

Mediating Effect of Strategic Agility on Entrepreneurial Orientation-Sustainable Performance: Evidence from Youth Enterprises in Kenya

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How to cite this paper: Mwadime, S. M., Maket, L. J., & Cheboi, J. (2026). Mediating Effect of Strategic Agility on Entrepreneurial Orientation-Sustainable Performance: Evidence from Youth Enterprises in Kenya. *Open Journal of Business and Management*, 14, 1496-1515.

<https://doi.org/10.4236/ojbm.2026.143084>

Received: February 24, 2026

Accepted: May 26, 2026

Published: May 29, 2026

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Abstract

The purpose of this study was to analyze the influence of entrepreneurial orientation and strategic agility on the sustainability performance of youth enterprises in Taita Taveta County, Kenya. Guided by the Triple Bottom Line (TBL) theory, the research defined the dimensions of sustainability performance as economic, social, and environmental. A survey research design was employed, following the positivist epistemology approach. Primary data were collected from 303 respondents out of a sample of 356 youth enterprises, yielding an 85% response rate. Data were gathered using standardized questionnaires to assess the study variables, including entrepreneurial orientation, strategic agility, and sustainability performance. Reliability and factor analyses confirmed that the instruments were valid. The study applied multiple regression and the PROCESS macro to conduct mediation analyses. The findings indicated that strategic agility partially mediated the relationship between entrepreneurial orientation and sustainability performance, demonstrating that entrepreneurial behavior and organizational agility jointly contributed to sustainable outcomes. The study provided practical guidance for youth enterprise managers and support agencies on fostering entrepreneurship and agility to enhance sustainability performance across economic, social, and environmental dimensions.

Keywords

Entrepreneurial Orientation, Strategic Agility, Sustainability Performance

1. Introduction

Performance measurement has progressively evolved from a narrow economic

orientation toward a broader sustainability-centered paradigm in contemporary management scholarship (Bui & de Villiers, 2021; Khan et al., 2020). Earlier models of performance measurement focused primarily on financial indicators such as profitability, return on investment, and market share, reflecting a shareholder-primacy logic (Sardi et al., 2020). However, the work of John Elkington introduced a transformative sustainability perspective, and over the past two decades, scholars have refined the Triple Bottom Line (TBL) approach to integrate value creation across Environmental, Social, and Governance (ESG) dimensions (Tsalis et al., 2020; Van der Byl & Slawinski, 2022). This shift reoriented performance discourse from compliance-based reporting toward stakeholder-centered value creation and long-term organizational resilience (Doni et al., 2020; Hörisch et al., 2014). As business environments become increasingly complex and uncertain, sustainability performance is widely conceptualized as the integration of economic viability, social responsibility, and environmental stewardship (Bebbington & Unerman, 2020; Schaltegger et al., 2019). Nonetheless, performance measurement remains inherently complex due to evolving indicators, contextual differences, regulatory changes, and shifting societal expectations (Siew, 2021; Tasdemir & Gazo, 2020).

In developing economies, youth enterprises are increasingly recognized as catalysts for sustainability and inclusive growth (Acs et al., 2021; George et al., 2021). Governments and development agencies across Africa and other emerging regions have introduced youth empowerment and entrepreneurship programs aimed at reducing unemployment and poverty (World Bank, 2022; UNDP, 2021). These programs increasingly frame entrepreneurship as a pathway for socio-economic transformation and environmental stewardship rather than merely income generation (Filser et al., 2019; Shepherd & Patzelt, 2022). Despite these efforts, youth enterprises continue to face structural constraints, including limited access to finance, inadequate managerial capabilities, market volatility, and operational instability (Igwe et al., 2018; Maduku et al., 2016). Such constraints complicate the pursuit of sustainable performance, particularly where enterprises must simultaneously ensure economic survival and maintain social legitimacy (Ngek Neneh & van Zyl, 2017; Urban & Kujinga, 2023).

In Kenya, youth-led enterprises are prioritized as strategic vehicles for economic transformation and inclusive development (Kenya National Bureau of Statistics, 2022; Republic of Kenya, 2023). Youth enterprises in Taita Taveta County contribute to the realization of the Sustainable Development Goals (SDGs), particularly SDG 1 (No Poverty), SDG 8 (Decent Work and Economic Growth), and SDG 13 (Climate Action), as articulated by the United Nations (United Nations, 2023). County-level initiatives such as entrepreneurial training, mentorship programs, and enhanced access to finance demonstrate increasing support for youth entrepreneurship (County Government of Taita Taveta, 2024; Kenya News Agency, 2024). Furthermore, continental and global initiatives such as the Young African Leaders Initiative promote youth engagement in innovation, leadership, and civic

participation (U.S. Department of State, 2022; African Development Bank, 2023). Nevertheless, empirical evidence indicates that many youth enterprises remain operationally fragile and struggle to achieve long-term sustainability due to financial and managerial limitations (Lenjo, 2023).

Entrepreneurial Orientation (EO) has been widely examined as a strategic posture that enhances firm performance under conditions of uncertainty (Covin & Wales, 2020; Kraus et al., 2020). EO encompasses innovativeness, proactiveness, risk-taking, autonomy, and competitive aggressiveness, which enable firms to identify opportunities and respond effectively to environmental turbulence (Anderson et al., 2015; Gupta & Batra, 2023). Recent studies indicate that EO contributes to competitive advantage and sustained performance in dynamic markets (Martens et al., 2021; Rauch et al., 2022). However, findings regarding the relationship between EO and sustainability performance remain mixed, with some studies demonstrating positive effects—often mediated by sustainability practices—while others report weak or insignificant relationships, particularly concerning the risk-taking dimension (Akomea et al., 2022; Lumpkin & Pidduck, 2021). These inconsistencies underscore the importance of complementary organizational capabilities that strengthen the translation of entrepreneurial posture into sustainable outcomes (Wales et al., 2021; Wiklund et al., 2022).

Strategic agility has emerged as a critical dynamic capability that enables organizations to sense environmental changes, reconfigure resources, and respond swiftly to emerging opportunities (Clauss et al., 2021; Doz & Kosonen, 2020). In volatile and resource-constrained environments, strategic agility enhances adaptive capacity and supports long-term sustainability performance (Shams et al., 2021). Agile enterprises are better positioned to align entrepreneurial initiatives with evolving market demands, technological advancements, and sustainability imperatives, thereby strengthening economic, social, and environmental outcomes (Clauss et al., 2021).

