Journal of
Entreprenuership and
Project Management
(JEPM)

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CARI
Journals

Journal of Entrepreneurship and Project Management
ISSN: 2520-9116 (Online)
Vol.11, Issue No.6, pp 67 – 90, 2026
www.carijournals.org

Entrepreneurial Orientation and Debt Finance Uptake among the Micro, Small and Medium Enteprises in Kericho County, Kenya

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Accepted: 11th Oct, 2026, Received in Revised Form: 29th Oct, 2026, Published: 15th Nov, 2026

ABSTRACT

Purpose: This study examined the effect of innovativeness and competitive aggressiveness on debt finance uptake among SMEs in Kericho County.

Methodology: The descriptive cross-sectional research design, the study targeted 1,079 SMEs operating within Kericho County with a sample size of 292 SMEs owners/managers/entrepreneurs. The study adopted a stratified random sampling design based on the different sectors. Data were collected via structured questionnaires, yielding a robust 69.5% response rate (n=203). The analytical framework employed descriptive statistics and inferential statistics.

Findings: The study concluded that firm's innovativeness has a positive and significant influence on uptake of debt finance among SMEs in Kericho County, Kenya. The study also concluded that firm's competitive aggressiveness has a positive and significant influence on uptake of debt finance among SMEs in Kericho County, Kenya.

Unique Contribution to Theory, Policy and Practice: Based on the findings, the study recommends that proprietors should develop clear, written competitive strategies including market positioning statements, customer retention protocols, and rapid response tactics—and maintain records of market share trends to substantiate claims of revenue stability during lender assessments.

Keywords: *Entrepreneurial Orientation, Firm's Innovativeness, Firm's Competitive Aggressiveness, Debt Finance, SMEs*

Background of the Study

Entrepreneurial orientation (EO) is a foundational firm-level decision-making architecture encompassing innovativeness and competitive aggressiveness (Wales, 2019; Lumpkin & Dess, 1996; Covin & Wales, 2022). Evolving from a three-dimensional construct (Miller/Covin & Slevin, 1989) to a five-dimensional framework (Lumpkin & Dess, 1996), EO remains a robust determinant of success, though dimensional prominence varies by context (Wales *et al*., 2021; Kallmuenzer *et al*., 2022).

Beyond a static trait, EO is a dynamic capability enabling firms to sense, seize, and reconfigure resources amid environmental shifts (Zahra, Sapienza, and Davidsson, 2020). This requires sustained entrepreneurial behaviors and favorable managerial dispositions toward uncertainty, often emerging from low-level strategies rather than top-down directives (Wales, 2019). Because EO manifestation varies internally by job function and business unit, it ultimately shapes firm performance (Wales, 2019). Collectively, EO represents an organizational state where inherently entrepreneurial processes drive opportunity identification, unique resource bundling, and frequent innovation (Crovini et al., 2021; Cohen & Wirtz, 2022; Cho & Lee, 2020).

Debt financing is critical for small and medium enterprises (SMEs) to scale operations and build resilience without diluting equity (Beck et al., 2021; Nazir et al., 2021; Giaretta & Chesini, 2021). The theoretical linkage between EO and debt uptake operates through signaling and resource-allocation channels. Entrepreneurially oriented firms leverage strategic agility and structured risk management to mitigate information asymmetries, enhancing perceived creditworthiness (Schepers et al., 2020; Crovini et al., 2021). By demonstrating operational viability and aligning risk appetites with lender expectations, EO acts as a compensatory capability that offsets information gaps (Zahra et al., 2020; Jaiyeola et al., 2022).

In mature financial ecosystems, this alignment facilitates efficient capital allocation, allowing sophisticated SMEs to amplify competitiveness while preserving independence (Nazir et al., 2021; Sidek et al., 2019). Empirically, all EO dimensions positively influence finance access: innovativeness and proactiveness identify credit opportunities, while risk-taking, competitive aggressiveness, and autonomy enhance debt-servicing capabilities during volatility (Beltrame et al., 2018; Chandrayanti et al., 2020; Fatoki, 2022; Cho & Lee, 2020; Sidek et al., 2020). As firms mature, external debt pursuit becomes increasingly intertwined with sustained EO behaviors (Schepers et al., 2020).

While conceptually established, the EO–debt nexus is heavily mediated by institutional frameworks and financial infrastructure. In mature ecosystems like the U.S. and E.U., sophisticated credit systems allow SMEs to leverage proactiveness and competitive aggressiveness for commercial and SBA-backed loans (Sidek et al., 2019; Rajamani, 2021),

while innovativeness and autonomy facilitate access to innovation-linked and green financing (Beltrame et al., 2018; Cho & Lee, 2020). However, stringent Basel III compliance and macroeconomic risk-aversion can constrain this uptake (Giaretta & Chesini, 2021; Motta & Sharma, 2020).

In East Asia, state-influenced and relationship-based banking shapes the nexus. SMEs in Japan and South Korea use proactiveness and innovativeness to secure preferential supply-chain and regional bank terms (Chandrayanti et al., 2020; Syahdan et al., 2020). In China, high-tech firms utilize government guarantees and digital platforms to bypass collateral barriers (Fatoki, 2022; Jaiyeola et al., 2022). Yet, regulatory scrutiny and cultural risk-aversion require firms to balance entrepreneurial postures with institutional compliance (Kallmuenzer et al., 2022; Wales et al., 2021).

Across South and Southeast Asia (India, Indonesia, Malaysia) and North Africa (Egypt, Morocco, Tunisia), fragmented credit infrastructures prevail. Here, EO enables access to fintech, microfinance, and state-sponsored credit (Chandrayanti et al., 2020; Syahdan et al., 2020; Dadzie et al., 2021), while mitigating bureaucratic and currency volatility constraints (Nguyen & Vo, 2023; García & Martínez, 2022). Nevertheless, underdeveloped credit bureaus and collateral-heavy protocols limit the full translation of EO into sustained debt uptake.

