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Deconstructing Entrepreneurial Orientation: A Variance Decomposition Analysis of SME Performance in Kabwe District, Zambia

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Abstract: This study examines how individual dimensions of Entrepreneurial Orientation (EO) influence SME performance in an emerging economy context, addressing the unresolved question of which EO dimensions matter, and why. Using data from 262 trading SMEs in Kabwe District, Zambia, the study employs hierarchical multiple regression with HC3 robust standard errors, nonlinear modeling, and Shapley value decomposition to assess both statistical significance and relative importance of EO dimensions. The results show that EO explains a substantial proportion of variance in performance ($\Delta R^2 = 0.302$). Innovativeness and autonomy emerge as the only statistically significant predictors, while proactiveness, risk-taking, and competitive aggressiveness are not significant in net-effect models. However, relative importance analysis reveals that all EO dimensions contribute meaningfully to explained variance, indicating divergence between coefficient significance and practical importance. Additionally, risk-taking exhibits a significant inverted U-shaped relationship with performance, suggesting optimal rather than linear effects. The study contributes by advancing a multidimensional and context-sensitive understanding of EO, introducing a variance-based analytical approach, and providing empirical evidence from Zambia - an underrepresented context in entrepreneurship research. The findings highlight the need to reconceptualize EO as a system of uneven strategic contributions shaped by institutional and resource constraints.

Keywords: *Entrepreneurial Orientation; SME Performance; Variance Decomposition; Emerging Economies; Zambia.*

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I. INTRODUCTION

Small and Medium Enterprises (SMEs) are widely recognized as key drivers of economic growth, employment creation, and innovation across both developed and developing economies. Globally, SMEs account for nearly 90% of businesses and contribute significantly to employment and income generation, underscoring their central role in economic resilience and structural transformation (Ayyagari et al., 2014; Beck & Demirgüç-Kunt, 2006; World Bank Group, 2018; IFC, 2019). In developing regions, including Africa, SMEs are particularly important for addressing unemployment, promoting inclusive growth, and strengthening local value chains (Abor & Quartey, 2010; Fatoki, 2014; Rogerson, 2001). However, despite their importance, SMEs face persistent structural challenges such as limited access to finance, weak institutional support, and managerial constraints, which hinder their performance and sustainability (Amoah & Amoah, 2018).

In Zambia, SMEs constitute a major pillar of the economy and play a critical role in employment creation and poverty reduction. Yet, many struggle to achieve sustainable growth due to infrastructural deficiencies, limited technological adoption, and regulatory inefficiencies (Ndulo, 2011; Muleya & Ng'andu, 2021; Mundia, 2026). Evidence further indicates low capacity utilization and relatively high failure rates among SMEs, highlighting the need for strategies that enhance

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competitiveness and performance (World Bank Group, 2018; GEM, 2019).

Within this context, Entrepreneurial Orientation (EO) has emerged as a central construct in explaining firm performance. EO reflects a firm's strategic posture characterized by innovativeness, proactiveness, risk-taking, autonomy, and competitive aggressiveness (Miller, 1983; Covin & Slevin, 1989; Lumpkin & Dess, 1996). While prior research generally reports a positive relationship between EO and performance (Rauch et al., 2009; Wiklund & Shepherd, 2005), increasing evidence highlights inconsistencies across its dimensions. Some studies find innovativeness and proactiveness to be strong predictors, while others report weak or insignificant effects for risk-taking and competitive aggressiveness (Kreiser et al., 2013; Hughes & Morgan, 2007). These mixed findings suggest that EO is not a uniformly performance-enhancing construct but rather a multidimensional and context-dependent phenomenon. The inconsistencies are particularly pronounced in emerging economies, where institutional conditions, market inefficiencies, and resource constraints shape the effectiveness of entrepreneurial strategies (Bruton et al., 2008; Kiss et al., 2012; Zoogah et al., 2015). In Zambia, empirical research on EO remains limited, especially within sector-specific contexts such as trading SMEs, despite their dominance in urban economies like Kabwe.