Although scholarship on entrepreneurial orientation, strategic agility, and sustainability performance continues to expand, these constructs are rarely integrated within a unified framework in the context of African youth enterprises (George et al., 2021; Ngek Neneh & van Zyl, 2017). Most existing studies examine these variables independently, with limited empirical focus on youth-owned enterprises in developing economies (Urban & Kujinga, 2023; Maduku et al., 2016). The absence of an integrated model linking entrepreneurial orientation, strategic agility, and sustainability performance therefore represents a significant research gap (Wales et al., 2021; Schaltegger et al., 2019).

Accordingly, this study develops and empirically examines a comprehensive theoretical model that explores the interrelationship between entrepreneurial orientation, strategic agility, and sustainability performance of youth enterprises in Taita Taveta County, Kenya (Shepherd & Patzelt, 2022). By situating youth entrepreneurship within a sustainability-centered performance paradigm, the study contributes to human resource and sustainability scholarship by clarifying how

entrepreneurial behaviors and agile capabilities drive sustainable economic, social, and environmental outcomes in developing contexts (Bebbington & Unerman, 2020; George et al., 2021). The findings are expected to inform both theoretical advancement and policy formulation aimed at strengthening youth-led sustainable enterprise ecosystems (World Bank, 2022; Republic of Kenya, 2023).

2. Literature Review

2.1. Theoretical Underpinning

The principal theory underpinning this study is the Triple Bottom Line (TBL) framework developed by John Elkington in the 1990s, which informs the sustainable performance variable by conceptualizing organizational success across economic, social, and environmental dimensions (Elkington, 2018; Schaltegger et al., 2019). Elkington (2018: p. 2) argues that businesses implemented the TBL model as standard operating practice. Elkington's 1998 (Elkington, 2018) TBL model broke away from the singular focus on the economic dimension of the performing organization, and instead, shifted the focus of the inquiry onto the E, S, and G dimensions of performance. Recently, a number of researchers have empirically supported the assertion that the performance of corporate sustainability is predicated not only on the performance of the financial dimension, but is also dependent on the performance of the dimension(s) of society (the social dimension) and the dimension(s) of the natural world (the environmental dimension) (Bebbington & Unerman, 2020; Tsalis et al., 2020). The years 2020 through 2025 have seen a number of empirical studies operationalizing the TBL of economic, social, and environmental dimensions of corporate sustainability and its relation to the competitive sustainability of corporate in the long run (Ansong, 2017; Schaltegger et al., 2019). Khan et al. (2020) and Tasdemir and Gazo (2020) have reported the use of survey instruments, archival financial data, and indices of sustainability disclosure to evaluate the dimensions of the impact of TBL on firm performance in corporate sustainability.

Economic sustainability within the TBL framework means the organization practices sustainable profitability and adds long-term sustainable value to society (Elkington, 2018). Companies are encouraged to design an economically sustainable future that is better than quick profit through strategy that is resilient, innovative, and responsible in the use of resources in economically uncertain situations (Muff et al., 2017). Economic sustainability has been economically linked in recent studies to the shared value concept, where companies economically outperform competitors by solving societal problems and doing so through their business (Porter & Kramer, 2011; Schaltegger et al., 2019). Worker equality, stakeholder involvement, workforce equitable treatment, and community social development are positive influencers of long-term organizational legitimacy (Klettner et al., 2014). Social sustainability, the second TBL component, when implemented by organizations in the governance and HR levels, it produces greater employee engagement, innovation, and goodwill (Eccles et al., 2020; Hörisch et al., 2014).

The third dimension of sustainability is environmental. This is where organizations have an obligation to lower their negative environmental impacts by being energy efficient, reducing carbon footprints, and being sustainable, and use lifecycle-based environmental management to control their impacts (Teece et al., 2016; Porter & Kramer, 2011). Schaltegger et al. (2019) and United Nations (2023) show that it is lucrative for organizations to meet the sustainability goals set by the United Nations.

This strategy {TBL} will work best when sustainability, along with its competing values across all its trade-offs, is engrained into product, supply, governance, and performance decision systems (Eccles et al., 2020; Khan et al., 2020). The GRI and Tsalis et al. (2020) reporting framework and disclosure, along with measurement, systems provide guidance when reporting any of the economic, social, and environmental indicators to improve accountability and transparency (GRI, 2021). Measurement and communication of TBL performance have social responsibility investors with an increased trust from stakeholders, and better performance in the long run (Bebbington & Unerman, 2020; Ansong, 2017). The TBL theory captures all the elements of modern enterprise and sustainable performance by integrating profitability, social justice, and the environment (Elkington, 2018; Schaltegger et al., 2019).

2.2. Hypothesis Development

The Mediating Effect of Strategic Agility

A study done by Nugroho, Ferdinan, and Rosyadi (2024) in Indonesia on the Impact of Creative Leadership on Strategic Agility in Startups: Mediating Roles of Resource Management and Innovative Work Behavior. This study surveyed 219 mid-to senior-level managers from various startups in Jakarta. Data were analyzed using Smart PLS 4 to examine the relationships among creative leadership, Innovative Work Behavior (IWB), Creative Resource Management (CRM), and strategic agility. The findings revealed that creative leadership positively influences both IWB and CRM. Furthermore, IWB and CRM significantly mediate the relationship between creative leadership and strategic agility, indicating that fostering innovation and effective resource management enhances organizational adaptability.

Another study done by Yildiz and Aykanat (2021) in Türkiye on The Mediating Role of Organizational Innovation on the Impact of Strategic Agility on Firm Performance. An online questionnaire was administered to 216 firms operating in the Sakarya Organized Industrial Zone. Structural equation modeling was used to test the hypotheses. The study found that strategic agility positively impacts both firm performance and organizational innovation. Organizational innovation partially mediates the relationship between strategic agility and firm performance, suggesting that agile firms enhance performance through innovative practices.

A study done by Rafiq et al. (2024) in Pakistan on HRM Strategies and Sustainable Competitive Advantage: Assessing Strategic Agility Mediating Impact. Data were collected from various organizations in Pakistan through online platforms. The study employed Covariance-Based Structural Equation Modeling (CB-SEM)

to assess the proposed model. The research concluded that strategic agility serves as a crucial mediator between Human Resource Management (HRM) strategies and sustainable competitive advantage. Effective HRM practices enhance strategic agility, which in turn leads to a sustainable competitive edge.