In Sub-Saharan Africa (SSA), the nexus unfolds amid severe credit rationing and institutional voids, with less than 27% of applicant SMEs securing formal debt (Beck et al., 2021; Mazanai & Fatoki, 2022). Despite this, EO consistently improves accessibility. In South Africa, entrepreneurial SMEs significantly outperform risk-averse peers (Fatoki, 2020), and in Nigeria, all five EO dimensions enhance financing for family-owned firms (Jaiyeola et al., 2022; Sidek et al., 2019). Thus, EO serves as a strategic buffer, leveraging calculated risk-taking and proactive positioning to offset systemic credit constraints (Dadzie et al., 2021; Syahdan et al., 2020), though its effectiveness remains contingent on localized regulations and financial inclusion policies.

In Kenya, SMEs form the economic backbone, accounting for over 80% of registered enterprises and contributing approximately 33% to GDP (KNBS, 2022; Gok, 2024). Yet, formal debt financing remains largely inaccessible; only 22% of Kenyan MSMEs accessed bank loans between 2020 and 2022, with most relying on informal savings groups, trade credit, or family networks (Ochieng & Oluoch, 2021; KNBS, 2023). The landscape is marked by pronounced heterogeneity in entrepreneurial behavior, with over 80% of enterprises exhibiting risk-averse tendencies that constrain strategic borrowing and external capital acquisition (KBA, 2021). Based on the MSME Act (2022), classification relies primarily on employee count and turnover: micro-enterprises (<10 employees, <Kshs 500,000 turnover), small enterprises (10–49

employees, Kshs 500,000–5 million), and medium enterprises (50–149 employees, Kshs 5–100 million) (Gok, 2022; KNBS, 2020).

Significant inter-county financing disparities exist, driven by devolved governance, localized economic priorities, and varying institutional capacities (Opiyo & Were, 2023; Mwangi & Wambua, 2024). Urban centers like Nairobi benefit from dense financial ecosystems and digital lending infrastructure, hosting over 30% of registered MSMEs concentrated in ICT, professional services, and retail (KNBS, 2023). Conversely, arid and semi-arid counties (e.g., Turkana, Wajir, Mandera) exhibit lower MSME densities and higher informality due to infrastructural deficits, limited market access, and weaker institutional support, with only 12% operating formally compared to 45% in Nairobi (Opiyo & Were, 2023). Agricultural counties like Kiambu, Nakuru, and Kakamega demonstrate distinct agro-processing and input supply profiles, where county governments leverage extension services, subsidized equipment, and cooperative linkages to support youth-led agri-SMEs (Mwangi & Wambua, 2024; County Government of Nakuru, 2023).

Statement of the Problem

Debt financing catalyses SME growth and resilience without diluting equity (Rajamani, 2021; Beck et al., 2021). Theoretically, entrepreneurial orientation (EO) characterized by innovativeness and competitive aggressiveness enhances a firm's capacity to secure formal debt by signalling strategic agility and creditworthiness to lenders (Jaiyeola et al., 2022; Covin & Wales, 2022). Empirical evidence from Sub-Saharan Africa, particularly in South Africa and Nigeria, where entrepreneurially-oriented SMEs significantly outperform risk-averse peers in securing institutional credit and navigating capital constraints (Fatoki, 2020; Sidek et al., 2019; Jaiyeola et al., 2022; Syahdan et al., 2020; Chandrayanti et al., 2020).

Despite this consensus, a profound disconnect persists between SME financing needs and actual debt uptake. Globally, the MSME credit deficit exceeds $5.2 trillion, disproportionately affecting Sub-Saharan Africa due to underdeveloped credit infrastructure and stringent lending protocols (Beck et al., 2021). In Kenya, formal debt remains critically inaccessible. Central Bank of Kenya (CBK, 2024) data show MSME loans constitute only 8.0% of commercial bank portfolios, with merely 5.6% of enterprises relying on bank debt. Between 2020 and 2022, only 22% of Kenyan MSMEs accessed formal loans, with over 80% depending on personal savings or informal groups (Ochieng & Oluoch, 2021; KNBS, 2022; Manyanga et al., 2023). This gap is exacerbated by systemic barriers such as stringent collateral requirements, inadequate financial documentation, high credit costs, bureaucratic procedures, and limited product awareness (KBA, 2021; Nguyen & Vo, 2023; García & Martínez, 2022). Consequently, many SMEs remain trapped in survival-mode operations, unable to leverage debt for technological adoption or market expansion.

While macro-level data highlights Kenya's financing deficit, the role of firm-level EO in mediating debt access remains empirically contested. Although literature affirms EO's potential to improve credit accessibility, findings across emerging markets are mixed, heavily moderated by institutional voids, regional structures, and lender risk appetites (Jaiyeola et al., 2022; Syahdan et al., 2020). In Kericho County, where MSMEs are predominantly anchored in agricultural value chains within a highly informalized ecosystem, the intersection of EO and debt uptake is critical yet poorly understood. Despite driving local economic activity, Kericho's SMEs face remarkably low formal credit penetration due to high interest rates and collateral-heavy models. Crucially, existing literature lacks granular, county-level evidence on how specific EO dimensions shape debt financing in agriculturally driven, semi-rural contexts, obscuring targeted financial inclusion policies. Therefore, this study addresses this empirical and contextual gap by examining the effect of entrepreneurial orientation on debt finance uptake among SMEs in Kericho County, Kenya.

Objectives of the Study

The general objective of the study was to examine how entrepreneurial orientation influence the uptake of debt finance among SMEs in Kericho county, Kenya.

Specific Objectives

i. To examine the influence of firm's innovativeness on uptake of debt finance among SMEs in Kericho County, Kenya.
ii. To evaluate the influence of firm's competitive aggressiveness on uptake of debt finance among SMEs in Kericho County, Kenya.

Theoretical Framework

Schumpeter's Theory of Innovation

Joseph Schumpeter developed the Theory of Innovation in (1934) to explain the role of innovation in entrepreneurship and economic development. The theory argues that entrepreneurs are agents of economic change because they introduce new combinations of resources through new products, new production methods, new markets, new sources of raw materials, or new organizational structures (Belás & Sopková, 2023). Schumpeter contends that innovation is the primary driver of competitive advantage and economic growth, enabling firms to disrupt existing markets through what he termed "creative destruction." According to the theory, organizations that continuously innovate are better positioned to exploit emerging opportunities, adapt to changing market conditions, and achieve sustainable growth.

