

DOI: 10.28934/jwee22.34.pp1-26

ORIGINAL SCIENTIFIC PAPER

Entrepreneurial Orientation and Entrepreneurial Performance among Female Entrepreneurs: Empirical Evidence from Kenya



Kimeu Muindi¹

Enno Masurel²

Amsterdam Center for Entrepreneurship@VU, Department of Management and Organization, School of Business and Economics, Vrije Universiteit Amsterdam, The Netherlands

ABSTRACT

The purpose of this paper was to study whether entrepreneurial performance can be explained by entrepreneurial orientation among female entrepreneurs in Kenya. This empirical research is based on the data from 301 small and medium enterprises (SMEs) located in Kenya. A linear multiple regression analysis on the effect of entrepreneurial orientation on entrepreneurial performance among female entrepreneurs was conducted. The paper focused on the five aspects of entrepreneurial orientation (risk-taking, innovativeness, pro-activeness, competitive aggressiveness, and, autonomy) and their ability to prompt entrepreneurial performance which was defined as firm performance, development of personal wealth, and social performance. Social performance was rather well predicted by entrepreneurial orientation (by 4 out of 5 aspects), whereas firm performance was only limitedly predicted by entrepreneurial orientation (only by 2 out of 5 aspects) and development of personal wealth was not predicted by entrepreneurial orientation at all (by 0 out of 5 aspects). On the other hand, we see that the entrepreneurial orientation aspects of innovativeness and pro-activeness

¹ Corresponding author, e-mail: a.m.kimeu@vu.nl

² Email: e.masurel@vu.nl

have the most predictive value (for 2 out of 3 entrepreneurial performance indicators), whereas risk-taking and autonomy have only limited predictive value (for only 1 out of 3 entrepreneurial performance indicators) and competitive aggressiveness has no predictive value at all (for 0 out of 3 entrepreneurial performance indicators). The paper is based on own-collected empirical data. The paper indicates that the benefits of aligning high levels of entrepreneurial orientation are not unanimous but vary across the different aspects of entrepreneurial orientation and the different entrepreneurial performance indicators.

KEYWORDS: *small and medium enterprises, female entrepreneurs, entrepreneurial orientation, firm performance, personal wealth, social performance, Kenya, Africa*

Introduction

Entrepreneurial orientation is a deliberate posture that highlights a firm's entrepreneurial activity and guides decision-making behaviour and, ultimately, performance. Firms espousing an entrepreneurial orientation embolden and expedite entrepreneurial activities. The greater the level of each of these entrepreneurial activities, the greater the firm's entrepreneurial orientation, which translates into higher levels of performance. (Rauch et al., 2009).

Understanding and the implication of entrepreneurial orientation to female entrepreneurs in the context of African economies is essential, as (Kiggundu, 2002) points out, to include examining cultural differences as possible contingencies in the entrepreneurial orientation - entrepreneurial performance link. (Kiggundu, 2002) further argued that firms need this link more than ever before as they seek emerging markets, acquisitions, and alliances. The current study investigates the relationship between entrepreneurial orientation and entrepreneurial performance in the context of small and medium enterprises (SMEs) in Kenya that employ less than ten people, operate with a small capital investment in the retail trade sector, and are run by female entrepreneurs. (Kenya National Bureau of Statistics, 2019).

In Kenya, very few or no studies have examined the contextual relationship between EO and entrepreneurial performance. Therefore, it is vital that in using EO to promote SME growth in Kenya, the EO-performance link in the context of Kenya should be examined, as the degree

or direction of this relationship can differ from other studies carried out in different contextual settings. This study supports entrepreneurship research in several ways. First, it is the first time that scholars are considering the relationship between entrepreneurial orientation and three different entrepreneurial performance indicators (firm performance, development of personal wealth, and social performance). Second, our paper contributes to the entrepreneurship literature with a study in an under-researched context (Africa, Kenya). Thus, the research question we seek to answer in this paper is to what extent entrepreneurial orientation contributes to the entrepreneurial performance of female entrepreneurs in Kenya.

Entrepreneurial Orientation

Miller (1983) developed the initial arguments for entrepreneurial orientation, largely based on a literature review. Miller (1983) proposed defining entrepreneurial orientation as the characteristics and activities that an entrepreneurial firm employs in product market innovation, undertaking risky ventures, and developing proactive innovations aimed at outperforming its competitors in the marketplace. There are various theoretical reasons why entrepreneurial orientation is associated with performance.