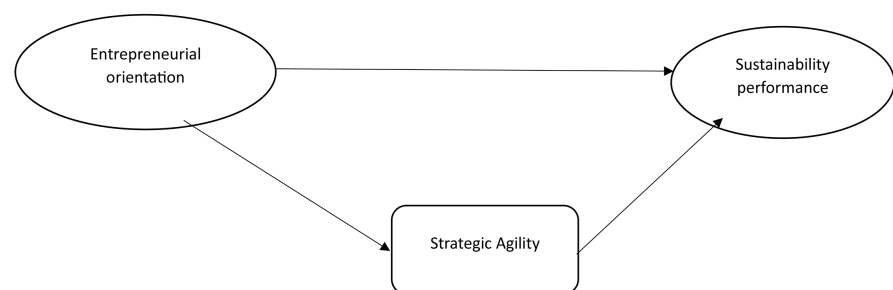
Another study done by (Kiilu et al., 2023) in Kenya on (Is There a Moderated Mediation Model That Explains the Relationship between Strategic Agility, Organizational Culture, Environmental Turbulence, and Organizational Performance?) Evidence from Accredited Universities in Kenya. A descriptive cross-sectional survey was conducted among 78 accredited universities in Kenya. Data were analyzed using ordinary least squares regression to test for moderated mediation effects. The study found that organizational culture mediates the relationship between strategic agility and organizational performance. Additionally, environmental turbulence moderates this mediation, enhancing the positive impact of strategic agility on performance through a strong organizational culture in turbulent environments.

A study done by Marlapa et al. (2024) in Indonesia on Determinants of Sustainable Performance: The Mediating Role of Strategic Agility and the Moderating Role of Leadership. The research involved 198 respondents from 66 private universities in Indonesia. Path analysis using Partial Least Squares (Smart-PLS) was employed to examine the relationships among competitive advantage, digital transformation, resource advantage, strategic agility, leadership, and sustainable performance. The findings indicated that strategic agility mediates the effects of competitive advantage, digital transformation, and resource advantage on sustainable performance. Leadership was found to moderate the relationship between strategic agility and sustainable performance, emphasizing the importance of agile leadership in achieving sustainability goals.

H1: Strategic agility has no mediating effect on the relationship between entrepreneurial orientation and sustainability performance.

2.3. Conceptual Framework

This will illustrate the relationship between the study variables:



Source: Researcher (2026).

3. Research Methodology

3.1. Research Philosophy

This study was grounded in the positivist philosophy, which assumes that reality

exists objectively and independently of the researcher. Knowledge is generated through observation, measurement, and empirical testing. Under this stance, the researcher remains detached to ensure neutrality and minimize bias. The study assumed that sustainability performance among youth enterprises can be objectively measured using validated instruments. Existing theories were reviewed, hypotheses were developed, and relationships among variables were tested statistically. By relying on quantifiable data and structured questionnaires, the research aimed to produce reliable, generalizable findings applicable to youth enterprises in Taita Taveta County.

3.2. Research Approach

Aligned with positivism, the study adopted a quantitative research approach based on deductive reasoning. The process moved from established theories to hypothesis formulation and empirical testing. Numerical data were collected using structured questionnaires adapted from prior studies to measure entrepreneurial orientation, strategic agility, and sustainability performance. Statistical techniques were employed to analyze relationships among the variables and assess the proposed model. This approach ensured objectivity, precision, and replicability. The findings were used to confirm or refute the hypotheses and provide evidence-based conclusions regarding the determinants of sustainability performance among youth enterprises.

3.3. Research Design

Research design was a guide for organizing and analyzing data as per the set study purpose and objectives. As such, in order to measure and estimate the effect of entrepreneurial orientation and strategic agility on sustainability performance among youth enterprises in Taita Taveta County, explanatory research design was followed. The researcher established the cause-and-effect relationships among the variables (Turner, Balmer, & Coverdale, 2013). This design was used because both the predictive and the outcome variables were measured and analysis performed at a particular point in time (Cooper & Schindler, 2014). In addition, to enhance the breadth of the data collection process, quantitative questionnaires were used to test the research hypotheses. Thus, this design enabled the researcher to target all the population elements and access data in a timely and cost-effective manner (Cooper & Schindler, 2014).

3.4. Population Size

The target population refers to the entire group of units to which a study intends to generalize its findings. It includes all individuals or elements that meet the pre-defined criteria for inclusion and share specific characteristics relevant to the research objectives. In this study, the target population comprised all government-funded youth enterprises registered under the Youth Enterprise Development Fund in Taita Taveta County. The sampling frame consisted of 262 officially registered

youth enterprise groups as of April 2019. To obtain individual-level data, two members were selected from each group, resulting in a total target population of 524 youths. This population formed the basis for drawing inferences regarding sustainability performance among youth enterprises in the county, ensuring that the findings would accurately reflect the characteristics and dynamics of registered youth-led enterprises.

Due to time and budget constraints associated with survey research, it was impractical to collect data from the entire target population. Therefore, a scientifically determined sample size was calculated to ensure adequate representation while maintaining feasibility. Using Yamane's (1967) formula, the required sample size was computed based on a population (N) of 524 and a margin of error (e) of 0.03 (3%). The formula, $n = N / \left[1 + N(e^2) \right]$, produced a sample size of 356 respondents. A 3% margin of error was selected to achieve a high level of precision and reliability in the findings while controlling survey costs. This margin falls within the acceptable range of 3% - 5% commonly used in social science research, ensuring statistical adequacy and representativeness.

3.5. Research Instrument and Measurement

This research tests the hypotheses against data from primary sources, data that the researcher collected first-hand. Standardized questionnaires are employed in the study so that respondents may express their views on the constructs. The questionnaire method was justified in this study as it promoted the study's objectives by providing a reusable method of collecting data from a greater number of participants, an economically smart way of collecting data, and a means of providing a structured and measurable instrument that can be subjected to a set of statistical tests to focus the research analysis. The instrument was constructed to meet the research objectives and the research questions, using measurement scales that had been previously tested empirically. The study instrument was composed of sections of structured questions to obtain demographic data and data relating to the key constructs of the study. Closed questions were employed to capture data on all variables, and respondents were subjected to a 5-point Likert Scale that measured the Level of Agreement from Strongly Disagree to Strongly Agree. The researcher employed the drop-and-pick method as well as face-to-face data collection in an effort to improve the rate of return of questionnaires and to minimize data incompleteness.

