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Research Article

Entrepreneurial Orientation Dimensions and Business Performance of Retired Public Servants from Technical Institutions in Tanzania: The Moderating Role of Learning Orientation

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Abstract

This study examined the role of entrepreneurial orientation (EO) dimensions on the business performance of enterprises owned by retired public servants from technical institutions in Tanzania. Guided by Entrepreneurial Orientation and Experiential Learning Theory, the study employed a quantitative approach, collecting data from 206 retired entrepreneurs using purposive and systematic sampling techniques. Partial Least Squares Structural Equation Modelling (PLS-SEM) was applied to assess the relationships between EO dimensions and business performance. The results revealed that proactiveness had the strongest positive effect on performance ($\beta = 0.334$, $p < 0.001$), followed by innovativeness ($\beta = 0.241$, $p < 0.01$) and risk-taking ($\beta = 0.225$, $p < 0.05$), indicating that retirees who actively pursued opportunities, introduced new ideas, and took calculated risks achieved better business outcomes. Moderation analysis clarified the role of Learning Orientation (LO): it positively strengthened the effect of innovativeness on performance ($\beta = 0.162$, $p = 0.032$) but weakened the proactiveness–performance relationship ($\beta = -0.222$, $p = 0.033$). LO did not significantly moderate the relationship between risk-taking and performance ($\beta = -0.014$, $p = 0.438$). These findings extend EO theory to retired entrepreneurs and highlight the nuanced role of experiential learning in enhancing business outcomes. Practically, the results inform policymakers and program designers on supporting retirees transitioning into entrepreneurship by emphasizing proactive opportunity-seeking, innovative practices, and structured learning, while recognizing that risk-taking outcomes may depend on contextual or environmental factors.

Keywords: Entrepreneurial Orientation, Innovativeness, Pro-activeness, Risk-Taking, Business Performance, Retired Entrepreneurs

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Introduction

Entrepreneurship has increasingly become an important livelihood strategy for individuals transitioning from formal employment to retirement (Aikhuomogbe, 2016; Bhandari, 2013; Curran & Blackburn, 2005; Sridharan, Maltz, Viswanathan, & Gupta, 2014). In Tanzania, many retired public servants establish small businesses to sustain their income and maintain social and economic stability (Namala & Milanzi, 2020). Despite their extensive professional experience, exposure to administrative systems, and technical expertise, the performance of retiree-owned enterprises varies considerably, with many struggling to grow or survive in competitive markets (Kodia, 2014; Namala & Milanzi, 2020).

Entrepreneurial orientation (EO) has been widely recognized as a key driver of firm performance across different contexts. It encompasses behavioral dimensions such as innovativeness, proactiveness, and risk-taking, which influence how individuals identify and exploit opportunities. Although numerous studies have examined EO within SMEs, corporate settings, and start-ups, limited attention has been given to how it manifests among retirees operating small-scale enterprises in Tanzania (Chailla, 2003; Covin & Wales, 2012; Meekaewkunchorn, Szczepańska-Woszczyna, Muangmee, Kassakorn, & Khalid, 2021). Retiree entrepreneurship is distinct because individuals enter business later in life, often with limited formal entrepreneurial training but with extensive work experience and established networks. Understanding how EO contributes to business performance in this context is therefore important for informing policies that integrate business knowledge into pre-retirement training programs.

In addition to EO, learning orientation (LO) represents a crucial behavioral attribute that enables individuals and firms to acquire and apply new knowledge in dynamic environments (Baets, 1998; Baker, Mukherjee, & Perin, 2022; Huang, Huang, & Soetanto, 2023). For retirees, adopting a strong LO may influence how EO dimensions translate into actual business success. However, most EO research focuses on organizations or younger entrepreneurs, leaving limited understanding of how EO functions for retirees in developing country contexts and how continuous learning shapes this relationship (Isaga & Musabila, 2017; Meekaewkunchorn et al., 2021; Ringo, Kazungu, & Tegambwage, 2023).

The persistent underperformance of retiree-owned businesses in Tanzania, despite retirees' accumulated professional experience and skills, presents a significant challenge (Namala & Milanzi, 2020; Shiamwama, Ombayo, & Mukolwe, 2014).This study addresses this issue by examining how EO dimensions: innovativeness, proactiveness, and risk-taking influence business performance (Hossain et al., 2022; Lumpkin & Dess, 1996) while also exploring the moderating role of learning orientation (Slater & Narver, 1995). By focusing on retired public servants from technical institutions, the study highlights a population with strong potential for post-retirement entrepreneurship that has received limited scholarly

attention (Amani & Fussy, 2023; Mwakujonga & Peter, 2023).

Theoretically, this study extends entrepreneurial orientation theory to the level of individual retirees and integrates experiential learning theory to demonstrate how learning orientation shapes entrepreneurial outcomes (Ferreira & Coelho, 2020; Kolb, Boyatzis, & Mainemelis, 2014). Empirically, it contributes to the limited literature on retiree entrepreneurship in Sub-Saharan Africa by providing context-specific evidence from Tanzania.

The central research question guiding this study is: how do EO dimensions and learning orientation affect retirees' business performance? By analyzing data collected between August 2024 and March 2025, the study aims to generate insights that inform retirees, policymakers, and financial institutions.