Lupkin and Dess, (1996) defined entrepreneurial orientation as the methods, practices, and decision-making mechanisms that can be seen as a kind of strategic direction that shows how a firm anticipates competing. They further argue that one can operationalize entrepreneurial orientation through the aspects of risk-taking, innovativeness, pro-activeness, competitive aggressiveness, and autonomy. Risk-taking alludes to the appreciation of ambiguity and risk, which is inherent in the initial activity and is characterized by allocating resources towards uncertain outcomes and undertakings. Innovativeness reflects a predisposition toward embracing and supporting ingenuity and experimentation and novelty in technology in the development of products, services, and processes. Pro-activeness indicates the forward-looking outlook where firms vigorously seek to anticipate opportunities to exploit and present new products to gain first-mover advantage and help outline the direction of the firms' environment. Competitive aggressiveness reflects the intensity with which a firm selects to compete and its efforts to outmanoeuvre their opponents and out-do their competitors. Autonomy alludes to the authority and individuality employed

by an individual or team applied inside the firm in the evolvment of business ideas from vision to completion.

It can be observed that it is generally uncertain how these five aspects can independently apply themselves to entrepreneurial performance (Hughes & Morgan, 2007). These authors argued that it is apparent that all or, in the least, an amalgamation of some aspects exhibit some relationship with performance since other authors have found a clear link between entrepreneurial orientation and performance (Shepherd et al., 2005; Wiklund, Shepherd, 2003; Zahra, 1991; Zahra & Covin, 1995). Others who have studied the entrepreneurial orientation - performance link found that there was little or no association, while others reported even negative relationships (Hart, 1992; Hughes & Morgan, 2007; Matsuno et al., 2002; Morgan & Strong, 2003). For all the arguments listed above and to advance the (Lumpkin & Dess, 1996) framework, it is apparent that an empirical study is desirable to examine whether distinct aspects of entrepreneurial orientation might influence entrepreneurial performance and to take account of the context in which the research takes place.

Female Entrepreneurship Development³

The role and importance of female entrepreneurs and their contribution to a country's economy have been on the increase in the last three decades (Brooks et al., 2018; Sarri & Trihopoulou, 2005). Equally, they also face challenges that can be classified as specific to different contexts and statuses such as cultural norms and beliefs. Similarly, (Isaga, 2018) reinforced this point by suggesting that female entrepreneurs, just like male entrepreneurs in developing countries, are constrained by a lack of infrastructure, by unstable business, economic and political environments, and by the general lack of entrepreneurship-related training. These business impediments are also attributed to the fact that many female entrepreneurs have limited or no access to formal education, real estate for collateral purposes, and social mobility. (Radović-Marković & Achakpa, 2018). There is not much difference in firm performance between female-owned and male-owned new ventures, provided that this performance is measured appropriately (Lock & Lawton Smith, 2016).

³ This sub-section is a synopsis of the sub-section chapter that has been prepared as part of the broader PhD series of chapters where the section on Female Entrepreneurship has been retained as the same across all other two chapters.

Entrepreneurial Performance⁴

This paper defines entrepreneurial performance as firm performance, development of personal wealth and social performance, for reasons listed below. Firm performance is measured as firm growth in terms of growth in profits, growth in sales, growth in assets, and growth in the number of employed people/employment. The development of personal wealth involves the acquisition of wealth at the household level. The social performance involves the interaction of the entrepreneur with her community. Therefore, we can define entrepreneurial performance as the achievements delivered by people running their enterprises. In measuring the development of personal wealth, we have used consumer durables as indicators like buying or building a house, having children in high-cost private schools, acquisition of financial assets (such as stocks, treasury bills, checking accounts, savings bonds & accounts, and trusts), increasing the number of assets (such as rental houses), contribution to employee pension plans, and general household prestige such as having a satellite television. Such measures, as used in developing personal wealth, vary from country to country and may be based on national surveys and primary data.