The theory is relevant to firm's innovativeness because it emphasizes innovation as the defining characteristic of entrepreneurial firms. SMEs that continuously engage in product innovation, process innovation, and technology adoption are more capable of improving operational

efficiency, responding to customer needs, and strengthening their competitive position (Dadzie *et al*., 2021). The theory therefore provides a strong foundation for examining how innovativeness shapes entrepreneurial behavior and organizational development among SMEs.

Competitive Strategy Theory

Competitive Strategy Theory was developed by Michael Porter in (1980) to explain how firms achieve superior performance by developing effective competitive strategies within their industries. Porter argues that organizations gain competitive advantage by positioning themselves strategically through cost leadership, differentiation, or focus strategies while responding effectively to competitive forces within the market. The theory emphasizes that firms must continuously monitor competitors, understand industry dynamics, and adopt aggressive strategies that strengthen their market position. Competitive behavior is therefore viewed as a critical determinant of organizational success (Weerasekara & Bhanugopan, 2023).

The theory provides a suitable foundation for firm's competitive aggressiveness because it explains how organizations compete by employing price competition, responding rapidly to market changes through market response, and increasing customer awareness through promotional intensity. Firms that aggressively pursue competitive strategies are better positioned to protect market share, strengthen customer loyalty, and improve their overall competitiveness (Aminu & Shariff, 2021). Consequently, Porter's Competitive Strategy Theory effectively explains the strategic behaviors associated with competitive aggressiveness among SMEs.

Conceptual Framework

A conceptual framework defines the research problem and guides the subsequent discussions on the research topic. It provides an approach to the strategies to be used by the study (Depoy & Gitlin, 2018).

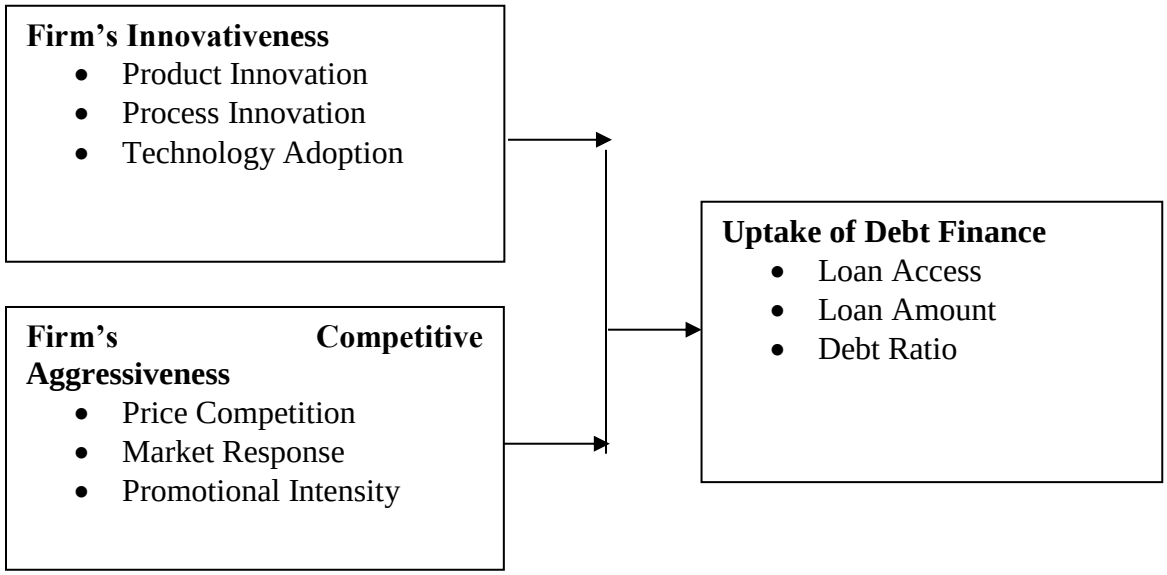


Figure 1: Conceptual Framework

Firm's Innovativeness

Firm's innovativeness refers to the ability and willingness of an organization to generate, adopt, and implement new ideas, products, services, technologies, and business processes that create value and improve organizational effectiveness. It reflects the extent to which a firm embraces creativity, experimentation, and continuous improvement in addressing changing customer preferences, technological advancements, and competitive market conditions (Belás & Sopková, 2023). Firm's innovativeness is manifested through several dimensions that collectively demonstrate an organization's commitment to continuous improvement. One important dimension is product innovation, which involves the creation of entirely new products or the significant improvement of existing products to satisfy evolving customer needs and market expectations. Product innovation enables firms to enhance product quality, increase customer satisfaction, diversify their offerings, and strengthen their competitive position. Another dimension is process innovation, which refers to the introduction of improved production techniques, operational procedures, management practices, or service delivery methods aimed at increasing organizational efficiency and effectiveness. Process innovation enables firms to optimize resource utilization, reduce production costs, improve product quality, shorten production cycles, and increase productivity (Dadzie *et al.*, 2021). The third dimension is technology adoption, which involves integrating modern technologies into organizational operations to improve efficiency, communication, information management, and decision-making.

Firm's innovativeness plays a critical role in promoting organizational learning, adaptability, and long-term sustainability. Organizations that encourage innovative thinking create an environment where employees are motivated to generate creative ideas, experiment with new approaches, and continuously seek improvements in products, services, and operational processes (Guo *et al*., 2020). Such firms invest in knowledge development, employee skills, technological infrastructure, and research activities to strengthen their innovative capabilities. Innovativeness also enables organizations to respond proactively to market uncertainties, technological disruptions, and changing consumer preferences by continuously adjusting their strategies and business models.

Firm's Competitive Aggressiveness

Firm's competitive aggressiveness refers to the intensity with which an organization challenges its competitors in order to strengthen its market position and achieve superior business performance. It reflects the firm's determination to outperform rivals through bold and assertive competitive actions aimed at increasing market share, attracting customers, and sustaining competitive advantage. As one of the key dimensions of entrepreneurial orientation, competitive aggressiveness emphasizes a firm's willingness to respond decisively to competitive pressures rather than adopting a passive approach (Balachandra & Brush, 2023). Firms exhibiting high competitive aggressiveness continuously monitor competitors' activities and develop strategic initiatives that enable them to compete effectively in dynamic and highly competitive markets.