The researcher conceptualized sustainability performance as the interaction of the three components of organizational performance, as categorized into economic, social, and environmental components of performance, which were operationalized through multiple items. These items were subdivided into three components of economic sustainability (financial viability and growth), social sustainability (community and employee engagement and social responsibility), and environmental sustainability (practices of resource conservation and protection of the environment). The strategic posture reflecting entrepreneurial thinking and behav-

ioral styles within the enterprise is referred to as entrepreneurial orientation. It was assessed by incorporating the following five components: innovativeness, proactiveness, risk-taking, autonomy, and competitive aggressiveness. Strategic agility is the organization's ability to respond quickly and effectively to changes within the environment. It was assessed by utilizing the following three components: strategic sensitivity, leadership unity, and fluidity of resources.

3.6. Data Analysis Technique

The precision, completeness, and appropriateness of the collected data were ensured before any analysis and statistical procedure were carried out on the data set. Data preparation involved the identification of outliers, cleaning of the data set, and recoding and transforming of variables, reducing mistakes that could potentially undermine validity and generalizability (Stieglitz et al., 2018; Sheard, 2018). Questionnaires were discarded when there was a lack of response or when the response provided was imprecise. The responses that were deemed valid were recorded and analyzed in an... The rest of the data was scrutinized and any outliers identified were avoided in the analysis. Outliers were identified with the use of a set of identified tools, which included the frequency distribution and the scatter plots. The analysis of the multivariate outliers used Mahalanobis Distance (D^2) to avoid biased analysis (Kwak & Kim, 2017). The analysis was carried out using the Stepwise method available in SPSS version 23. The analysis of the data involved both the descriptive and the inferential analysis. The descriptive analysis was done using the mean, frequency, percentage and the standard deviation. The inferential analysis carried out was multiple regressions and the PROCESS macro. **Tables 1-3** and charts were used in the representation of the analyzed data to enhance clarity and ease of interpretation.

4. Results and Discussions

4.1. Response Rate

The study collected 306 surveys from a sample of 356 youth enterprises (respondents) in Taita Taveta County. 303 responses met the established criteria, providing an above the mean 85% response rate common in Entrepreneurial studies (Anseel et al., 2010). This response rate gave adequate data to establish the relationship between Entrepreneurial Orientation, Strategic Agility, Institutional Pressures and Sustainable Performance of the Youth Enterprises in Taita Taveta (Roberts et al., 2020; Van Waeyenberg et al., 2015).

Table 1. Response rate of youths in Taita Taveta.

Distributed Questionnaires	Received Questionnaire	Usable Questionnaires	Response Rate
356	306	303	85%

Source: Authors (2026).

4.2. Results of Measurement of Model

Jackson (2015) states that reliability is used in statistical research to assess the internal consistency or stability of an instrument while measuring particular concepts. According to Mohajan (2017), reliability refers to how well results hold up over time and accurately represent the entire population. The coefficient is used to examine the internal consistency of the measuring scales' items and determine whether they are statistically acceptable. The findings shown in Table 2 demonstrated that all coefficients were within the generally recognized limits of 0.7 proposed by Hair et al. (2010), and therefore all the research instruments met the criteria to be used in the study. Reliability firm's sustainability performance was 0.897. Entrepreneurial Orientation had a reliability of 0.705, while Strategic Agility had reliability of 0.884.

Table 2. Reliability results of the variables.

	Cronbach's Alpha	N of Items
Firm Sustainability Performance	0.897	23
Entrepreneurial Orientation	0.705	19
Strategic Agility	0.884	8

Source: Authors (2026).

Factor analysis was used to evaluate the dataset's viability concerning the study's constructs. Regarding sustainability performance, the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy equals 0.684. This suggests that the sample is optimal for extract factor sample, and the items are suitable for assessing construct validity. For entrepreneurial orientation, the KMO value equals 0.682, meaning that sufficient level of adequacy is reached for factor analysis, and the items can construct the explained reliability. As for strategic agility, the KMO is 0.548, slightly lower, but is still above the acceptable level of threshold, meaning that sample is extracted for factor moderate suit ability of the sample. KMO value for Institutional pressures equals 0.701, which means that construct is available to investigate, and data is suitable so that factor analysis structure is highly relevant. KMO values of almost all variables were above 0.6, which means that sample had justified basis for factor analysis and the data collected from youth enterprises had justified the parameters of construct to measure. These assessments enabled later statistical analysis to be conducted on the valid sample items.

4.3. Hypothesis Testing (Table 3)

Hypothesis H₀₅ holds that strategic Agility has no significant mediating effect on the link between Entrepreneurial orientation and sustainability performance. Guided by PROCESS macro (4.2) and mediation model 4, H₀₅ was tested on step-wise mediation procedures by MacKinnon (2012). To start, Path (a1) shows that

entrepreneurial orientation has a positive influence on strategic agility ($\beta = 0.6123$, $p < 0.001$). Next, in Path (b1), strategic agility has a positive influence on sustainable performance ($\beta = 0.0490$, $p < 0.001$). Finally, in Path (C'), entrepreneurial orientation has a positive influence on sustainable performance ($\beta = 0.0925$, $p < 0.05$). These first three paths show that MacKinnon's requirements for mediation have been met. With the inclusion of strategic agility as a mediator in the model, the effect of entrepreneurial orientation on sustainable performance was reduced from $\beta = 0.1225$ to $\beta = 0.0925$. This shows that strategic agility partially mediates the entrepreneurial orientation and sustainable performance relationship, demonstrating that a firm's entrepreneurial orientation has a direct overt influence on sustainability performance, and, in addition to that direct influence, there is also an indirect effect that is elicited through the firm's enhanced agility to adapt and reconfigure its resources in a way that drives sustainability performance (Mani et al, 2016).

Table 3. Results of the hypothesis testing.

OUTCOME VARIABLE:						
SP						
Model Summary						
R	R-sq	MSE	F	df1	df2	p
0.8248	0.6803	0.0106	158.5531	4.0000	298.0000	0.0000
Model						
	Coeff.	SE	t	p	LLCI	ULCI
Constant	1.5789	0.0959	16.4623	0.0000	1.3901	1.7676
EO	0.0925	0.0062	14.8615	0.0000	0.0802	0.1047
SA	0.0490	0.0054	9.1053	0.0000	0.0384	0.0596
Standardized Coefficients						
	Coeff.					
EO	0.5777					
SA	0.3520					
***** TOTAL EFFECT MODEL *****						
OUTCOME VARIABLE:						
SP						
Model Summary						
R	R-sq	MSE	F	df1	df2	p
0.7690	0.5914	0.0136	144.2528	3.0000	299.0000	0.0000