Social performance, to a large extent, is an assessment of a firm's participation in its local community activities (Muindi et al., 2020). It entails a firm's success in meeting its responsibilities to the various stakeholders, its employees, its customers, and generally, its local community and the society at large. (Stephan et al., 2019), described the concept of entrepreneurial performance to include, among others, the existence of innovative behavior, business growth and employee satisfaction, which also involves investing in social networks with people inside and outside the firm. Hans and Møen, (2007) established a link between founders' personal wealth and start-up performance.

Hypotheses

The various ways and methods of operationalizing entrepreneurial orientation present the different manifestations in which this concept can be applied and used. Most approaches are complementary and interactive

⁴ This sub-section is a synopsis of the sub-section chapter that has been prepared as part of the broader PhD series of chapters where the section on Entrepreneurial Performance has been retained as the same across all other two chapters.

(Lumpkin & Dess, 2001). These authors further argued that each of these manifestations presents various competing views of how important different entrepreneurial activities are to firms' successes. From these arguments and to advance the framework of (Lumpkin & Dess, 1996), we postulate to examine the five entrepreneurial orientation aspects and how they affect or impact overall entrepreneurial performance. In the following five subsections, the five hypotheses are presented.

Risk-taking

Risk-taking at the firm level is defined as allocating high levels of resources to potentially profitable endeavours that have a high likelihood of failure (Miller & Friesen, 1982). The higher the levels of each of these entrepreneurial undertakings, the higher the firm's entrepreneurial orientation, which may, in turn, translate to higher levels of performance (Boso et al., 2013; Leutner et al., 2014). When deciding on what risks to undertake, firms must tolerate at least two circumstances; first, the possibility of failure, and second, the risk of not being able to exploit an opportunity. These authors also posited that tolerance of risk-taking orients the firm towards action; thus appropriate risk-taking action is related to intentional decision promptness and is linked to improved performance.

Hughes and Morgan, (2007), observed that risk-taking firms typically seize opportunities and allocate resources before fully understanding what action needs to be undertaken. They further argued that risk-taking could carry costs mainly through increased or constant changes in customer demands. Firms need to demonstrate a readiness to take risks and challenge the prevailing order of business to secure entrepreneurial performance (Shan et al., 2016).

Thus, the following hypothesis is derived:

H1 Risk-taking is positively related to entrepreneurial performance.

Innovativeness

The aspect of innovativeness characterizes a bias towards adopting and embracing creativeness, experimentation, technical leadership, research, and development in developing products, processes, and services, to create novel solutions to customer needs and problems (Hughes & Morgan, 2007). Such a situation exists when firms seek to pursue the active process of implementing these new ideas, products, and services. The innovativeness

trait of entrepreneurial orientation stimulates change, and creative behaviour encourages a dynamic exchange of ideas and improves the flow of information leading to new product development (Keh et al., 2007).

Therefore, we hypothesize that:

H2 Innovativeness is positively related to entrepreneurial performance.

Pro-activeness

Pro-activeness represents forward outlook perspectives in which a firm actively seeks to anticipate opportunities to cultivate and present new or improved products or services, initiate changes to existing strategies and manoeuvres, and identify future trends in the market (Hughes & Morgan, 2007; Lumpkin & Dess, 2001). In this way, the firm secures the first-mover advantage in the short term and hence shapes the direction of the marketplace in the long-term (Hughes & Morgan, 2007). Pro-activeness in a firm is characterized by planned change, meaning effectively acting on information to adjust and not merely anticipating it (Hughes & Morgan, 2007). In doing this, firms alleviate the peril of complacency by ensuring they are better positioned to exploit markets both in the short and in the long term (Hughes & Morgan, 2007).

Pro-activeness further helps leverage the firm's responsive capabilities and propensity to act to meet new circumstances (Shan et al., 2016). Thus, we posit the following hypothesis:

H3 Pro-activeness is positively related to entrepreneurial performance.

Competitive Aggressiveness

Lumpkin and Dess, (2001), defined competitive aggressiveness as encapsulating the intensity of a firm's effort in outperforming and undermining its trade and sectoral rivals. (Hughes & Morgan, 2007) posited that this competitive aggressiveness might take the form of well-chosen and deliberate actions that reflect a reactive response. Competitive aggressiveness may also be implemented through the deployment of resources to launch an uninterrupted attack on competitors with the aim of overwhelming them in their marketing efforts and steadily building on their strengths and weaknesses and thus establishing a competitive advantage through continuous offensive tactics (Griffith et al., 2006; Hughes & Morgan, 2007; Lumpkin & Dess, 2001; Mason et al., 2015).