Firm's competitive aggressiveness is reflected through several strategic dimensions that demonstrate an organization's competitive behavior. One important dimension is price competition, which refers to the use of pricing strategies to attract customers, retain market share, and compete effectively against rivals. Firms may adopt competitive pricing, discounts, flexible payment terms, or value-based pricing to strengthen their position in the marketplace. The second dimension is market response, which involves the speed and effectiveness with which a firm reacts to changes in the competitive environment, customer preferences, technological developments, and competitors' strategic actions (Chandrayanti *et al*., 2020. Organizations with strong market response capabilities continuously monitor market conditions and implement timely adjustments to their products, services, or strategies to maintain competitiveness. The third dimension is promotional intensity, which refers to the extent to which a firm invests in marketing, advertising, branding, and promotional campaigns to increase customer awareness, influence purchasing decisions, and differentiate its products or services from those of competitors.

Firm's competitive aggressiveness plays an important role in enhancing organizational competitiveness, adaptability, and long-term sustainability. Organizations with a strong competitive orientation are more likely to develop effective competitive strategies, continuously

improve their products and services, and respond proactively to changing market conditions (Cowling *et al*., 2020). Such firms encourage continuous market intelligence, strategic planning, and innovation to ensure they remain competitive in increasingly dynamic business environments. Competitive aggressiveness also motivates organizations to seek operational excellence, improve customer satisfaction, and strengthen their strategic positioning through persistent efforts to outperform competitors.

Empirical Review

Firm Innovativeness and Debt Financing in SMEs

Empirical research reveals that while innovativeness drives competitive advantage and long-term growth, it often creates friction in traditional debt markets due to intangible assets, uncertain cash flows, and information asymmetry as studies have highlighted the positive linkages between innovativeness and uptake of debt finance (Belás & Sopková, 2023; Dadzie *et al*., 2021). Innovativeness improves the creative posture of enterprises by stimulating employee attitudes to develop existing products or services and to invent novel goods (Adzido, Sedzro & Dorkpah, 2023).

Moreover, innovativeness makes SMEs more productive and seek more opportunities in various markets (Dadzie et al., 2021). By increasing their productivity and range of their products, innovative firms generate more revenues (Civelek, 2022). Innovativeness appears to be displayed by producing some changes, which are perceived to be new to the business. These changes, however, might not be new to the industry. Furthermore, innovativeness does not appear to refer to the commitment of resources to invest and develop novel products, services, and technology processes. firms shows that the firms innovate by blending their current offering with novel solutions following an integration approach.

Based on survey, Chen and Yoon (2022) comparatively explored the use of two forms of financial technology as a form of technology innovation in contributing towards debt-financing among Chinese listed firms. Based on the study, financial technology plays a more significant role for private-owned firms, small firms, growth-stage firms, and firms under intense financial supervision by alleviate firms' financing constraints and reduce firms' debt-financing costs. Guo et al., (2020) indicated that entrepreneurial firms face financial difficulties due to the expensive financing costs which restrict firms' investments.

Xin et al., (2021) examined the influence of innovation on firm's debt financing capability using listed computer and telecommunications equipment firms in China. The survey observed that innovativeness influences debt financing differently with radical innovation decreasing with debt financing cost while incremental innovation having no effect in debt financing itself. The impact of the innovativeness is that firms integrate current knowledge and experience in new

product development either through chancing the iconic products or reinvigorating their traditional products in line with modern conditions, adopting new technologies to improve their traditional production. It is evident that innovativeness could assist the SME in gaining debt financing.

Multiple studies confirm that firms with high innovativeness orientation face greater difficulty accessing bank debt. In a study examining 2,147 UK SMEs, Cowling et al. (2020), observed that innovative SMEs as measured by R&D expenditure or new product development were 28% more likely to be rejected for bank loans than non-innovative peers. Lenders perceived innovation as increasing commercialization risk and reducing asset tangibility, key factors in traditional credit scoring. Similarly, Nguyen et al. (2022) studied 623 Vietnamese SMEs and observed a significant negative relationship between innovativeness and formal bank loan particularly for young firms lacking revenue history.

Balachandra et al. (2019) found that high-growth entrepreneurial firms, particularly those that are in the new technological innovation are increasingly turning to venture debt, a specialized form of debt tailored to startups to extend cash runway and avoid premature equity dilution. Similarly, Block et al., (2021) analysed European SMEs and found that firms scoring high on innovativeness orientation were more likely to use bank debt, particularly when they demonstrated strong growth trajectories and had prior lending relationships. These EO firms signal "strategic intent" to lenders, which can offset perceptions of operational risk if accompanied by credible growth metrics.

Recent studies have emphasized that innovativeness does not inherently preclude debt access rather, its financial viability depends on the firm's ability to signal quality. As observed Block et al., (2021) comparatively sampled 4,872 European firms based on patents as a measure of innovativeness and the finding showed that patent-holding innovative firms were able to access 19% more debt than their compatriots with without patents. This effect was only in countries with strong intellectual property (IP) protection.

Within the same context, García-Quevedo et al., (2021), studied 1,024 Spanish manufacturing firms to delineate the levels of access to debt and the findings showed that recipients of innovation grants had a 27% increased likelihood of accessing debt financing from private sources. In this instance, grants validated the firm's innovation capacity and reducing information asymmetry. These studies confirmed that a firm's innovativeness orientation presents a paradox in debt markets: while essential for long-term value creation, it often impedes access to traditional bank financing due to intangible assets and uncertain returns (Cowling et al., 2020; Nguyen et al., 2022).

Firm Competitive Aggressiveness and Debt Financing in SMEs

Studies have observed linkages between competitive aggressiveness and access to finance in different contexts. Abdullahi et al., (2019) examined the state of competitive aggressiveness orientation and its impact on the debt financing of Nigeria small and medium enterprises in the construction industry. Based on the SEM modelling the study observed that competitive aggressiveness is positive linked to access to finance by the SMEs. Through, these competitive capabilities a firm can easily increase revenue flows by tapping into new opportunities (Weerasekara & Bhanugopan, 2023).

Aminu and Shariff (2021) examined the influence of entrepreneurial orientation on SMEs financial capital accessibility in Nigeria using a survey design. Based on SEM the study observed that the firm's competitive aggressiveness in marketing activities was critical in improving the firm's success in accessing debt finance and that competitive firms could easily access bank financing than their counterparts.. A strong competitively aggressive stance enables a firm to be a decisive player in a field of rivals and to act forcefully to safeguard or advance its position (Lumpkin & Dess 2001).