Literature

Theoretical review

This study is grounded in entrepreneurial orientation theory (EOT) and experiential learning theory (ELT) to examine how the strategic behaviors of retiree's influence enterprise performance after retirement. EOT, developed by Covin and Slevin (1991), identifies innovativeness, proactiveness, and risk-taking as central drivers of entrepreneurial decision-making. Empirical studies consistently link high entrepreneurial orientation (EO) with improved performance, particularly in opportunity recognition, market responsiveness, and adaptability in dynamic environments (Chow & Hock, 2021; Rauch, Wiklund, Lumpkin, & Frese, 2009). ELT complements this perspective by emphasizing how individuals transform accumulated experience into actionable knowledge through reflective and experiential processes. Despite extensive EO research within small and medium enterprises, limited attention has been given to retired individuals in developing economies (Ng'aru, 2019; Ringo et al., 2023). This gap highlights the relevance of studying Tanzanian retirees, who represent a transitional group with rich experiential capital but often face resource constraints and socio-economic vulnerabilities.

ELT, as conceptualized by Kolb et al. (2014), frames learning as a cyclical process involving concrete experience, reflective observation, abstract conceptualization, and active experimentation. In this study, ELT is applied to explore how retirees past professional experiences shape their learning orientation (LO) and, in turn, entrepreneurial outcomes. LO reflects an individual's willingness to acquire, share, and apply knowledge, thereby enhancing adaptive capacity (Ferreira & Coelho, 2020). While evidence from Sub-Saharan Africa suggests that reflective learning and experimentation positively affect firm outcomes, ELT has been critiqued for its linear structure and limited attention to social and cultural influences (Hossain et al., 2022). By incorporating LO as a moderating factor, this study extends ELT to better suit collectivist contexts.

Overall, the research integrates EO and ELT into a concise framework for understanding retiree entrepreneurship in Tanzania. EO explains strategic behavior, while ELT and LO shape how experiential knowledge is processed and applied.

Empirical Literature Review and Hypotheses

This manuscript reviews literature on retirees' innovativeness, proactiveness, and risk-taking, and their effects on business performance, learning orientation, and post-retirement enterprise outcomes.

The growing participation of retirees in entrepreneurship highlights the need to understand how innovativeness interacts with firm performance. Innovativeness, defined as the tendency to introduce new products, processes, or managerial practices, remains central to entrepreneurial orientation and is widely linked to competitive advantage (Rauch et al., 2009). Evidence suggests that retirees accumulated professional experience and domain expertise can strengthen innovative capacity, leading to improved performance through deeper knowledge and strategic creativity (Murmann, Salmivaara, & Kibler, 2023; Stephens & Hegarty, 2022). However Financial constraints and limited access to resources can reduce the benefits of innovation among older entrepreneurs (Fraser, Bhaumik, & Wright, 2015; Hewitt-Dundas, 2006; Oriazowanlan & Idehen, 2024). Research further indicates that when innovativeness is combined with proactiveness and calculated risk-taking, stronger performance outcomes emerge, underscoring the interdependence of entrepreneurial orientation dimensions (Adetunji & Gumede, 2024; Kreiser, Marino, Kuratko, & Weaver, 2013).

Conceptual developments also show that retiree innovation extends beyond product development to include managerial and process improvements that enhance SME productivity (Dutz & Sharma, 2012; Rathee & Rajain, 2022). Nonetheless, factors such as health limitations and restricted learning opportunities can constrain innovative engagement, particularly in low-income settings (Pardasani & Thompson, 2012; Rodriguez, Neri, & Wu, 2025). Overall, the literature positions innovativeness as a critical but context-dependent driver of post-retirement business success, shaped by financial, technological, and institutional conditions and reinforced by complementary entrepreneurial behaviors

Accordingly, the study has a hypothesis which is

H1: Innovativeness has a positive effect on business performance of the retirees.

Proactiveness of Retirees and Business Performance

Proactiveness refers to a forward looking tendency to anticipate and act on the future opportunities before other competitors (Covin & Miller, 2014; Wales, Gupta, Marino, & Shirokova, 2019). For the retirees, proactiveness is a synthesis of career acquired foresight with renewed entrepreneurial engagement in order to sustain venture activity and adaptive response to environmental change (Rönkkö, von Bonsdorff, & Mansikkamäki, 2024; Shane, 2003). Training interventions to create anticipatory behaviours have further positive implications for post-retirement readiness and success (Oriazowanlan & Idehen, 2024; Rae, 2017). Empirical findings, however, are diverse. Dominant frameworks prioritize market oriented proactiveness - opportunity scanning and competitive positioning - at the expense of internal dimensions such as process innovation and human capital development (Barney, 1991; Hodgkinson, Hughes, Leite, & Lee, 2023). Contrasting evidence suggests that internal proactiveness, in the form of operational efficiency and empowerment of staff, may have stronger performance effects than market scanning alone (Hodgkinson et al., 2023). Sectoral and spatial disparities further condition outcomes: proactiveness has more variance in service sector than in rural enterprise performance and urban SMEs than in rural enterprises, where the presence of resource constraints dampens its effect (Brush, De Bruin, & Welter, 2009; Omowole, Olufemi-Philips, Ofodili, Eyo-Udo, & Ewim, 2024).

