to perform structural equation modeling (SEM). The findings provided support for two of the three hypotheses, demonstrating that creative leadership had a large beneficial effect on business performance and that leadership motivation had the most substantial influence on all the factors examined. On the other hand, the accomplishment-oriented dimension did not have a statistically significant influence on performance, which suggests that the dimensions of entrepreneurial leadership do not have an equivalent impact but instead vary in terms of how successful they are within the organizational environment that is present in the non-profit sector.

6. Implication and suggestion for future research

The results of this research provide nonprofit leaders and decision-makers with valuable insights into practical applications, underscoring the significance of implementing leadership approaches that emphasize motivation and creativity as crucial elements in the advancement of organizational performance and the improvement of sustainability. In addition, the current study serves as a qualitative contribution to the body of scientific literature. It furnishes empirical material that is both contemporary and contextualized within an Arab community, an area that has not been well explored in prior studies. This improves our strategic comprehension of the function of entrepreneurial leadership in situations that have limited resources and need flexible and inventive leadership models.

The findings of this study highlight several potential directions for future research that have the potential to contribute to the expansion of knowledge regarding entrepreneurial leadership within the nonprofit sector. It is suggested that, given the fact that the study focused on nonprofit organizations, future research should be expanded to include a variety of regions within the Kingdom of

Saudi Arabia or to compare it to other countries in the Arabian Gulf region. This will make it possible to understand the differences that exist in the context and culture, and the influence that these differences have on the relationship between organizational performance and entrepreneurial leadership. It is additionally recommended that, in the models developed in the future, it is necessary to incorporate variables that mediate or moderate it, such as organizational culture, level of job satisfaction, or administrative structure, in order to evaluate how these variables affect the relationship between performance levels and the dimensions of entrepreneurial leadership by constraining or expanding it. This would contribute to an improvement in the precision of the scientific interpretation of the data. Since this study used a quantitative approach, it would be advantageous to include a mixed methodology in future research that includes both qualitative analysis and quantitative data. This could be accomplished by conducting in-depth interviews with leaders. This would provide a more extensive and accurate picture of their practical experiences and approach to tackling organizational difficulties. It would also provide a more comprehensive and accurate understanding of their practical experiences and their approach to resolving organizational challenges.

List of abbreviations

AO	Achievement orientation
AVE	Average variance extracted
β	Path coefficient
CI	Confidence interval
CL	Creative leadership
CR	Composite reliability
ESG	Environmental, social, and governance
HTMT	Heterotrait-monotrait ratio
LM	Leadership motivation
M	Mean
n	Sample size
NFI	Normed fit index
OP	Organizational performance
p	P-value
PLS-SEM	Partial least squares structural equation modeling
rho_A	Dijkstra-Henseler's rho_A reliability coefficient
RMS	Root mean square
SD	Standard deviation
SDG16	Sustainable development goal 16
SEM	Structural equation modeling
SMEs	Small and medium-sized enterprises
SPSS	Statistical package for the social sciences
SRMR	Standardized root mean square residual
t	T-statistic
VIF	Variance inflation factor

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Compliance with ethical standards

Ethical considerations

The study used a voluntary questionnaire directed to human participants. All respondents were informed about the purpose of the research, and participation was entirely optional. No personal identifying information was collected, and responses were treated anonymously and used only for academic purposes. The data were kept confidential and analyzed in aggregate form. Participants had the right to withdraw at any time without any consequences.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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