Ruttoh, Chelogoi & Chepkwony (2025) examined the role of competitive aggressiveness in influencing short term debt financing of SMEs in Nairobi City County, Kenya. The study observed that competitive aggressiveness has a significant but weak linkages with short-term debt financing. Extant literature has shown that firms exhibiting high levels of competitive aggressiveness rely heavily on debt financing to pursue bold, innovative strategies to gain a competitive advantage and objectives. For instance, Tang & Tang (2012) examined the competitive aggressiveness and debt financing in SME in China's changing environment. The study observed that high levels of competitive aggressiveness tend lead to extensive use debt financing for the firm.

These studies show that strong competitive aggressive stance enables a firm to be a decisive player in environments where competition for customers is high. Aggressive moves can include price cutting, increased spending on marketing, quality and improved production capacity. This when a firm either promotes its products in markets identified by competitors or through analysing and attacking competitor's weaknesses. It is essentially a firm's response to competitive threats (Madhoushi et al., 2011). Competitive aggressiveness gives quick and powerful reactions against their competitors' strategies (Khan et al., 2021). Thus, SMEs become motivated to create new ideas and apply competitive strategies that improves performance (Belás & Sopková, 2016). Since firms that have, competitive aggressiveness performs better compared to their rivals, they can have market leadership positions and might limit their competitors' counterattacks by predicting the rivals' next reactions (Hughes-Morgan,Kolev, & Mcnamara, 2018).

METHODOLOGY

Research Design

A research design serves as the structural blueprint for data collection, measurement, and analysis, thereby directing the achievement of study objectives (Saunders et al., 2019). Accordingly, this study employed a descriptive, cross-sectional design which documented the phenomenon of entrepreneurial orientation (EO) among small and medium enterprises (SMEs) in Kericho County, highlighting its relationship with debt financing behaviours. Concurrently, the cross-sectional approach enabled data collection at a single point in time, providing a comprehensive snapshot of prevailing entrepreneurial and financial dynamics within the target population.

Target Population

The target population comprised the specific group of elements from which the study sample was drawn (Depoy & Gitlin, 2019). For this research, the population of interest consisted of all small and medium enterprises (SMEs) officially registered in the Kericho County Government Business Directory (KCBD, 2023). This registry documented a total of 1,079 SMEs operating across diverse economic sectors. The sectoral distribution and classification of these enterprises were detailed in Table 3.1.

Table 1: Target population

Category	Target Population	30%
Manufacturing	79	23
Agricultural	157	47
Services oriented	298	89
Retail and commercial	367	110
Financial services	178	53
Total	**1,079**	**322**

Source: (County Government of Kericho, 2023)

Sample and Sampling Technique

The study employed a proportionate stratified sampling design, with strata delineated by economic sector. This methodology enhanced sample representativeness and minimized sampling error across predetermined characteristics by increasing homogeneity and reducing variability within each subgroup (Depoy & Gitlin, 2019). The study used Yamane, (1967) formula, to calculate a sample size for the study

$$n = \frac{N}{1 + N(e^2)} = \frac{1079}{1 + 1079(0.05^2)} = 292$$

Where *n* was the desired sample size, *N* was the entire population and *e* is the margin of error (which is 0.05).

The stratified approach was utilized to achieve three primary objectives: (1) to maximize the statistical efficiency of the sample, (2) to generate sufficient data for the comprehensive analysis of distinct sectoral subpopulations, and (3) to enable the application of tailored research methods and procedures across different strata where necessary (Cooper & Schindler, 2022).

Data Collection Instrument

The study relied on two principal sources of data: primary data and secondary data. Primary data were collected through structured questionnaires administered directly to the selected respondents, while secondary data were obtained from financial records and supplemented by relevant business documents.

Structured questionnaires are systematic, efficient instruments for gathering empirical data from target populations (Creswell & Creswell, 2019). This study utilized a structured questionnaire to reach a large sample with a standardized format that ensured response uniformity, minimized interviewer bias, and streamlined data coding and analysis (Ary et al., 2018; Saunders et al., 2019). The instrument consistently measured respondents' attitudes, perceptions, and behaviours across key constructs.

Secondary data encompass quantitative information that originate from previously collected datasets reorganized for broader analytical frameworks (Saunders et al., 2020). For this study, secondary sources included, unaudited financial statements drawn from targeted SME financial accounts to identify historical debt utilization patterns, funding sources, and financing constraints.

Pilot Testing

The pilot testing of the instrument evaluated the research instrument's clarity, feasibility, and preliminary psychometric properties prior to full administration, refining items and assessing usability per methodological guidelines (Van Teijlingen & Hundley, 2018; Saunders et al., 2019). The pilot involved 10% of the target sample MSME owners in Mau Summit Township, Nakuru County. Feedback from the pilot, combined with an initial content validation review, enabled the researcher to revise ambiguous items, adjust response scales, and streamline the instrument's layout (Roebianto et al., 2023). The finalized version was subsequently deployed for the main data collection exercise.

Data Analysis and Presentation

Quantitative data was coded then analyzed using Statistical Package for Social Sciences (SPSS) computer software version 28. The choice of the software is influenced by its ability to appropriately create graphical presentation of questions, data reporting, presentation and publishing. SPSS is also able to handle large amount of data and it is purposefully designed for social sciences.

Descriptive statistics was used to analyze the data in frequency distributions and percentages which was presented in tables and figures. Discussions and presentations of the analyzed data was done in tables of frequency distribution, percentages, bar graphs and pie charts. Measures of dispersion will be used to provide information about the spread of the scores in the distribution.

The study also analysed the data using inferential statistics which comprised of correlation analysis and regression analysis. Correlation analysis was used to test the strength and the direction of the relationship between the independent variables and the dependent variable. Multiple regression analysis comprised of the model summary, the analysis of variance and the beta coefficients.

The multiple regression model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 \varepsilon$$

Where: -

Y is the uptake of debt finance among SMEs in Kericho County, Kenya

X_1 is firm's innovativeness

X_2 is firm's competitive aggressiveness

β_0 is a constant

ε is Error term

RESEARCH FINDINGS AND DISCUSSION

Descriptive Analysis for Entrepreneurial Orientation

Innovativeness Orientation and Uptake of Debt Financing

The first specific objective of the study was to examine the influence of firm's innovativeness on uptake of debt finance among SMEs in Kericho County, Kenya.The respondents were requested to indicate their level of agreement on various statements related to firm's innovativeness and uptake of debt finance among SMEs in Kericho County, Kenya. The results were as shown Table 2.