Environmental volatility and competitive saturation moderates the effectiveness also; proactiveness is beneficial in stable or growing markets but may be less beneficial in conditions of extreme instability or fierce competition (Autio, Kenney, Mustar, Siegel, & Wright, 2014; Eisenhardt & Martin, 2017; Tvedt & Lunnan, 2025), although counter examples exist where proactive retirees achieved diversification and market expansion (Autio et al., 2014; Prachyapruit, 2023). Synthesizing on these strands, proactiveness reveals itself as a critical yet context contingent driver of retiree entrepreneurial performance, its efficacy contingent on access to resources, institutional support, sectoral dynamics, and the balance between internal and market-oriented strategies.
Hence, the study tests:
H2: Proactiveness has a positive influence on the business performance of the retirees.

Risk-Taking of Retirees and Business Performance

Risk-taking, a core dimension of entrepreneurial orientation, refers to an individual's willingness to commit resources to uncertain opportunities in pursuit of potential returns (Covin & Miller, 2014; Dess & Lumpkin, 2005). Among retirees, risk-taking reflects a careful balance between prudence and entrepreneurial ambition. Prior managerial and professional experience can enhance the ability to assess uncertainty, enabling calculated exposure that supports firm performance (March & Shapira, 1987; Simamora, 2025). Longitudinal evidence further suggests that sustained and strategic engagement with risk is associated with SME growth and performance stability (Ngo & Vu, 2025; Tversky & Kahneman, 2015).

However, findings remain mixed and highly context-dependent. Risk aversion may help preserve household and business solvency but can also limit expansion in competitive markets (Ringo et al., 2023). Cross-country comparisons reveal contrasting outcomes: risk-taking has been linked to improved performance among retirees in Brazil, yet negative effects have been observed in less stable environments such as South Africa, highlighting the importance of institutional and macroeconomic conditions (Hossain et al., 2022). Moreover, excessive risk exposure can lead to liquidity shortages and operational distress, underscoring the dangers of unmoderated risk behavior (Covin & Slevin, 1991).

Conceptual distinctions between financial and strategic risk provide further insight. Financial risk-taking, including decisions related to capital allocation and leverage, may yield short-term performance gains, whereas strategic risk-taking such as market repositioning or product diversification often involves longer-term uncertainty (Hossain et al., 2022). Industry dynamics also play a moderating role, as high-velocity sectors like technology typically reward higher risk appetites, while traditional industries offer lower returns to risk (Embong, Afzainizam, Norhashim, & Ahmadi, 2021). Overall, the literature indicates that balanced, context-aware risk-taking supports retiree enterprise performance, while both excessive caution and reckless exposure can undermine long-term viability.

Synthesizing these strands, the study progresses a balanced proposition:
H3: Risk taking has a positive effect on the business performance of retirees, conditional on measured application, sectoral fit and institutional support.

Learning Orientation, Entrepreneurial Orientation Dimensions and Retirees' Business Performance

Entrepreneurial orientation (EO) remains a central framework for explaining firm behavior through innovativeness, proactiveness, and risk-taking (Hodgkinson et al., 2023; Ringo et al., 2023). However, EO alone does not fully account for performance differences among retiree-owned enterprises. As a result, scholars emphasize learning orientation (LO)—the commitment to acquire, share, and apply knowledge—

as a critical capability that shapes how EO translates into outcomes (Cohen & Levinthal, 1990; Nnko & John, 2022; Sinkula, Baker, & Noordewier, 1997). LO is particularly important for retirees, who must adapt to new technologies, evolving markets, and emerging practices after leaving formal employment.

Empirical research increasingly highlights the moderating role of LO. Cheng, Zhang, Zhang, and Jiang (2022), studying 300 retiree-owned SMEs in China, found that firms with strong LO exhibited a significantly enhanced EO–performance relationship (R^2 = 0.67, p = 0.01), supporting theories of organizational learning and absorptive capacity(Cohen & Levinthal, 1990; March & Shapira, 1987). Similarly, Mbogo, Olando, and Macharia (2023) using structural equation modeling on 250 retiree firms in Kenya, reported that LO improved adaptability, decision quality, and managerial responsiveness, thereby reinforcing the performance effects of EO (Zahra & George, 2002).

However, contrasting evidence underscores the importance of context. Sawaean and Ali (2020), found LO to be an insignificant moderator in a longitudinal UK study (R^2 = 0.30, p = 0.06), suggesting that retirees in low-innovation sectors rely more on accumulated experience than continuous learning. Industry characteristics and innovation intensity appear to influence LO's effectiveness. Deku, Wang, Danquah, and Narain (2021), observed strong moderating effects in high-technology, knowledge-intensive sectors, while more routine industries showed weaker relationships.

Overall, LO emerges as a vital yet context-dependent moderator. It strengthens the benefits of EO when firms possess sufficient absorptive capacity, operate in supportive environments, and align with sectoral demands, but its impact diminishes where learning opportunities and innovation incentives are limited. Accordingly, the current research contributes to the following hypothesis:

H4: Learning orientation moderates the influence of entrepreneurial orientation dimensions (innovativeness, proactiveness and risk taking) on business performance of the retirees.

The hypotheses developed as a result of this review provide information for the conceptual framework (Figure 1) that places the EO practices as the independent variables that influence the performance of business by the retirees (dependent variable) with LO identified as a moderator.