Addressing these gaps, this study reframes the EO debate by shifting focus from whether EO matters to which EO dimensions matter and why. Specifically, the study examines the differential effects of EO dimensions on SME performance in Kabwe District, Zambia, using a variance decomposition approach to assess both statistical significance and relative importance. By adopting a multidimensional and context-sensitive perspective, the study contributes to theory by clarifying the heterogeneous effects of EO and to practice by providing insights for enhancing SME competitiveness in emerging economies.

➢ *Research Hypotheses*

- *Ho_1:* Autonomy has a positive and significant relationship with firm performance.
- *Ho_2:* Innovativeness has a positive and significant relationship with firm performance.
- *Ho_3:* Risk-taking has a positive and significant relationship with firm performance.
- *Ho_4:* Proactiveness has a positive and significant relationship with firm performance.
- *Ho_5:* Competitive aggressiveness has a positive and significant relationship with firm performance.

II. LITERATURE REVIEW

Entrepreneurial Orientation (EO) has been extensively examined within the strategic management and entrepreneurship literature as a key determinant of firm performance. Early foundational studies conceptualized EO as a unidimensional construct and consistently reported a positive relationship between EO and firm performance across different contexts (Covin & Slevin, 1989; Wiklund & Shepherd, 2005). Meta-analytic evidence further reinforced this position, demonstrating that EO enhances firm competitiveness, innovation, and growth outcomes (Rauch et al., 2009). However, more recent scholarship has challenged the assumption of uniformity, arguing that EO should be understood as a multidimensional construct whose components exert distinct and context-dependent effects on performance.

The multidimensional perspective, advanced by Lumpkin & Dess (1996), conceptualizes EO as comprising innovativeness, proactiveness, risk-taking, autonomy, and competitive aggressiveness. Emerging global evidence suggests that these dimensions do not operate uniformly. While innovativeness and proactiveness are often associated with positive performance outcomes, risk-taking and competitive aggressiveness frequently produce weak, inconsistent, or even negative effects (Kreiser et al., 2013; Hughes & Morgan, 2007). This divergence underscores a critical theoretical insight: EO is not a monolithic capability but rather a configuration of strategic behaviours whose effectiveness varies across contexts.

These inconsistencies are particularly pronounced in emerging economies, where institutional fragility, resource constraints, and market inefficiencies shape entrepreneurial outcomes. Studies across Africa and other developing regions indicate that the EO–performance relationship is often nonlinear, weaker, or contingent upon environmental factors such as market dynamism, institutional quality, and resource availability (Boso et al., 2013; Zoogah et al., 2015; Neneh, 2019). For instance, while innovativeness tends to remain a relatively stable predictor of performance, proactiveness and competitive aggressiveness often fail to yield consistent benefits in environments characterised by informality and institutional instability.

Within the Zambian context, the literature remains limited but reveals similar patterns. SMEs are widely recognised as engines of socio-economic development, contributing significantly to employment creation, poverty reduction, and economic diversification (Chilwana, 2021; OECD, 2020; World Bank, 2022; Mundia et al., 2025; Mwiya et al., 2026). They account for approximately 90% of businesses globally and over 50% of employment, with even greater significance in developing economies (Ayyagari et al., 2011; IFC, 2019). In Zambia specifically, SMEs contribute nearly 70% of GDP and about 88% of employment, highlighting their central role in economic development (Bank of Zambia & ILO, 2021; ZDA, 2021).

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Despite their importance, SMEs in Zambia face persistent structural challenges, including limited access to finance, weak institutional support, inadequate technological adoption, and high levels of informality (SME Policy, 2023; Beck et al., 2005). These constraints weaken the translation of entrepreneurial behaviours into performance outcomes, particularly for externally oriented EO dimensions such as proactiveness and competitive aggressiveness. Consequently, internally driven capabilities such as innovativeness and autonomy may play a more critical role in enhancing performance within such constrained environments.