Table 2: Firm's innovativeness Orientation

			Responses						
	Indicators of innovativeness		**SD**	**D**	**N**	**A**	**SA**	Mean	SD
1	The firm strongly emphasizes research and development to achieve technological or process leadership.	F	4	9	29	100	61	4.010	0.895
		%	2.0	4.4	14.3	49.3	30.0		
2	Management actively encourages employees to generate and test creative solutions to operational challenges.	F	2	5	40	108	48	3.961	0.789
		%	1.0	2.5	19.7	53.2	23.6		
3	The firm has frequently introduced new products or service lines to the market in recent years.	F	1	11	43	108	40	3.862	0.809
		%	0.5	5.4	21.2	53.2	19.7		
4	The firm regularly updates or significantly modifies its offerings to align with emerging market trends.	F	1	15	46	100	41	3.813	0.859
		%	0.5	7.4	22.7	49.3	20.2		
5	The firm prioritizes experimentation and innovative problem-solving over relying solely on established business practices.	F	3	8	41	106	45	3.897	0.841
		%	1.5	3.9	20.2	52.2	22.2		
	Aggregate for the innovativeness orientation							**3.908**	**0.838**

Table 2 presents the descriptive analysis of the firms' innovativeness orientation. The SMEs demonstrated a moderate to strong orientation toward innovativeness, with aggregate mean scores ranging from 3.81 to 4.01. The highest mean was recorded for emphasizing research and development to achieve technological or process leadership (M = 4.01, SD = 0.90), with 79.3% of respondents agreeing or strongly agreeing. Similarly, management actively encouraged employees to generate creative solutions (M = 3.96, SD = 0.79; 76.8% agreement), reflecting a decentralized approach to problem-solving and operational efficiency (Katialem, Muhanji, & Otuya, 2018; Sigey, Omwenga, & Sije, 2023).

Moderate to strong agreement was also observed for introducing new products (M = 3.86, SD = 0.81; 72.9% agreement) and updating offerings to align with market trends (M = 3.81, SD = 0.86; 69.5% agreement), indicating active engagement in iterative product refinement (Ndemo & Weiss, 2017; Asongu & Odhiambo, 2021). Furthermore, the prioritization of experimentation

over established practices (M = 3.90, SD = 0.84; 74.4% agreement) underscores a strategic preference for adaptive learning rather than rigid adherence to legacy models (Sigey et al., 2023).

Firm's Competitive Aggressiveness and Uptake of Debt Finance

The second specific objective of the study was to assess the influence of firm's competitive aggressiveness on uptake of debt finance among SMEs in Kericho County, Kenya.The respondents were requested to indicate their level of agreement on various statements related to firm's competitive aggressiveness and uptake of debt finance among SMEs in Kericho County, Kenya. The results were as shown Table 3.

Table 3: Firm's Competitive Aggressiveness

			Responses						
	Indicators of Competitive Aggressiveness		**SD**	**D**	**N**	**A**	**SA**	Mean	SD
1	The firm actively seeks to outperform competitors through aggressive market positioning and strategic initiatives.	F	1	8	36	112	46	3.956	0.779
		%	0.5	3.9	17.7	55.2	22.7		
2	The firm directly confront rivals when they threaten market share, pricing, or customer relationships.	F	0	8	32	116	47	3.995	0.741
		%	0.0	3.9	15.8	57.1	23.2		
3	Management prefers an assertive "capture-the-market" approach rather than a passive "coexist-with-competitors" stance.	F	1	4	39	110	49	3.995	0.748
		%	0.5	2.0	19.2	54.2	24.1		
4	The frequently engage in rapid promotional campaigns, or competitive bidding to counter rival actions.	F	2	7	38	104	52	3.970	0.820
		%	1.0	3.4	18.7	51.2	25.6		
5	The firms strategic focus is heavily oriented toward gaining competitive advantage	F	0	15	33	111	44	3.906	0.818
		%	0.0	7.4	16.3	54.7	21.7		
	Aggregate for competitive aggressiveness Orientation							**3.965**	**0.781**

Source: Research Data (2026)

Table 3 details the competitive aggressiveness orientation, revealing a strong posture with mean scores ranging from 3.91 to 4.00. The highest means were recorded for directly confronting rivals threatening market share or customer relationships (M = 4.00, SD = 0.74) and preferring an assertive "capture-the-market" approach over passive coexistence (M = 4.00, SD = 0.75). Approximately 80% of respondents endorsed these practices, reflecting a shared mindset where competitive threats are met with deliberate countermeasures. This resonates with evidence that in markets with low entry barriers and high informality, assertive tactics like loyalty incentives and rapid service responses are critical for customer retention (Sigey, Omwenga, & Sije, 2023; Muriu & Kariuki, 2023).

Moderately strong agreement was observed for actively pursuing outperformance through aggressive positioning (M = 3.96, SD = 0.78; >77% agreement) and engaging in rapid promotional campaigns to counter rivals (M = 3.97, SD = 0.82; >77% agreement). This suggests SMEs view rivalry as a catalyst for sharpening their value proposition, aligning with the entrepreneurial orientation framework which posits that competitive aggressiveness enhances responsiveness through rapid strategic reaction (Lumpkin & Dess, 1996; Covin & Wales, 2019). The lowest score was for a strategic focus on gaining competitive advantage even at the cost of intensifying rivalry (M = 3.91, SD = 0.82; 76.4% agreement), reflecting a calibrated aggressiveness model where market position is assertively defended but not recklessly expanded, a practice common in resource-constrained environments (Katialem, Muhanji, & Otuya, 2018; Asongu & Odhiambo, 2021).

Secondary Data on Debt Finance Uptake (2021–2025)

Secondary data on debt finance uptake were extracted from the audited annual reports of the sampled micro, small and medium enterprises (MSMEs) covering the period 2021 to 2025. The analysis focused on three objective indicators of debt finance uptake, namely loan access, loan amount, and debt ratio. Loan access was measured as the percentage of sampled enterprises that obtained bank loans during each financial year. Loan amount represented the average value of bank loans obtained by the enterprises, while debt ratio was calculated as the proportion of total assets financed through debt. The analysis was undertaken to establish trends in the uptake of debt finance among MSMEs over the five-year period.