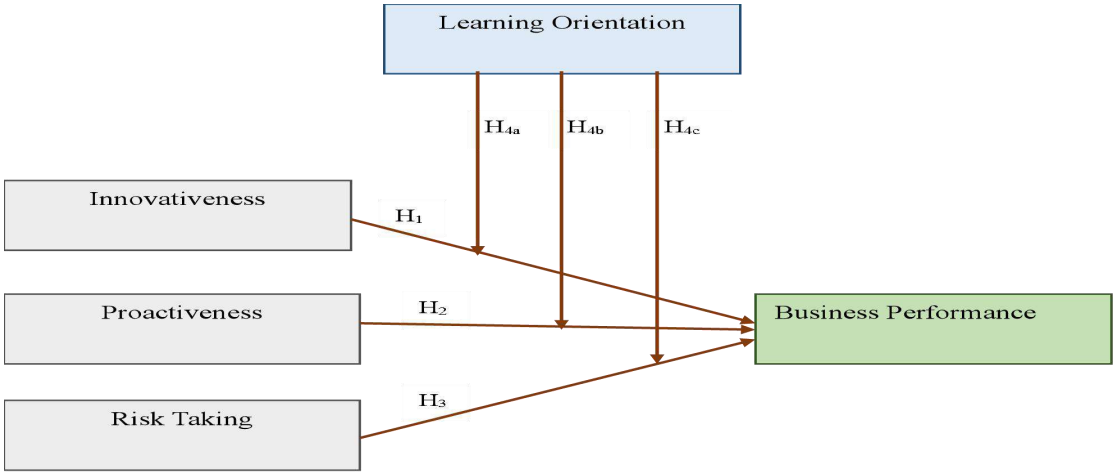

Figure 1: Conceptual model

H4a: Learning Orientation (LO) moderates the relationship between innovativeness and business performance of retirees.

H4b: Learning Orientation (LO) moderates the relationship between proactiveness and business performance of retirees.

H4c: Learning Orientation (LO) moderates the relationship between risk-taking and business performance of retirees.

Methodology

Research Design and Procedures

Cross-sectional research design was used to assess entrepreneurial orientation (EO) dimensions innovativeness, proactiveness, and risk-taking affect the business performance of retired public servants of technical institutions of mainland Tanzania. The cross-sectional approach was suitable in that it allows data to be gathered at a single point in time to investigate existing relationships among variables within available resources and time constraints (Chih-Pei & Chang, 2017). The research followed a deductive reasoning approach, which was based on a positivist epistemology, that is, assumptions about the extent of social phenomena that can be measured objectively and causal explanations that can be tested by empirical research.

Population and Sampling

The target population comprised retired personnel from selected technical institutions. The sample size was determined using Umar and Wachiko (2021) stated Yamane's (1967) formula at a 95% confidence level and a 5% margin of error, consistent with established practice for known populations (Umar & Wachiko, 2021). From a sampling frame of 424 retirees, a final sample of 206 respondents was obtained. Participants were drawn from six technical institutions, with retirees identified through alumni databases and contacted via email and telephone.

A multi-stage sampling procedure was applied to ensure geographic and institutional representation. First, regions with major technical institutions and notable retiree entrepreneurial activity were purposively selected. Second, regional headquarters were identified. Third, retirees who had transitioned into business were screened and included in the sampling frame. Fourth, each eligible retiree was assigned a sequential number from 1 to 424. Finally, systematic sampling using odd-number selection produced the final sample.

Data Collection

Primary data were collected using a structured questionnaire comprising sections on demographics, innovativeness, proactiveness, risk-taking, learning orientation, and business performance. Entrepreneurial orientation (EO) items were adapted from established scales (Covin & Miller, 2014; Dess & Lumpkin, 2005), learning orientation (LO) items from Sinkula et al. (1997), and performance measures from Wiklund and Shepherd (2005). Responses were captured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The instrument was piloted with 20 retirees outside the study sample to assess clarity and reliability. Internal consistency was evaluated using Cronbach's alpha, with values ranging from 0.860 to 0.907, exceeding accepted thresholds for reliability (Holmbeck & Devine, 2009; Saruni, Urassa, & Kajembe, 2018). The questionnaire was administered both physically and electronically to enhance accessibility, and data collection was conducted over six weeks with support from institutional representatives in Arusha, Dodoma, and Mbeya. Informed consent was obtained from all participants, who were assured of voluntary participation, confidentiality, and anonymity. Ethical approval was secured from the relevant institutional authority.

Table 1: Measurement and operationalization of variables

CONSTRUCT	INDICATOR	SOURCE
Innovativeness of Retirees	IR 3: I encourage my employees to suggest new ideas. IR 4: I am willing to take risks on new and untested ideas. IR 5: I am comfortable with change and adaptation in my Business. IR 6: I consider myself to be a creative problem solver. IR 7: I stay up-to-date on industry trends and innovations. IR 8: I invest in research and development for my Business.	Zhang et al. (2014)
Proactiveness of Retirees	PR 2: I take initiative to identify and solve problems before they arise. PR 4: I develop strategic plans for the future of my Business. PR 5: I am persistent in achieving my business goals. PR 6: I am not afraid to take calculated risks. PR 7: I look for opportunities to expand my Business.	Zhang et al. (2014)
Risk-Taking of Retirees	RT 1: I am willing to take calculated risks to achieve my business goals. RT 3: I believe that taking risks is essential for Business growth. RT 4: I am comfortable with the possibility of failure. RT 5: I have a strong tolerance for ambiguity. RT 7: I have a contingency plan in place for unexpected events.	Zhang et al. (2014)
Learning Orientation	LO 1: I actively seek out new information and skills relevant to my Business. LO 2: I encourage my employees to learn and develop new skills. LO 3: I am open to feedback and willing to learn from my mistakes. LO 4: I attend industry events and conferences to stay up-to-date. LO 5: I invest in training and development programs for myself and my employees. LO 6: I am comfortable learning new things, even if they	Sinkula et al. (1997)