Continued

Model						
	Coeff.	SE	t	<i>p</i>	LLCI	ULCI
Constant	1.9269	0.0993	19.4076	0.0000	1.7315	2.1223
EO	0.1225	0.0060	20.5571	0.0000	0.1108	0.1342
Standardized Coefficients						
					Coeff.	
EO					0.7651	
***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****						
Total Effect of X on Y						
Effect	SE	t	<i>p</i>	LLCI	ULCI	<i>c'_cs</i>
0.1225	0.0060	20.5571	0.0000	0.1108	0.1342	0.7651
Direct Effect of X on Y						
Effect	SE	t	<i>p</i>	LLCI	ULCI	<i>c'_cs</i>
0.0925	0.0062	14.8615	0.0000	0.0802	0.1047	0.5777
Indirect Effect(s) of X on Y						
	Effect	BootSE	BootLLCI	BootULCI		
SA	0.0300	0.0046	0.0215	0.0397		
Completely Standardized Indirect Effect(s) of X on Y						
	Effect	BootSE	BootLLCI	BootULCI		
SA	0.1874	0.0268	0.1378	0.2416		

5. Discussion and Findings

The hypothesis suggesting that strategic agility orchestrates a partial mediation effect between entrepreneurial orientation and sustainability performance within youth enterprises has received confirmation from the mediation analysis undertaken. Path (a1) elucidated a statistically significant and a sizeable positive effect of entrepreneurial orientation on strategic agility ($\beta = 0.6123$, $p < 0.001$). Therefore, the results show that the greater the entrepreneurial behavior exhibited by the firm, for instance, in relation to innovativeness, proactiveness, and risk-taking, the better the firm's ability to adopt and reconfigure its resources in reaction to changes in the surrounding context. Consequently, it can be concluded that entrepreneurial orientation is fundamental in establishing the context for the agility required to respond to changing market conditions. The stepwise mediation process shows that youth enterprises with strong entrepreneurial orientation are in a better position to increase their agility, and therefore improve their capability to

adopt sustainability initiatives. These findings corroborate with the previous studies, which show that pre-entrepreneurial behavior facilitates the organizational flexibility and adaptive behavior necessary to achieve sustainability goals (Mani et al, 2016).

In addition, the results indicate that strategic agility operationalizes sustainability performance ($\beta = 0.0490$, $p < 0.001$). This demonstrates the effect of an enterprise's ability to foresee, and pivot in resource allocation and go through clear actions to take, to increase their economic, social and environmental opportunities. The effect of entrepreneurial orientation on sustainability performance is still significant ($\beta = 0.0925$, $p < 0.05$) when strategic agility is included in the model, which reflects partial mediation. In the situation where the beta coefficient reduction is significant as from 0.1225 to 0.0925, it shows that some of the effects of entrepreneurial orientation to sustainability performance are operative through strategic agility. This informs us that presence of an entrepreneurial orientation is the main reason for the presence of sustainable outcomes, while the enhancement of the agility of the firm is an additional contribution to the same. The results clarify that youth enterprises should not only promote entrepreneurial behavior, but also encourage agile behavior to enhance sustainable performance, in an intricate and fluid situation.

The PROCESS macro-outputs confirmed the indirect impact entrepreneurial orientation has through strategic agility and the indirect impact of 0.0300 (BootLLCI = 0.0215; BootULCI = 0.0397) with a standardized impact of 0.1874. This type of result reinforces the significant impact strategic agility has as an effect, explaining how entrepreneurial behavior impacts sustainability performance. Therefore, youth enterprises wanting to address all three bottom lines of the economy, society, and the environment should combine entrepreneurial behavior and strategic agility components, such as resource flexibility, aligned leadership, and fast decision-making, to improve strategic agility. These results present two pathways that the entrepreneurial orientation constructs to improve sustainability performance. First, there is a direct impact through the entrepreneurial initiatives. Having strategic agility is important to transform entrepreneurial motivation into sustainable performance and impact.

5.1. Theoretical Implications

The relevance of the Triple Bottom Line (TBL) theory has been reinforced, as demonstrated from an empirical standpoint, the sustainability performance of youth enterprises is economic, social, and environmental. Entrepreneurial orientation, as an antecedent, drives the performance of all the three dimensions of TBL, and is even more so, the case when performance is mediated via strategic agility. This empirical analysis of the theory posits the proposition of sustainable business value as encompassing social and environmental value, in addition to economic value. Therefore, the synthesis of TBL, strategic agility, and entrepreneurial orientation, enhances the theoretical base of how integrated TBL, strategic agility, and entrepre-

neurial orientation, from a developing country perspective, can help a firm achieve integrated sustainability. Furthermore, it demonstrates that the TBL is not exclusive to large corporations, but extends to youth-led enterprises. This is particularly important within the context of illustrating the fusion of entrepreneurial and organizational agility in the achievement of sustainability.

5.2. Practical Implications

The research highlights youth enterprises' potential for long-lasting impact by encouraging a sustainability-focused approach that integrates the three elements of the Triple Bottom Line (TBL). Managers should start implementing entrepreneurial behaviors and also proactively engage in other more flexible areas, such as environmental and market-oriented strategic agility, in addition to the environmental impacts of the community, to foster financial, community, and environmental positive impacts of the enterprises. Financial, community, and environmental positive impacts of the enterprises. Supporting youth enterprises to adjust to the principles of TBL is largely within the boundaries of policy-making and support agencies' impacts by fostering entrepreneurial tendencies and flexible management skills. With a primary focus on TBL, youth enterprises can improve stakeholder confidence, meet sustainability requirements, and adjust to a fast-changing market, enhancing financial sustainability, social sustainability, and environmental sustainability.

6. Conclusion, Limitations, and Future Research Directions

The current study focused on the role of entrepreneurial orientation and strategic agility in determining the sustainability performance of youth enterprises in Taita Taveta County, Kenya. The results confirmed that entrepreneurial orientation results in improved sustainability performance directly and also through strategic agility. This shows that the entrepreneurial-oriented practice covers positive outcomes in the economic, social, and environmental domains when coupled with agile resource management. The findings also show that the Triple Bottom Line framework, emphasizing on the economic, social, and environmental outcomes, is relevant to youth enterprises. Overall, the study results showed that when youth enterprises adopt innovative and proactive decision-making and risk-taking agile-oriented entrepreneurial practices, sustainability performance is improved. This also shows that youth enterprises in developing countries, with limited resources, through strategic entrepreneurial action and organizational adaptability, can achieve holistic sustainability. This adds to the existing literature on developing countries, integrating the TBL and Dynamic Capabilities Theory.