Table 4: Secondary Data on Debt Finance Uptake

Indicator	2021	2022	2023	2024	2025
Loan Access (%)	42.3	46.8	51.5	56.9	61.4
Average Loan Amount (KSh Million)	1.24	1.46	1.73	2.08	2.41
Debt Ratio (%)	24.8	27.5	30.2	33.7	36.9

The results in Table 4 indicate a steady improvement in loan access among MSMEs during the study period. The proportion of enterprises accessing bank loans increased from 42.3% in 2021 to 61.4% in 2025, representing an overall increase of 19.1 percentage points. This trend suggests that more MSMEs were able to obtain formal debt financing over time, possibly due to improved lending practices, enhanced financial inclusion initiatives, and stronger relationships between financial institutions and MSMEs.

The findings further show that the average loan amount increased consistently throughout the study period, rising from KSh 1.24 million in 2021 to KSh 2.41 million in 2025. The increasing average value of loans indicates that enterprises progressively obtained larger credit facilities, reflecting growing financing requirements associated with business expansion, acquisition of productive assets, and increased working capital needs. The upward trend also suggests improved lender confidence in the borrowing capacity of MSMEs.

Similarly, the debt ratio increased from 24.8% in 2021 to 36.9% in 2025, indicating that debt constituted an increasingly important component of the enterprises' capital structure. The gradual rise in debt financing demonstrates that MSMEs increasingly relied on borrowed funds to finance their assets and business operations. Overall, the secondary data reveal a positive trend in debt finance uptake, characterized by increasing loan access, larger loan amounts, and a higher proportion of assets financed through debt during the period 2021–2025. These findings suggest that formal debt financing became progressively more significant in supporting the financing needs of MSMEs in Kericho County.

Inferential Statistics

Inferential statistics in the current study focused on correlation and regression analysis. Correlation analysis was used to determine the strength of the relationship while regression analysis was used to determine the relationship between dependent variable (uptake of debt finance among SMEs in Kericho County, Kenya) and independent variables (firm’s innovativeness and firm’s competitive aggressiveness).

Correlation Analysis

The present study used Pearson correlation analysis to determine the strength of association between independent variables (firm’s innovativeness and firm’s competitive aggressiveness) and the dependent variable (uptake of debt finance among SMEs in Kericho County, Kenya). Pearson correlation coefficient range between zero and one, where by the strength of association increase with increase in the value of the correlation coefficients.

Table 5: Correlation Coefficients

		Uptake of Debt Finance	Firm's Innovativeness	Firm's Competitive Aggressiveness
Uptake of Debt Finance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	203		
Firm's Innovativeness	Pearson Correlation	.831**	1	
	Sig. (2-tailed)	.001		
	N	203	203	
Firm's Competitive Aggressiveness	Sig. (2-tailed)	.003	.099	
	N	203	203	
	Pearson Correlation	.846**	.207	1
	Sig. (2-tailed)	.000	.016	
	N	203	203	203

From the results, there was a very strong relationship between firm's innovativeness and uptake of debt finance among SMEs in Kericho County, Kenya (r = 0.831, p value =0.001). The relationship was significant since the p value 0.001 was less than 0.05 (significant level). The findings are in line with the findings of Dadzie *et al*. (2021) who indicated that there is a very strong relationship between firm's innovativeness and uptake of debt finance.

The results also revealed that there was a very strong relationship between firm's competitive aggressiveness and uptake of debt finance among SMEs in Kericho County, Kenya (r = 0.846, p value =0.000). The relationship was significant since the p value 0.000 was less than 0.05 (significant level). The findings are in line with the results of Weerasekara and Bhanugopan (2023) who revealed that there is a very strong relationship between firm's competitive aggressiveness and uptake of debt finance.

Regression Analysis

Multivariate regression analysis was used to assess the relationship between independent variables (firm's innovativeness, firm's proactiveness and firm's competitive aggressiveness) and the dependent variable (uptake of debt finance among SMEs in Kericho County, Kenya)

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.810	.656	.655	.10129

a. Predictors: (Constant), firm's innovativeness and firm's competitive aggressiveness

The model summary was used to explain the variation in the dependent variable that could be explained by the independent variables. The r-squared for the relationship between the independent variables and the dependent variable was 0.656. This implied that 65.6% of the variation in the dependent variable (uptake of debt finance among SMEs in Kericho County, Kenya) could be explained by independent variables (firm's innovativeness and firm's competitive aggressiveness).

Table 7: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	68.053	2	34.027	191.163	.000[b]
	Residual	35.617	200	.178		
	Total	103.670	202			

a. Dependent Variable: uptake of debt finance among SMEs in Kericho County, Kenya

b. Predictors: (Constant), firm's innovativeness and firm's competitive aggressiveness

The ANOVA was used to determine whether the model was a good fit for the data. F calculated was 191.163 while the F critical was 3.041. The p value was 0.000. Since the F-calculated was greater than the F-critical and the p value 0.000 was less than 0.05, the model was considered as a good fit for the data. Therefore, the model can be used to predict the influence of firm's innovativeness and firm's competitive aggressiveness on uptake of debt finance among SMEs in Kericho County, Kenya.

Table 8: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.280	0.075		3.733	0.000
	firm's innovativeness	0.341	0.089	0.340	3.831	0.001
	firm's competitive aggressiveness	0.356	0.093	0.357	3.828	0.000

a Dependent Variable: uptake of debt finance among SMEs in Kericho County, Kenya

The regression model was as follows:

$$\mathbf{Y = 0.280 + 0.341X_1 + 0.356X_4 + \varepsilon}$$

According to the results, firm's innovativeness has a significant effect on uptake of debt finance among SMEs in Kericho County, Kenya β_1=0.341, p value= 0.001). The relationship was considered significant since the p value 0.001 was less than the significant level of 0.05. The findings are in line with the findings of Dadzie *et al*. (2021) who indicated that there is a very strong relationship between firm's innovativeness and uptake of debt finance.