CONSTRUCT	INDICATOR	SOURCE
	are outside of my area of expertise. LO 7: I believe that a learning culture is important for innovation. LO 8: I am constantly looking for ways to improve my knowledge and skills. LO 9: I readily adapt to new technologies and Business practices. LO 10: I view challenges as opportunities to learn and grow.	
Business Performance	PM 1: Profitability PM 3: Customer satisfaction PM 4: Market share PM 5: Employee satisfaction PM 6: Innovation PM 7: Efficiency PM 8: Adaptability	Shah and Ahmad, (2019)

Source: Data analysis (2025)

Despite methodological rigor, some limitations are noted. The cross-sectional design restricts causal inference, as data were collected at a single point in time. Reliance on self-reported measures may introduce common method bias and subjective responses. Additionally, the focus on retirees from selected technical institutions in Tanzania may limit generalizability, and the sampling approach may still involve some selection bias

Data Analysis Techniques

Data analysis was conducted using SPSS (Version 27) and SmartPLS 4. Initial data screening ensured completeness and accuracy. Missing values accounted for less than 5% of responses and were handled using mean substitution. Outliers were assessed through boxplots and found not to distort the distribution. Given the study's objective to test both direct and moderating effects, Partial Least Squares Structural Equation Modelling (PLS-SEM) was employed. This method is suitable for predictive analysis, complex models, and the inclusion of moderating variables (Hair et al., 2021). The analysis followed two stages: evaluation of the measurement model and assessment of the structural model.

The measurement model examined the reliability and validity of constructs related to entrepreneurial orientation (EO), learning orientation (LO), and business performance. Reliability was assessed using Cronbach's alpha and Composite Reliability (CR), with acceptable thresholds set at 0.70 and above. Convergent validity was confirmed through Average Variance Extracted (AVE) values exceeding 0.50. Discriminant validity was evaluated using the Fornell–Larcker criterion and cross-loading analysis, confirming that the square roots of AVE exceeded inter-construct correlations and that each indicator loaded most strongly on its respective construct.Bootstrapping with 5,000 subsamples at a 95% confidence level was applied to determine path significance. Model explanatory and predictive power were assessed using R^2 and Q^2 values.

Results

Demographic statistical findings

The study's respondents displayed varied demographic characteristics, as summarized in Table 2, including gender, education level, business experience, and age of the enterprise. These factors collectively shape retirees' participation in entrepreneurship by influencing innovativeness, proactiveness, and risk-taking behavior.

Table 2: Demographic Characteristics

Demographic	Characteristics	Frequency	Percent
Sex	Male	119	66
	Female	62	34
Age	Between 50–64 years	115	63.56
	65 and above years	66	36.44
Education Level	Bachelor Degree	72	39.63
	Masters' Degree	86	47.3
	Ph.D.	23	13.03
Experience in SME	1–5 years	36	19.68
	6–10 years	39	21.81
	11–15 years	77	42.29
	16 years and above	29	16.22

Age of the SME	1–5 years	94	51.86
	6–10 years	52	28.99
	11–15 years	19	10.37
	15 years and above	16	8.78
Size of Business	Micro (1–4 employees)	68	37.57
	Small (5–49 employees)	91	50.28
	Medium (50–99 employees)	22	12.15
Type of Business	Services	74	40.88
	Trading	49	27.07
	Manufacturing	33	18.23
	Agribusiness	25	13.82

Source: Field Data, (2024)

The sample was predominantly male (66%), with females accounting for 34%. Most respondents were aged between 50 and 64 years (63.56%), while 36.44% were 65 years and above. This distribution suggests that entrepreneurial behaviors may differ by gender, with male dominance potentially skewing findings toward higher levels of risk tolerance and proactiveness.

In terms of education, respondents were highly qualified: 47.3% held master's degrees, 39.63% held bachelor's degrees, and 13.03% had PhDs. This indicates strong cognitive and analytical capacity, which may enhance the application of entrepreneurial orientation principles.Business experience varied, with 42.29% reporting 11–15 years, 21.81% having 6–10 years, 19.68% 1–5 years, and 16.22% over 16 years. This indicates substantial managerial exposure, which likely strengthens decision-making, confidence in risk-taking, and market understanding.

Regarding firm age, 51.86% of businesses were 1–5 years old, 28.99% were 6–10 years, and smaller proportions exceeded 10 years. This suggests many retirees recently entered entrepreneurship, operating in early-stage ventures where innovation, proactiveness, and learning are critical for growth and survival.

Descriptive Statistics

The study focused on innovativeness, proactiveness, and risk-taking items measured using a 5-point Likert scale. The items were adapted and analysed to align with the study objectives, as presented in Table 1. Findings on innovativeness indicate generally positive tendencies among respondents. Retirees reported actively exploiting new ideas from employees (mean = 3.59) and showed comfort with change and adaptation (mean = 3.79). They also identified themselves as creative problem solvers and as keeping up with industry trends (mean ≈ 3.79).

Regarding business performance, the results show moderate to strong perceived outcomes across key indicators. Respondents reported profitability growth (mean = 4.12), consistent revenue growth (mean = 3.86), customer satisfaction (mean = 3.81), market share expansion (mean = 3.89), and employee satisfaction and commitment (mean = 4.00).