There are impacts on the scope of the study that must be acknowledged. First, the study used a cross-sectional approach. This makes determining the relationship between the variables of interest, in this case, the sustainable performance, to be problematic. To add on, the study was only focused on the government-sponsored youth enterprises in Taita Taveta County, diminishing the applicability of

its findings to privately sponsored or informal youth enterprises, different regions, or countries that are economically and/or regulatory different and/or the regions that the study was done. Additionally, the study used self-administered questionnaires, which could lead to some level of response bias and/or cases with answers driven by social desirability rather than by the truth. Also, the study used some structured scales to measure some of the variables of Strategic Agility and Entrepreneurial Orientation. Though these measures have been validated as such, they do capture some of the contextual elements of the youth enterprise practices. Lastly, the study did not measure qualitatively the personal experiences, challenges, and motivation of the youth entrepreneurs, and this limited the scope of the study to mostly the quantitative measures, which overall led to poorer understanding of the sustainability practices and the agility of the enterprises.

Future studies may implement longitudinal research designs that are able to capture the evolution of youth enterprises as they respond to changes in the market and the environment in order to better understand the complexities involved in entrepreneurial orientation, strategic agility, and sustainability performance over time. Comparative studies that involve multiple jurisdictions, either at the county or country level, will improve the generalizability of the research findings and the identification of contextual support and constraints on sustainability performance. Furthermore, studies of youth entrepreneurs that incorporate qualitative research designs, such as interviews or focus groups, will improve the understanding of how the youth entrepreneurs implement strategic agility and TBL (triple bottom line) constructs. Future studies may evaluate the role of various potential moderating or mediating variables, such as access to finance, technological innovation, and institutional framework, in strengthening the relationship between entrepreneurial orientation and sustainability performance. Lastly, broadening the scope of such studies to include other types of enterprises, such as informal or private startup businesses, will provide a more comprehensive analysis of the factors that influence the sustainability performance of youth enterprises in developing economies.

Ethical Consideration

To protect the privacy of the study respondents, as well as the protection, ethics, and volunteer ethics of the respondents, the study was conducted with the highest ethical care. The data collection process was preceded by an ethical review and approval with the National Commission for Science, Technology, and Innovation (NACOSTI) with an approval number NACOSTI/P/155986, which permitted the research to be conducted on youth enterprises in Taita Taveta County. Participants were informed of the study in detail, which included the purpose, the objectives of the study, and the procedures involved in the study. Participants were asked to provide study assumptions, which included confidentiality, their study participation being anonymous, free, and the ability to withdraw from the study at any time. The research study also avoided deception, coercion, and/or exploitation of the study

participants and any data collected was for the sole academic usage and secured for that purpose. Such ethical care and effort were given to the study in order for the study to be in compliance with the National Research Ethics Code, as well as the International Research Ethics Code.

Acknowledgements

I wish to thank the Almighty God for his eternal support. I also deeply appreciate my supervisors, Dr. Lydia Maket and Prof. Josephat Cheboi, who gave me academic direction in every step of developing this thesis. The data I accessed from the Youth Enterprise Fund was invaluable. I would like to thank the officials of Youth Enterprises in Taita-Taveta County, who generously gave their time to take part in this study.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- Acs, Z. J., Estrin, S., Mickiewicz, T., & Szerb, L. (2021). Entrepreneurship, Institutional Economics, and Economic Growth: An Ecosystem Perspective. *Small Business Economics*, *51*, 501-514. <https://doi.org/10.1007/s11187-018-0013-9>
- African Development Bank (2023). *African Youth Entrepreneurship and Innovation Report 2023*. AfDB Publications.
- Akomea, S. Y., Agyapong, A., Ampah, G., & Osei, H. V. (2022). Entrepreneurial Orientation, Sustainability Practices and Performance of Small and Medium Enterprises: Evidence from an Emerging Economy. *International Journal of Productivity and Performance Management*, *72*, 2629-2653. <https://doi.org/10.1108/ijppm-06-2021-0325>
- Anderson, B. S., Kreiser, P. M., Kuratko, D. F., Hornsby, J. S., & Eshima, Y. (2015). Reconceptualizing Entrepreneurial Orientation. *Strategic Management Journal*, *36*, 1579-1596. <https://doi.org/10.1002/smj.2298>
- Anseel, F., Lievens, F., Schollaert, E., & Choragwicka, B. (2010). Response Rates in Organizational Science, 1995-2008: A Meta-Analytic Review and Guidelines for Survey Researchers. *Journal of Business and Psychology*, *25*, 335-349. <https://doi.org/10.1007/s10869-010-9157-6>
- Ansong, A. (2017). Corporate Social Responsibility and Firm Performance of Ghanaian SMEs: The Role of Stakeholder Engagement. *Cogent Business & Management*, *4*, Article 1333704. <https://doi.org/10.1080/23311975.2017.1333704>
- Bebbington, J., & Unerman, J. (2020). Advancing Research into Accounting and the UN Sustainable Development Goals. *Accounting, Auditing & Accountability Journal*, *33*, 1657-1670. <https://doi.org/10.1108/aaaj-05-2020-4556>
- Bui, B., & de Villiers, C. (2021). Recovery from Covid-19 Towards a Low-Carbon Economy: A Role for Accounting Technologies in Designing, Implementing and Assessing Stimulus Packages. *Accounting & Finance*, *61*, 4789-4831. <https://doi.org/10.1111/acfi.12746>
- Clauss, T., Kraus, S., Kallinger, F. L., Bican, P. M., Brem, A., & Kailer, N. (2021). Organizational Ambidexterity and Competitive Advantage: The Role of Strategic Agility in the Exploration-Exploitation Paradox. *Journal of Innovation & Knowledge*, *6*, 203-213. <https://doi.org/10.1016/j.jik.2020.07.003>