Furthermore, prior research is limited by three key gaps. First, many studies rely on aggregated EO measures, obscuring the distinct effects of individual dimensions. Second, African contexts - particularly Zambia - remain underrepresented in mainstream EO research, limiting generalizability. Third, existing studies predominantly employ regression-based approaches, offering limited insight into the relative importance of EO dimensions.

Addressing these limitations, this study adopts a multidimensional and context-sensitive perspective by examining the differential effects of EO dimensions on SME performance. By employing a variance decomposition approach, the study not only evaluates statistical significance but also disentangles the relative contribution of each EO dimension. This approach provides a more nuanced understanding of how entrepreneurial behaviours translate into performance outcomes within the institutional realities of emerging economies such as Zambia.

III. THEORETICAL FRAMEWORK

Entrepreneurial Orientation (EO) is primarily grounded in the Resource-Based View (RBV) proposed by Barney (1991), which explains firm performance in terms of internal capabilities. In this study, RBV provides the baseline logic that EO dimensions such as innovativeness and autonomy enhance SME performance because they are internally embedded and can be deployed with minimal reliance on external conditions (Wiklund & Shepherd, 2003).

To account for contextual influences, the study integrates Institutional Theory, advanced by North (1990) and extended by Peng et al. (2008). This perspective explains that in environments like Zambia - characterized by informality, regulatory inefficiencies, and resource constraints - the effectiveness of EO depends on institutional support. As such, externally oriented dimensions such as proactiveness and competitive aggressiveness are likely to exhibit context-dependent effects.

The study further draws on risk amplification logic (Tang et al., 2008; Bruton et al., 2013), which explains that SMEs face heightened vulnerability due to limited resources. Consequently, risk-taking is expected to produce nonlinear outcomes, where moderate levels enhance performance but excessive risk reduces it.

Finally, the study adopts the EO dimensionality perspective proposed by Lumpkin and Dess (1996), which treats EO as a multidimensional construct. This perspective aligns with the study's approach of examining the distinct and uneven effects of individual EO dimensions rather than assuming uniform contributions.

Integrating these theories, the study proposes the concept of Entrepreneurial Orientation Performance Architecture, which conceptualizes EO as a system of uneven and context-dependent capabilities. Within this framework, innovativeness and autonomy are expected to have direct positive effects, proactiveness and competitive aggressiveness are context-dependent, and risk-taking exhibits a nonlinear relationship with performance.

IV. METHODOLOGY

➢ *Research Design*

This study adopts an explanatory cross-sectional survey design to examine the relationship between Entrepreneurial Orientation (EO) dimensions and SME performance. The cross-sectional approach is appropriate for testing theoretically grounded relationships between firm-level strategic orientations and performance outcomes within a defined context, and is widely used in entrepreneurship research (Wiklund & Shepherd, 2005; Rauch et al., 2009). The design enables efficient capture of firm heterogeneity across a large sample while maintaining internal consistency in measurement.

➢ *Population, Sampling, and Sample Size Justification*

The target population comprised registered trading SMEs in Kabwe District, Zambia (N = 1,200), obtained from the Kabwe City Council licensing database (2024). The sample size was determined using the Yamane (1967) formula: n = N/(1+N(e^2)). At a 5% margin of error, the minimum required sample size was 300 firms. Data were collected from owner-managers or chief decision-makers, consistent with key informant approaches in SME research. The adequacy of the sample size was further supported by statistical power considerations. Using Cohen's (1992) guideline for multiple regression ($n \geq 50 + 8m$, where $m = 5$ predictors), the minimum requirement was 90 observations. Green's (1991) rule ($n \geq 104 + m$) suggests a minimum of 109 cases. The final sample used in regression analysis (N = 262) exceeds these thresholds, ensuring sufficient statistical power and robustness of estimates.