Proactiveness results show that retirees generally adopt forward-looking business behaviours. They reported taking initiative in problem-solving (mean = 3.67), engaging in strategic planning (mean = 3.64), remaining persistent in achieving goals (mean = 3.87), and actively seeking opportunities for expansion (mean = 3.61).

Risk-taking attitudes were also relatively strong. Respondents expressed willingness to take calculated risks (means ranging from 3.57 to 4.15), agreed that risk is necessary for growth (mean = 4.03), and showed comfort with possible failure (mean = 4.15). However, slightly lower agreement was observed for maintaining contingency plans (mean = 3.57), suggesting a generally pragmatic but not fully formalized approach to risk management.

Assessment of Measurement Model

The measurement model assessed the reliability and validity of the constructs (innovativeness, proactiveness and risk taking) using composite ratability for internal consistency, average variance extracted (AVE) and Fornell-Larcker Criterion for validity.

Table 3: Construct Reliability and Validity

Construct	Cronbach's Alpha	Composite Reliability (ρa)	Composite Reliability (ρc)	AVE
Innovativeness (IR)	0.905	0.906	0.927	0.681
Business Performance (PM)	0.907	0.909	0.927	0.644
Proactiveness (PR)	0.867	0.87	0.904	0.654

Risk-Taking (RT)	0.86	0.862	0.9	0.643

Source: Data analysis (2025)

Table 3 indicates a reflective measurement model was used, as indicators were conceptualized as manifestations of latent constructs. The model's reliability and validity were examined through four key criteria: internal consistency, indicator reliability, convergent validity, and discriminant validity (Arbale & Mutisya, 2024; Straub, Boudreau, & Gefen, 2004). Composite Reliability (CR) values ranged between 0.862 and 0.909, exceeding the 0.70 threshold (Hair et al., 2021), indicating strong internal consistency. Individual item loadings varied from 0.702 to 0.867**,** all significant at $p < 0.001$, confirming acceptable indicator reliability. The Average Variance Extracted (AVE) values ranged between 0.643 and 0.681, demonstrating adequate convergent validity since all values exceeded 0.50. Discriminant validity was established using the Fornell–Larcker criterion and cross-loading analysis. The square roots of AVE were higher than inter-construct correlations, and each indicator loaded most strongly on its respective construct (Fornell & Larcker, 1981).

Structural Model Assessments

After determining the reliability and validity, the structural model was assessed using Coefficient of Determination (R2) and path coefficients. The model had an R2 of .537, which means that 53.7% of the variance in business performance (PM) was explained by both innovativeness (IR) and proactiveness (PR) as well as risk taking (RT) combined. This indicates a moderate to strong explanatory power,Table 4 presents the path coefficients and hypothesis testing results for the three direct relationships

Table 4: Path Coefficients and Hypothesis Testing-Direct relationship

Hypothesis	Path	β	T-Statistic	P-Value	Decision
H1	IR → PM	0.241	3.339	0	Accepted
H2	PR → PM	0.334	4.2	0	Accepted
H3	RT → PM	0.225	2.548	0.005	Accepted

Source: Data analysis (2025)

Bootstrapping using 5,000 subsamples supported the robustness of path coefficients 95% confidence. The results indicate that proactiveness (β=0.334) had the highest impact of positive association on the business performance followed by innovativeness (β=0.241) and risk-taking (β=0.225). All paths were statistically significant ($p < 0.05$) and validated hypothesized relationships. The Q^2 value of 0.343 affirmed the medium predictive relevance of the model showing that entrepreneurial orientation is a significant explanatory factor for business performance by the retirees in Tanzania.

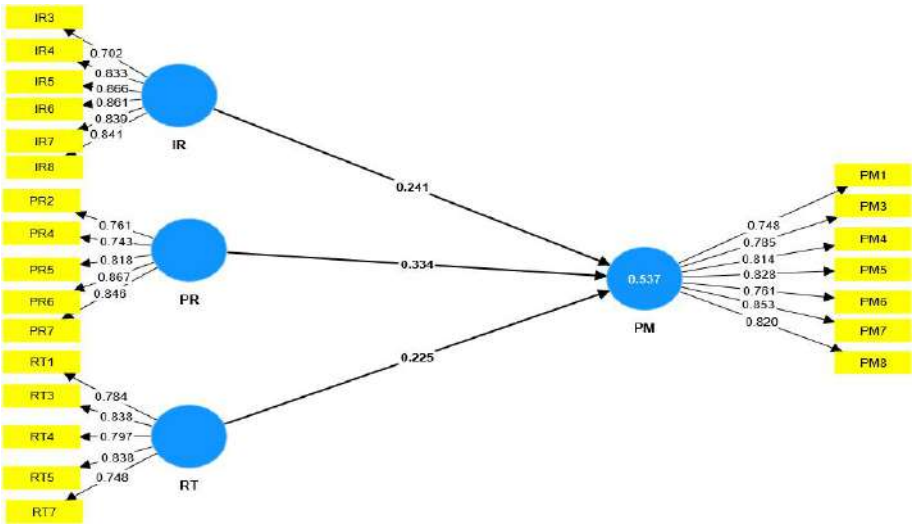

Figure 2: Measurement model

Overall, the PLS-SEM results demonstrate a well-fitting, reliable, and valid model. Entrepreneurial orientation dimensions particularly proactiveness play a pivotal role in enhancing the performance of businesses owned by retired public servants.