- Cooper, D. R., & Schindler, P. S. (2014). *Business Research Methods* (12th ed.). McGraw-Hill Education.
- County Government of Taita Taveta (2024). *County Integrated Development Implementation Report 2024*. Taita Taveta County Government.
- Covin, J. G., & Wales, W. J. (2020). Crafting High-Impact Entrepreneurial Orientation Research: Some Suggested Guidelines. *Entrepreneurship Theory and Practice*, *43*, 3-18. <https://doi.org/10.1177/1042258718773181>
- Doni, F., Bianchi Martini, S., Corvino, A., & Mazzoni, M. (2020). Voluntary versus Mandatory Non-Financial Disclosure: EU Directive 2014/95/EU and Sustainability Reporting Practices. *Meditari Accountancy Research*, *28*, 781-802. <https://doi.org/10.1108/medar-12-2018-0423>
- Doz, Y. L., & Kosonen, M. (2020). *Fast Strategy: How Strategic Agility Will Help You Stay Ahead of the Game*. Wharton School Press.
- Eccles, R. G., Ioannou, I., & Serafeim, G. (2020). The Impact of Corporate Sustainability on Organizational Processes and Performance. *Management Science*, *60*, 2835-2857. <https://doi.org/10.1287/mnsc.2014.1984>
- Elkington, J. (2018). 25 Years Ago I Coined the Phrase “Triple Bottom Line”. Here’s Why It’s Time to Rethink It. *Harvard Business Review*, *25*, 2-5.
- Filser, M., Kraus, S., Roig-Tierno, N., Kailer, N., & Fischer, U. (2019). Entrepreneurship as Catalyst for Sustainable Development: Opening the Black Box. *Sustainability*, *11*, Article 4503. <https://doi.org/10.3390/su11164503>
- George, G., Merrill, R. K., & Schillebeeckx, S. J. D. (2021). Digital Sustainability and Entrepreneurship: How Digital Innovations Are Helping Tackle Climate Change and Sustainable Development. *Entrepreneurship: Theory and Practice*, *45*, 999-1027. <https://doi.org/10.1177/1042258719899425>
- Global Reporting Initiative (GRI) (2021). *Consolidated Set of GRI Sustainability Reporting Standards 2021*. Global Reporting Initiative.
- Gupta, V. K., & Batra, S. (2023). Entrepreneurial Orientation and Firm Performance: The Role of Environmental Dynamism and Strategic Flexibility. *Journal of Small Business Management*, *61*, 345-367.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th ed.). Pearson.
- Hörisch, J., Freeman, R. E., & Schaltegger, S. (2014). Applying Stakeholder Theory in Sustainability Management: Links, Similarities, Dissimilarities, and a Conceptual Framework. *Organization & Environment*, *27*, 328-346. <https://doi.org/10.1177/1086026614535786>
- Igwe, P. A., Amaugo, A. N., Ogundana, O. M., Egere, O. M., & Anigbo, J. A. (2018). Factors Affecting the Investment Climate, SMEs Productivity and Entrepreneurship in Nigeria. *European Journal of Sustainable Development*, *7*, 182-200. <https://doi.org/10.14207/ejsd.2018.v7n1p182>
- Jackson, S. (2015). *Reliability and Validity in Research*. Research Press.
- Kenya National Bureau of Statistics (2022). *Economic Survey 2022*. KNBS.
- Kenya News Agency (2024). *Taita Taveta Launches Poverty Alleviation Policy to Empower Youth Entrepreneurs*. Kenya News Agency Report.
- Khan, H., Bose, S., & Johns, R. (2020). Regulatory Influences on Sustainability Reporting: A Global Evidence. *Accounting & Finance*, *61*, 123-165.
- Kiilu, P., Machuki, V., Aosa, E., & Ngahu, C. (2023). Is There a Moderated Mediation Model That Explains the Relationship between Strategic Agility, Organizational Culture, Environmental Turbulence, and Organizational Performance? Evidence from Accredited

- Universities in Kenya. *European Journal of Business and Management Research*, 9, 1-6. <https://doi.org/10.24018/ejbmr.2024.9.6.2503>
- Klettner, A., Clarke, T., & Boersma, M. (2014). The Governance of Corporate Sustainability: Empirical Insights into the Development, Leadership and Implementation of Responsible Business Strategy. *Journal of Business Ethics*, 122, 145-165. <https://doi.org/10.1007/s10551-013-1750-y>
- Kraus, S., Breier, M., & Dasi-Rodríguez, S. (2020). The Art of Crafting a Systematic Literature Review in Entrepreneurship Research. *International Entrepreneurship and Management Journal*, 16, 1023-1042. <https://doi.org/10.1007/s11365-020-00635-4>
- Kwak, S. K., & Kim, J. H. (2017). Statistical Data Preparation: Management of Missing Values and Outliers. *Korean Journal of Anesthesiology*, 70, 407-411. <https://doi.org/10.4097/kjae.2017.70.4.407>
- Lenjo, J. (2023). Youth Empowerment Projects and Sustainability in Taita Taveta County, Kenya. *African Journal of Development Studies*, 13, 55-72.
- Lumpkin, G. T., & Pidduck, R. J. (2021). Global Entrepreneurial Orientation (GEO): An Updated, Multidimensional View of EO. In A. C. Corbett, P. M. Kreiser, L. Marino, & W. J. Wales (Eds.), *Entrepreneurial Orientation: Epistemological, Theoretical, and Empirical Perspectives* (pp. 17-68). Emerald Publishing Limited. <https://doi.org/10.1108/s1074-754020210000022002>
- MacKinnon, D. P. (2012). *Introduction to Statistical Mediation Analysis*. Routledge.
- Maduku, D. K., Mpinganjira, M., & Duh, H. (2016). Understanding Mobile Marketing Adoption Intention by South African SMEs: A Multi-Perspective Framework. *International Journal of Information Management*, 36, 711-723. <https://doi.org/10.1016/j.ijinfomgt.2016.04.018>
- Mani, V., Agarwal, R., Gunasekaran, A., Papadopoulos, T., Dubey, R., & Childe, S. J. (2016). Social Sustainability in the Supply Chain: Construct Development and Measurement Validation. *Ecological Indicators*, 71, 270-279. <https://doi.org/10.1016/j.ecolind.2016.07.007>
- Marlapa, E., Karyatun, S., Yuliantini, T., Pradopo, L. R., & Endri, E. (2024). Determinants of Sustainable Performance: The Mediating Role of Strategic Agility and the Moderating Role of Leadership. *Uncertain Supply Chain Management*, 12, 2253-2262. <https://doi.org/10.5267/j.uscm.2024.6.006>
- Martens, C. D. P., Lacerda, F. M., Belfort, A. C., & de Freitas, H. M. R. (2021). Research on Entrepreneurial Orientation: Current Status and Future Agenda. *International Journal of Entrepreneurial Behavior & Research*, 22, 556-583. <https://doi.org/10.1108/ijeb-08-2015-0183>
- Mohajan, H. K. (2017). Two Criteria for Good Measurements in Research: Validity and Reliability. *Annals of Spiru Haret University. Economic Series*, 17, 59-82. <https://doi.org/10.26458/1746>
- Muff, K., Kapalka, A., & Dyllick, T. (2017). The Gap Frame—Translating the SDGs into Relevant National Grand Challenges for Strategic Business Opportunities. *The International Journal of Management Education*, 15, 363-383. <https://doi.org/10.1016/j.ijme.2017.03.004>
- Ngek Neneh, B., & van Zyl, J. (2017). Entrepreneurial Orientation and Its Impact on Firm Growth amongst SMEs in South Africa. *Problems and Perspectives in Management*, 15, 166-178. [https://doi.org/10.21511/ppm.15\(3\).2017.14](https://doi.org/10.21511/ppm.15(3).2017.14)
- Nugroho, R. A., Ferdinan, B. A., & Rosyadi, J. A. (2024). The Impact of Creative Leadership on Strategic Agility in Startups: Mediating Roles of Resource Management and Innovative Work Behavior. *Business Review and Case Studies*, 5, 305-318.