➢ *Measurement of Variables*

All constructs were measured using multi-item Likert scales adapted from established EO and performance literature (Lumpkin & Dess, 1996; Covin & Slevin, 1989). Responses were captured on a five-point scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). EO was operationalized

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across five dimensions: innovativeness, proactiveness, risk-taking, autonomy, and competitive aggressiveness. SME performance was measured using both financial and non-financial indicators to capture multidimensional outcomes. Composite indices were computed as mean scores of their respective items.

➢ *Validity and Reliability*

Construct validity was assessed using Exploratory Factor Analysis (EFA) to confirm the underlying factor structure. Reliability was evaluated using Cronbach's alpha, with most constructs exceeding the recommended threshold of 0.70 (Hair et al., 2019), except risk-taking, which exhibited lower internal consistency. Convergent validity was examined using Average Variance Extracted (AVE) and Composite Reliability (CR), following the Fornell–Larcker criterion (Fornell & Larcker, 1981). All constructs met the CR threshold (> 0.70), and AVE values were within acceptable limits, supporting convergent validity. Discriminant validity was confirmed as the square root of AVE for each construct exceeded inter-construct correlations.

➢ *Addressing Common Method Bias*

Given the use of self-reported survey data, procedural and statistical remedies were implemented to mitigate common method bias (Podsakoff et al., 2003). Procedurally, respondents were assured of anonymity, and questionnaire items were structured to reduce evaluation apprehension. Statistically, Harman's single-factor test was conducted. The first factor did not account for the majority of variance, indicating that common method bias is unlikely to be a serious concern.

➢ *Analytical Strategy and Robustness Checks*

Hierarchical multiple regression analysis was employed to estimate the effects of EO dimensions on SME performance. Model 1 included control variables, while Model 2 introduced EO dimensions. Model 3 incorporated nonlinear effects through a squared term for risk-taking. To address heteroskedasticity concerns, HC3 robust standard errors were applied, which provide reliable estimates under small-to-moderate sample conditions (Hayes & Cai, 2007). Breusch–Pagan tests confirmed the absence of significant heteroskedasticity, but robust errors were retained as a conservative approach. Relative importance was assessed using Shapley value regression to decompose the contribution of each EO dimension to explained variance, allowing comparison between statistical significance and practical importance.

➢ *Endogeneity Considerations*

Potential endogeneity arising from reverse causality and omitted variables was addressed through model specification and diagnostic checks. The inclusion of relevant control variables (firm size, age, owner characteristics) reduces omitted variable bias. Additionally, variance inflation diagnostics and robustness checks support the stability of estimates. Given the cross-sectional design, causal inference is interpreted cautiously; however, the theoretical grounding, model structure, and robustness procedures enhance confidence in the validity of the observed relationships. While endogeneity cannot be fully eliminated in cross-sectional designs, the inclusion of theoretically grounded control variables and robustness checks reduces potential bias. Future research may employ instrumental variable approaches or longitudinal designs to further address this limitation.

➢ *Summary*

The methodological approach combines rigorous sampling, validated measurement, and robust analytical techniques to ensure reliability and validity of findings. The integration of power analysis, bias controls, and robustness checks positions the study within accepted standards for high-impact entrepreneurship research.

V. RESULTS

➢ *Descriptive Statistics, Reliability, and Correlations*

Table 1. Descriptive Statistics and Reliability

Construct	Items	N	Mean	SD	Skewness	Kurtosis	Cronbach's α
Innovativeness	5	296	3.510	0.911	-0.367	-0.376	0.809
Proactiveness	6	296	3.710	0.811	-0.477	0.168	0.847
Risk-taking	4	296	3.370	0.811	-0.178	0.014	0.539
Autonomy	5	295	3.181	0.960	-0.348	-0.206	0.838
Competitive aggressiveness	5	295	3.578	0.823	-0.395	0.034	0.787
SME performance	11	295	3.474	0.810	-0.476	0.173	0.926

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Table 1 reports the descriptive statistics and reliability estimates for all constructs. The means for the Entrepreneurial Orientation (EO) dimensions range from 3.18 (autonomy) to 3.71 (proactiveness), while SME performance records a mean of 3.47. Skewness and kurtosis values fall within acceptable limits, supporting the use of parametric techniques. Internal consistency is satisfactory for all constructs except risk-taking (α = .539), while SME performance demonstrates high reliability (α = .926).