Moderation Relationship

Moderation describes a situation in which the strength or direction of a relationship between an independent variable and a dependent variable varies depending on the level of a third variable, known as a moderator. Several approaches exist for specifying this interaction—such as the product indicator method, orthogonalizing approach, and two-stage method—but the two-stage method is frequently preferred because of its flexibility and suitability for models that include latent constructs (Dawson, 2014;

Memon et al., 2019). This study adopted the two-stage approach in SmartPLS to test whether learning orientation (LO) alters the effect of entrepreneurial orientation dimensions on the performance of SMEs operated by retirees,with results summarised in Table 5.

Table 5: moderation analysis

Relationship	Path Coefficient	Sample Mean	STDEV	t-value	p-value	Interpretation
LO × IR → PM	0.162	0.149	0.087	1.856	0.032	LO strengthens IR → PM
LO × PR → PM	–0.222	–0.200	0.121	1.837	0.033	LO weakens PR → PM
LO × RT → PM	–0.014	–0.024	0.088	0.156	0.438	No moderation

Source: Data analysis (2025)

The results of the moderation analysis indicate that learning orientation meaningfully modifies the influence of innovativeness (IR) and proactiveness (PR) on performance. Specifically, LO strengthened the positive relationship between IR and business performance, suggesting that the benefits of innovativeness are more pronounced for retirees who maintain a strong learning culture. LO also moderated the PR–performance link with a negative coefficient (β = −0.222), indicating that higher learning orientation weakens rather than strengthens the proactiveness–performance relationship. This suggests that retirees with strong learning habits may become more deliberate and reflective in their decision-making, which can slow the speed-to-action advantage that proactiveness typically provides, thereby reducing its direct effect on performance. In contrast, LO did not moderate the relationship between risk-taking (RT) and performance, indicating that the performance implications of risk-taking remain relatively stable regardless of learning intensity,as illustrated in Figure 3.

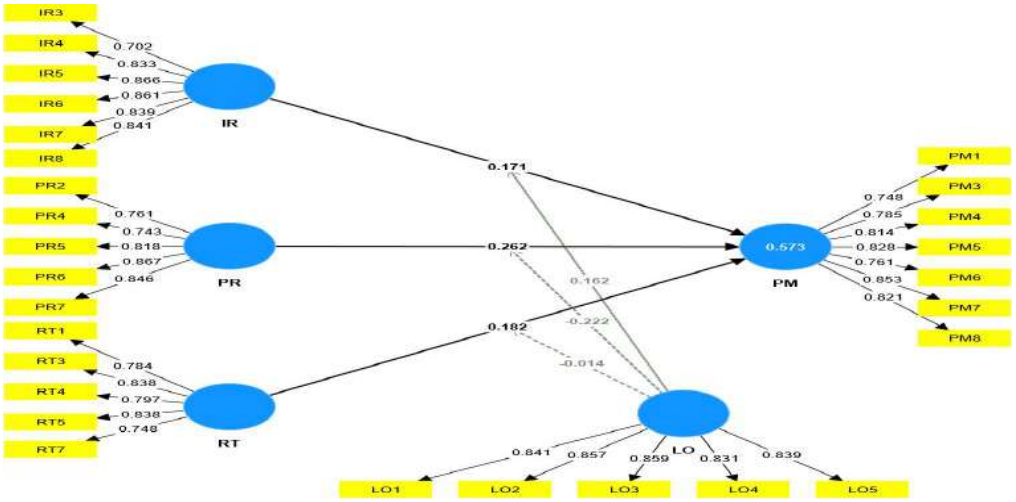

Figure 3: Moderation analysis

The addition of learning orientation as a moderator increased the amount of explained variance in performance slightly from 0.537 to 0.573. Although the increase seems modest, 6.7% is a substantial improvement that suggests that learning orientation is a meaningful additional source of explanatory power.The findings suggest that the ability to use entrepreneurial attributes to sustain performance gains depends on the extent to which a retiree will invest in continuous learning through training, networking, or upgrading skills.

Importance Performance Map Analysis (IPMA)

Importance-Performance Map Analysis (IPMA) is a widely used analytical tool used to identifying and prioritizing factors that have the greatest impact on a business performance. According to Ringle and Sarstedt (2016), who extend the application path coefficient, IPMA plots the importance of predictor variables on x-axis (PC values) against their performance. The resulting map is interpreted using four quadrants, with the greatest potential for improving business performance found in the lower-right quadrant, followed by the upper-right, lower-left, and upper-left quadrants.

The IPMA results, presented show that proactiveness is the most important factor affecting retirees' business performance, with an importance score of 0.334. Innovativeness follows with a score of 0.241, and risk-taking contributes a score of 0.225. These findings indicate that enhancing proactiveness, along with supporting innovativeness and risk-taking, can have a substantial impact on improving business performance among retirees.