<https://doi.org/10.17358/brcs.5.2.305>

- Porter, M. E., & Kramer, M. R. (2011). Creating Shared Value: Redefining Capitalism and the Role of the Corporation in Society. *Harvard Business Review*, 89, 62-77.
- Rafiq, M., Hasan, A., Latif, Z., Kamil, A., Zaidi, A. R., & Bangash, S. A. (2024). HRM Strategies and Sustainable Competitive Advantage: Assessing Strategic Agility Mediating Impact. *Bulletin of Business and Economics (BBE)*, 13, 379-384.
<https://doi.org/10.61506/01.00504>
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2022). Entrepreneurial Orientation and Business Performance Revisited. *Entrepreneurship Theory and Practice*, 46, 1-30.
- Republic of Kenya (2023). *Medium Term Plan IV (2023-2027)*. Government Printer.
- Roberts, C., Clark, M., & Paterson, L. (2020). Response Rates in Quantitative Research on SMEs: A Meta Analysis. *Small Enterprise Research*, 27, 123-140.
- Sardi, A., Sorano, E., Garengo, P., & Ferraris, A. (2020). The Role of HRM in the Innovation of Performance Measurement and Management Systems: A Multiple Case Study in SMEs. *Employee Relations: The International Journal*, 43, 589-606.
<https://doi.org/10.1108/er-03-2020-0101>
- Schaltegger, S., Hörisch, J., & Freeman, R. E. (2019). Business Cases for Sustainability: A Stakeholder Theory Perspective. *Organization & Environment*, 32, 191-212.
<https://doi.org/10.1177/1086026617722882>
- Shams, R., Vrontis, D., Belyaeva, Z., Ferraris, A., & Czinkota, M. R. (2021). Strategic Agility in International Business: A Conceptual Framework for “Agile” Multinationals. *Journal of International Management*, 27, Article ID: 100737.
<https://doi.org/10.1016/j.intman.2020.100737>
- Sheard, J. (2018). *Data Preparation and Cleaning for Quantitative Analysis*. Springer.
- Shepherd, D. A., & Patzelt, H. (2022). *Entrepreneurial Cognition: Exploring the Mindset of Entrepreneurs* (2nd ed.). Springer.
- Siew, R. Y. J. (2021). A Review of Corporate Sustainability Reporting Tools (SRTs). *Journal of Environmental Management*, 164, 180-195.
<https://doi.org/10.1016/j.jenvman.2015.09.010>
- Stieglitz, S., Dang-Xuan, L., Bruns, A., & Neuberger, C. (2018). Social Media Analytics: Data Collection and Analysis Techniques. *Business & Information Systems Engineering*, 60, 123-135.
- Tasdemir, C., & Gazo, R. (2020). A Systematic Literature Review for Sustainability Reporting. *Sustainability*, 12, 1-21.
- Teece, D., Peteraf, M., & Leih, S. (2016). Dynamic Capabilities and Organizational Agility: Risk, Uncertainty, and Strategy in the Innovation Economy. *California Management Review*, 58, 13-35. <https://doi.org/10.1525/cm.2016.58.4.13>
- Tsalis, T. A., Malamateniou, K. E., Koulouriotis, D., & Nikolaou, I. E. (2020). Exploring the Performance of Sustainability Reporting Initiatives: A Multi-Method Approach. *Journal of Cleaner Production*, 245, 118-135.
- Turner, N., Balmer, J., & Coverdale, J. (2013). *Research Methodologies for Management Studies*. Routledge.
- U.S. Department of State (2022). *Youth Engagement in Innovation, Leadership, and Civic Participation*. Bureau of Educational and Cultural Affairs. <https://eca.state.gov/>
- United Nations (2023). *The Sustainable Development Goals Report 2023*. United Nations Publications.
- United Nations Development Programme (UNDP) (2021). *Youth and Sustainable Devel-*

opment in Africa: Regional Report. UNDP.

- Urban, B., & Kujinga, L. (2023). Institutional Environments and SME Sustainability in Emerging Markets. *Journal of Entrepreneurship in Emerging Economies*, 15, 245-263.
- Van der Byl, C. A., & Slawinski, N. (2022). Embracing Tensions in Corporate Sustainability: A Review of Research from Win-Wins and Trade-Offs to Paradoxes and beyond. *Organization & Environment*, 28, 54-79. <https://doi.org/10.1177/1086026615575047>
- Van Waeyenberg, T., Bouwman, H., & Haezendonck, E. (2015). Research Response Rates in Entrepreneurship Studies: A Review. *Journal of Entrepreneurship Research*, 5, 45-62.
- Wales, W., Gupta, V. K., Marino, L., & Shirokova, G. (2021). Entrepreneurial Orientation: International, Global and Cross-Cultural Research. *International Small Business Journal: Researching Entrepreneurship*, 37, 95-104. <https://doi.org/10.1177/0266242618813423>
- Wiklund, J., Nikolaev, B., Shir, N., Foo, M. D., & Bradley, S. (2022). Entrepreneurship and Well-Being: Past, Present, and Future. *Journal of Business Venturing*, 34, 579-588. <https://doi.org/10.1016/j.jbusvent.2019.01.002>
- World Bank (2022). *World Development Report 2022: Finance for an Equitable Recovery*. World Bank Publications.
- Yamane, T. (1967). *Statistics: An Introductory Analysis* (2nd ed.). Harper and Row.
- Yildiz, T., & Aykanat, Z. (2021). The Mediating Role of Organizational Innovation on the Impact of Strategic Agility on Firm Performance. *World Journal of Entrepreneurship, Management and Sustainable Development*, 17, 765-786. <https://doi.org/10.1108/wjemsd-06-2020-0070>