Table 2. Correlation Matrix and Multicollinearity Diagnostics

Variable	**1**	**2**	**3**	**4**	**5**	**6**
1. Innovativeness	—	.648	.501	.433	.517	.521
2. Proactiveness	.648	—	.469	.439	.526	.486
3. Risk-taking	.501	.469	—	.261	.387	.389
4. Autonomy	.433	.439	.261	—	.336	.426
5. Competitive aggressiveness	.517	.526	.387	.336	—	.416
6. SME performance	.521	.486	.389	.426	.416	—

VIF diagnostics (Model 2 predictors)

Predictor	VIF
Proactiveness	3.359
Competitive aggressiveness	2.504
Innovativeness	2.163
Risk-taking	1.620
Autonomy	1.283
Controls range	1.051–1.174

Bivariate correlations (Table 2) indicate that all EO dimensions are positively and significantly associated with SME performance (r = .389 to .521, p < .001). Intercorrelations among EO dimensions are moderate. Variance Inflation Factors (VIFs) for all predictors in subsequent regression models range from 1.283 to 3.359, indicating no multicollinearity concerns.

- *Hierarchical Regression Analysis*

Table 3 presents the hierarchical regression results with HC3 robust standard errors.

Table 3. Hierarchical Regression Predicting SME Performance (HC3 Robust SEs)

Predictor	Model 1 b (SE)	Model 2 b (SE)	Model 3 b (SE)
Constant	3.416*** (.275)	1.112* (.433)	1.534*** (.455)
Firm age	0.0002* (.0001)	0.0002 (.0003)	0.0002 (.0003)
Employees	0.0051 (.0057)	-0.0011 (.0065)	-0.0008 (.0057)
Owner age	-0.0138* (.0056)	-0.0058 (.0053)	-0.0045 (.0053)
Male owner	0.1042 (.108)	0.1290 (.093)	0.0916 (.090)
Education	0.0370 (.036)	0.0165 (.034)	0.0050 (.033)
Manager tenure	0.0774*** (.022)	0.0411* (.019)	0.0354* (.018)
Innovativeness	—	0.2594** (.082)	0.2345** (.078)
Proactiveness	—	0.0827 (.107)	0.1059 (.096)
Risk-taking	—	0.0928 (.074)	—

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Predictor	Model 1 b (SE)	Model 2 b (SE)	Model 3 b (SE)
Centered risk-taking	—	—	0.0733 (.061)
Risk-taking²	—	—	-0.1705** (.058)
Autonomy	—	0.1514** (.056)	0.1621** (.054)
Competitive aggressiveness	—	0.0722 (.081)	0.0749 (.081)

Model fit:

Statistic	Model 1	Model 2	Model 3
N	262	262	262
R^2	.092	.394	.428
Adjusted R^2	.070	.367	.400
ΔR^2	—	.302	.034
Breusch–Pagan χ^2	—	14.274	11.265
Breusch–Pagan p	—	.218	.506

Model 1 includes control variables only and explains 9.2% of the variance in SME performance (R^2 = .092, Adjusted R^2 = .070). Among the controls, manager tenure is positively associated with performance (b = 0.077, p < .001), while owner age is negatively associated (b = -0.014, p < .05). Other controls are not statistically significant.

Model 2 introduces the EO dimensions and explains 39.4% of the variance in SME performance (R^2 = .394, Adjusted R^2 = .367). This represents a substantial increase in explanatory power, with EO contributing an additional 30.2% of variance (ΔR^2 = .302). In this model, innovativeness (b = 0.259, p < .01) and autonomy (b = 0.151, p < .01) are statistically significant predictors of SME performance. Proactiveness, risk-taking, and competitive aggressiveness are not statistically significant when included jointly with other EO dimensions and controls.