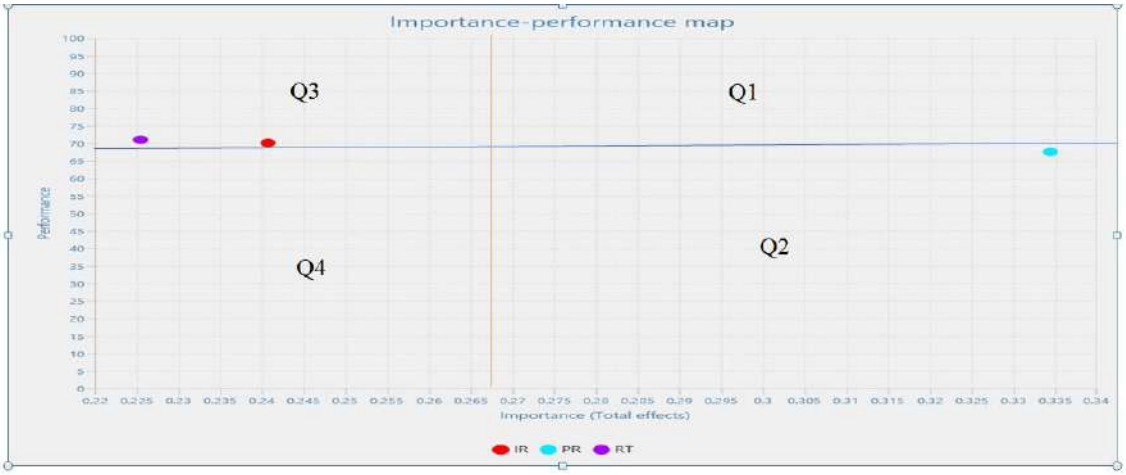

Figure 4: Importance Performance Map Analysis

Discussions

The present study examined the direct influence of entrepreneurial orientation (EO) dimensions innovativeness, proactiveness, and risk-taking on the business performance of retirees from technical institutions in Tanzania. Specifically, it assessed how each EO dimension contributes to profitability, growth, and sustainability of retiree-owned enterprises. The empirical findings provide strong evidence that all three entrepreneurial traits positively and significantly influence business performance, thereby supporting the study hypotheses.

The results confirm hypothesis H1, which proposed that innovativeness has a positive effect on retirees' business performance. The findings show a statistically significant relationship ($\beta = 0.241$, $p < 0.001$), indicating that innovativeness contributes meaningfully to improved outcomes. Retirees who introduce new products, services, or business processes tend to achieve better performance results. This aligns with Okangi (2019), who reported that innovativeness enhances profitability growth in Tanzanian construction firms, and Makhloufi, Laghouag, Ali Sahli, and Belaid (2021), who found that innovative practices improve financial performance in micro-enterprises. From the perspective of Experiential Learning Theory, retirees leverage accumulated experience to generate innovative solutions, thereby improving adaptability and performance.

Hypothesis H2 is also supported, showing that proactiveness has a significant positive effect on business performance ($\beta = 0.334$, $p = 0.000$). This indicates that retirees who anticipate market trends, engage in strategic planning, and pursue emerging opportunities are better positioned to achieve competitive advantage. The results are consistent with Anim, Arthur, and Amoako (2024), who found that proactiveness enhances SME performance in emerging economies. However, contrasting evidence from Hossain et al. (2022), shows that proactiveness does not always significantly influence export performance, suggesting contextual dependency based on sector and resource availability.

Finally, hypothesis H3 is supported, confirming that risk-taking positively influences business performance ($\beta = 0.225$, $p = 0.005$). The findings indicate that retirees who engage in calculated risk-taking, invest in uncertain opportunities, and make bold strategic decisions achieve stronger business outcomes. This aligns with Okangi (2019) and Hossain et al. (2022), who also reported positive effects of risk-taking on firm growth and export performance.

The findings of this study have supported hypothesis H4 (a, b, c). A further contribution of the study lies in establishing the moderating role of learning orientation (LO) in shaping the EO–performance relationship. The moderation analysis revealed that LO amplifies the positive influence of innovativeness on performance but weakens the effect of proactiveness. This suggests that while continuous learning enhances a retiree's capacity to generate and refine new ideas, it may simultaneously slow proactive decision-making by encouraging excessive reflection before action, thereby reducing the direct performance returns of proactiveness (Meekaewkunchorn et al., 2021; Nnko & John, 2022). However, LO did not significantly moderate the relationship between risk-taking and performance, indicating that the benefits of risk-taking are relatively independent of learning intensity. These findings highlight the importance of continuous learning as a complementary capability that helps retirees refine ideas, interpret market signals, and improve decision-making, thereby strengthening the performance benefits derived from entrepreneurial behaviors (Aguinis et al., 2017; Memon et al., 2019).

Comparatively, while all three EO dimensions positively influence business performance, the strength of their effects varies. Innovativeness appears to have the strongest influence, followed by proactiveness and risk-taking Furthermore, the outcomes highlight the importance of retired people engaging in innovation practices, being proactive in discovering opportunities and taking calculated risks to optimize the value of business.

Conclusion

This study shows the importance of entrepreneurial orientation in enhancing the performance of businesses by retired public servants from technical institutions in Tanzania. The results support that innovativeness, proactiveness, and risk taking have a positive and direct effect on the performance of a firm. Innovativeness reinforces the importance of creative and adaptive strategies in competitive business environments.. Proactiveness and risk taking also add important respondent and it helps retirees in opportunity recognition, strategic planning, and growth-oriented decision-making. The study is adding to the theoretical understanding of EO by confirming its relevance in the context of entrepreneurship of retirees. The results vindicate the application of Entrepreneurial Orientation Theory and Experiential Learning Theory in explaining the conversion of entrepreneurial behaviors into concrete outcomes (in terms of performance). Moreover, the research is the empirical evidence from Tanzania that contribute to the limited literature on retiree entrepreneurship and EO in developing countries.

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