In addition, the results revealed that firm's competitive aggressiveness has significant effect on uptake of debt finance among SMEs in Kericho County, Kenya β1=0.356, p value= 0.000). The relationship was considered significant since the p value 0.000 was less than the significant level of 0.05. The findings are in line with the results of Weerasekara and Bhanugopan (2023) who revealed that there is a very strong relationship between firm's competitive aggressiveness and uptake of debt finance.

CONCLUSION AND RECOMMENDATION

Conclusion

The study concluded that firm's innovativeness has a positive and significant influence on uptake of debt finance among SMEs in Kericho County, Kenya. Findings revealed that product Innovation, process Innovation and technology Adoption influence uptake of debt finance among SMEs in Kericho County, Kenya

The study also concluded that firm's competitive aggressiveness has a positive and significant influence on uptake of debt finance among SMEs in Kericho County, Kenya. Findings revealed that price Competition, market Response and promotional Intensity influence uptake of debt finance among SMEs in Kericho County, Kenya

Recommendations

SME proprietors should prioritize documenting demonstrable market traction, stable cash flow projections, and collateralizable assets in loan applications rather than emphasizing innovation intensity or R&D expenditure, as lenders appear to value repayment certainty over novelty.

Proprietors should develop clear, written competitive strategies including market positioning statements, customer retention protocols, and rapid response tactics—and maintain records of market share trends to substantiate claims of revenue stability during lender assessments.

REFERENCES

Abdullahi, U., Kunya, S. U., Bustani, S. A., & Usman, N. (2019). Impact of competitive aggressiveness on performance of small and medium construction firms in Nigeria. *FUTY Journal of the Environment, 13*(1), 65–74.

Adzido, R. Y., Sedzro, E., & Dorkpah, O. (2016). Assessment of demand side factors of SMEs and external financing by rural banks in Ghana. *The International Journal of Business & Management, 4*(4), 458–472.

Asongu, S. A. (2018). Financial inclusion and entrepreneurial dynamics in Africa. Journal of Entrepreneurship in Emerging Economies, 10(2), 189–207.

Beck, T., & Demirgüç-Kunt, A. (2006). The impact of corporate governance on firm financing. *Journal of Financial Economics, 82*(3), 521–550.

Beck, T., Demirgüç-Kunt, A., & Maksimovic, V. (2008). Financing patterns around the world: Are small firms different? *Journal of Financial Economics, 89*(3), 467–487.

Chandrayanti, T., Nidar, S. R., Mulyana, A., & Anwar, M. (2020). Impact of entrepreneurial characteristics on credit accessibility: Case study of small businesses in West Sumatera – Indonesia. *Entrepreneurship and Sustainability Issues, 7*(3), 1760–1777.

Cohen, L., & Wirtz, P. (2022). Decision-making style in entrepreneurial finance and growth. *Small Business Economics, 59*(1), 183–210.

Dadzie, C. A., Agyapong, A., & Suglo, J. (2021). Entrepreneurial orientation and debt financing in emerging economies. *African Journal of Economic and Management Studies, 12*(4), 512–528.

Dadzie, Z., Agyapong, A., & Suglo, A. (2021). The role of internationalization in entrepreneurial orientation-performance link: Empirical study of SMEs in a developing nation perspective. *Review of International Business and Strategy, 31*(2), 257–280.

Fatoki, O. (2022). Risk-taking propensity and external financing among African SMEs. International Journal of Entrepreneurship and Small Business, 45(1), 78–94.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39–50.

García, L., & Martínez, F. (2022). Informal finance and MSME survival in Latin America: Evidence from Colombia and Peru. *Small Business Economics, 58*(4), 1673–1691.

Gomezel, A. S. (2022). Firm characteristics, debt maturity structure, and innovation performance of small firms. *Dynamic Relationships Management Journal, 11*(1), 3–15.

Kericho County Government. (2022). *County integrated development plan* 2023–2027. Kericho County Government Press.

Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.

Kline, R. B. (2023). *Principles and practice of structural equation modeling* (5th ed.). Guilford Press.

Mazanai, M., & Fatoki, O. (2022). Debt financing constraints among South African SMEs: An empirical investigation. *South African Journal of Economic and Management Sciences, 25*(1), 1–12.

McGrath, R. G. (1997). A real options logic for initiating technology positioning investments. *Academy of Management Review, 22*(4), 974–996.

Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic Management Journal, 3*(1), 1–25.

Nyangau, P. M., Omondi, G. O., & Ochieng, J. W. (2020). Financial literacy and debt management among SMEs in Kenya. *Journal of Finance and Accounting, 8*(4), 112–125.

Ochieng, J. W., Mwangi, S. K., & Wambugu, P. (2021). Competitive strategy and loan performance in Kenyan manufacturing firms. *African Journal of Economic and Management Studies, 12*(3), 345–362.

Omarini, A. E. (2018). Banks and FinTechs: How to develop a digital open banking approach for the bank's future. *International Business Research, 11*(9), 23–36.

Rotich, W., Wanjau, K., & Namusonge, G. (2015). Entrepreneurial orientation, relationship lending and financial performance of SMEs in Kenya. *Journal of Management and Strategy, 6*(4), 45–58.

Roy, S. K., Singha, M., & Datta, P. (2023). Best practices for factor analysis in business research. *Journal of Business Research, 15*(8), 113645.

Sigey, R. K., Omwenga, J., & Sije, A. (2023). Entrepreneurial orientation and performance of small and medium enterprises in Kenya. *Journal of Entrepreneurship & Project Management, 3*(2), 19–35.

Weerasekara, S., & Bhanugopan, R. (2023). The impact of entrepreneurs' decision-making style on SMEs' financial performance. *Journal of Entrepreneurship in Emerging Economies, 15*(5), 861–884.

World Bank. (2022). *Kenya economic update: Financing small and medium enterprises in a post-pandemic era*. Washington, DC: World Bank Group.

Xin, K., Sun, Y., Zhang, R., & Liu, X. (2019). Debt financing and technological innovation: Evidence from China. *Journal of Business Economics and Management, 20*(5), 841–859.

Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology, 9*(2), 79–94.

Zahra, S. A., Sapienza, H. J., & Davidsson, P. (2020). Entrepreneurial orientation as a dynamic capability: A resource orchestration perspective. *Strategic Entrepreneurship Journal, 14*(3), 323–345.

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