Model 3 incorporates a nonlinear specification of risk-taking. The model explains 42.8% of the variance in SME performance (R^2 = .428, Adjusted R^2 = .400), representing an additional 3.4% increase in explanatory power over Model 2 (ΔR^2 = .034). The squared term for risk-taking is negative and statistically significant (b = -0.171, p < .01), while the linear term remains non-significant. Innovativeness and autonomy remain statistically significant across specifications. Breusch–Pagan tests are non-significant in both Model 2 and Model 3, and HC3 robust standard errors are retained.

➢ *Relative Importance Analysis*

Table 4 presents the Shapley value decomposition of the EO dimensions, conditional on the control variables. The EO block contributes 30.25% of the explained variance in SME performance, consistent with the ΔR^2 observed in Model 2.

Table 4. Relative Importance Analysis (Shapley Value Decomposition, Conditional on Controls)

EO dimension	**Shapley R^2 contribution**	**Share of EO incremental R^2 (%)**	**Statistical significance in Model 2**
Innovativeness	0.1074	35.52	Significant
Autonomy	0.0602	19.91	Significant
Proactiveness	0.0559	18.49	Not significant
Risk-taking	0.0401	13.27	Not significant
Competitive aggressiveness	0.0387	12.81	Not significant
Total EO contribution	0.3025	100.00	—

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Innovativeness accounts for the largest share of the EO contribution (35.52%), followed by autonomy (19.91%) and proactiveness (18.49%). Risk-taking (13.27%) and competitive aggressiveness (12.81%) contribute smaller shares.

A comparison of regression coefficients and Shapley values indicates differences between statistical significance and relative importance. Innovativeness and autonomy are both statistically significant and account for substantial shares of explained variance. In contrast, proactiveness, risk-taking, and competitive aggressiveness are not statistically significant in the regression models, yet they contribute between 12.81% and 18.49% of the EO-related variance in the Shapley decomposition.

- *Summary of Findings*

The inclusion of EO dimensions substantially improves model explanatory power relative to controls alone. Across model specifications, innovativeness and autonomy consistently exhibit statistically significant effects on SME performance. The nonlinear specification of risk-taking introduces a significant squared term, indicating a non-linear relationship. Relative importance analysis shows that all EO dimensions contribute to explained variance, with differing magnitudes compared to their regression coefficients.

VI. DISCUSSION

The findings provide strong evidence that Entrepreneurial Orientation (EO) is not a uniformly performance-enhancing construct but a multidimensional and context-contingent strategic posture, reinforcing ongoing debates in the literature. While the inclusion of EO dimensions substantially improves explanatory power ($\Delta R^2 = 0.302$), the effects are uneven across dimensions, indicating that the EO–performance relationship is more complex than traditionally assumed.

A central result is the consistent significance of innovativeness and autonomy, which emerge as the primary drivers of SME performance. This aligns with prior studies that highlight innovation as a critical source of competitive advantage, particularly in resource-constrained environments (Rosenbusch et al., 2011; Mwiya et al., 2026). Similarly, the positive effect of autonomy supports arguments that decentralized decision-making enhances responsiveness and adaptability in SMEs (Lumpkin et al., 2009). From a Resource-Based View perspective, these dimensions represent internally embedded capabilities that can be effectively deployed regardless of external constraints, explaining their stable performance effects.

In contrast, the absence of statistically significant effects for proactiveness and competitive aggressiveness is consistent with emerging evidence that these dimensions are context-sensitive rather than universally beneficial (Kreiser et al., 2013; Wales et al., 2013). Studies in developing economies have similarly reported weak or inconsistent effects of these dimensions due to institutional limitations and market inefficiencies (Boso et al., 2013; Neneh, 2019). Within the Zambian context, characterized by informality and limited market transparency, the ability to anticipate or aggressively respond to market opportunities may not translate into measurable performance gains. This supports insights from Institutional Theory, which suggest that the effectiveness of strategic actions depends on the quality of institutional frameworks (North, 1990; Peng et al., 2008).

The findings also reveal a critical distinction between statistical significance and relative importance. Although proactiveness, risk-taking, and competitive aggressiveness are not significant in regression models, they collectively account for a meaningful share of explained variance (12.81%–18.49%). This pattern is consistent with recent calls in the literature to move beyond coefficient-based interpretations and adopt variance-based and configurational approaches to better capture the complexity of EO (Kraus et al., 2018; Wales et al., 2021). It suggests that these dimensions contribute to performance through complementary or interaction effects, rather than through direct linear relationships.

The nonlinear effect of risk-taking further reinforces this complexity. The inverted U-shaped relationship indicates that moderate risk-taking enhances performance, while excessive risk reduces it. This finding is consistent with prior studies that document nonlinear EO–performance relationships (Tang et al., 2008; Hughes & Morgan, 2007). In the context of SMEs, this can be explained through risk amplification logic, where limited resources and weak institutional buffers magnify the consequences of strategic risk. Unlike large firms, SMEs cannot absorb high levels of uncertainty, making optimal - not maximal - risk-taking the most effective strategy.

Taken together, these findings support a shift toward a configurational and context-sensitive understanding of EO, conceptualized here as an "Entrepreneurial Orientation Performance Architecture." Within this framework, EO dimensions function as interdependent but unequal components, where some act as core drivers (innovativeness, autonomy) and others play conditional roles depending on environmental and resource conditions. This perspective extends the EO dimensionality debate by demonstrating that differences across dimensions are not merely empirical inconsistencies but reflect underlying mechanisms shaped by context and capability constraints.

Overall, the study contributes to theory by integrating insights from RBV and Institutional Theory to explain why EO dimensions exhibit heterogeneous effects. It also aligns with and extends prior empirical research by showing that the effectiveness of entrepreneurial behavior is contingent on both internal capabilities and external conditions, particularly in emerging economies such as Zambia.

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VII. CONCLUSION AND RECOMMENDATIONS

➢ *Conclusion*

This study provides a more refined understanding of the EO–performance relationship by demonstrating that Entrepreneurial Orientation is best conceptualized as a multidimensional and context-contingent system of strategic capabilities, rather than a uniform construct. While EO significantly enhances explanatory power, its effects are uneven across dimensions, with innovativeness and autonomy emerging as the primary performance drivers. These dimensions consistently translate into performance outcomes because they are internally grounded and less dependent on external institutional conditions.

In contrast, proactiveness and competitive aggressiveness do not exhibit independent effects, reflecting their reliance on favorable market structures and institutional stability. Their contribution is therefore better understood as conditional and embedded within broader strategic configurations. Similarly, the nonlinear relationship observed for risk-taking confirms that its effectiveness is bounded; moderate risk enhances performance, whereas excessive risk becomes detrimental, particularly in resource-constrained SME environments.

Collectively, these findings reinforce the need to move beyond aggregate EO measures toward a context-sensitive and mechanism-based understanding of entrepreneurial behavior. In emerging economies such as Zambia, where institutional constraints and resource limitations are pronounced, the value of EO lies not in its overall presence but in how specific dimensions are deployed and aligned with contextual realities.

➢ *Recommendations*

SME managers should prioritize innovation and autonomy as core strategic capabilities. Risk-taking should be carefully moderated, while proactiveness and competitive aggressiveness should be applied selectively based on market conditions.

Policymakers should strengthen the business environment by improving access to finance, regulatory efficiency, and market information. Supporting innovation and skills development is critical to enhance SME performance.

Future studies should use longitudinal designs, apply variance decomposition methods, and adopt configurational approaches (e.g., fsQCA) to better capture the complex and context-dependent nature of EO.

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