In leveraging its market position, an aggressive firm creates value by accruing its adaptive capabilities that consistently undermine competitors' efforts in the market in contrast to the adoption of a passive stance to competition (Hughes & Morgan, 2007). Thus, an aggressive firm can improve its performance because it mainly depends on the out-manoeuvring and out-doing of competitors, therefore, strengthening the firm's competitiveness at the expense of the rivals. This is characterized by an aggressive posture and a forceful response to a competitor's actions. Thus, we derive the following hypothesis:

H4 Competitive aggressiveness is positively related to entrepreneurial performance.

Autonomy

Autonomy is defined as conveying freedom to employees to encourage them to be self-directed; it helps to champion innovative ideas that are vital for productive entrepreneurial activity (Lumpkin & Dess, 1996). A lack of autonomy would lead to probable passivity such that employees are constrained in carrying out activities without managerial consent (Hughes & Morgan, 2007). Autonomy, for this reason, is an essential driver of flexibility, which can be a necessary attribute of a firm because it leads to enhanced performance (Grewal & Tansuhaj, 2001). A firm can react promptly to environmental change and market signals by swiftly countering and adopting immediate actions and tasks (Grewal & Tansuhaj, 2001; Hughes & Morgan, 2007). Therefore, the presence of autonomy encourages greater flexibility in the firm to facilitate a dynamic adjustment to change. We derive the following hypothesis:

H5 Autonomy is positively related to entrepreneurial performance.

Study Setting⁵

Uasin Gishu County, is the place where the data collection for this paper took place, is located in the Great Rift Valley, Western Kenya, and covers an area of 3,345.2 km². The County lies on a highland plateau with altitudes gently dropping from 2700 meters above sea level (Forest & Kali,

⁵ This sub-section is a synopsis of the sub-section chapter that has been prepared as part of the broader PhD series of chapters where the section on **Study setting** has been retained as the same across all other tree chapters

2009). According to the population census of the year 2009, the population in this County was 894,179 and is expected to rise to 1,211,853 in the year 2015, with a projected growth rate of 3.8 percent by the year 2019. Uasin Gishu County has relatively high poverty levels, standing at 51.3 percent in the year 2015; this level is comparable with the national rate of 47.2 percent (Kenya National Bureau of Statistics, 2017). The fieldwork took place in April and May 2015.

Questionnaire Development

We utilized 17 items on entrepreneurial orientation initially as conceptualized by (Miller, 1983), (Lumpkin & Dess, 1996), (Lumpkin & Dess, 2001), and (Covin & Slevin, 1990). However, the questionnaire was slightly modified and adjusted to fit better within the Kenyan perspective and after conducting 30 pre-study qualitative interviews with experts in the field before the actual data collection. The instrument used a five-point Likert scale, using statements ranging from *Strongly disagree (1)*; *Disagree (2)*, *Neither Agree nor Disagree (3)*, *Agree (4)*, *Strongly agree (5)* and from *Below competitors (1)*, *Slightly Below competitors (2)*, *At Par with competitors (3)*, *Slightly above competitors (4)*, *Above competitors (5)*.

On entrepreneurial performance, we used 24 items on a five-point Likert scale. On firm performance, we adopted a scale developed by Isaga (2012), with other 10 items on the development of personal wealth and 10 items on social performance adopted from Muindi et al. (2020), Using statements ranging from *Strongly Decreased (1)*, *Decreased (2)*, *Did not Increase nor Decrease (3)*, *Increased (4)*, and *Strongly Increased (5)* for firm performance and *Strongly disagree (1)*; *Disagree (2)*, *Neither Agree nor Disagree (3)*, *Agree (4)*, *Strongly agree (5)* for both personal wealth and social performance.

Results⁶

From Table 1 it becomes clear that Less than 20 percent of the respondents had Basic Education (Classes 1-8) as their highest form of completed level of education, and almost half of the respondents had

⁶ This sub-section is a synopsis of the sub-section chapter that has been prepared as part of the broader PhD series of chapters where **Table 1 and Table 2** below have been retained as the same across all other three chapters

Secondary Education (Forms 1-4) being the highest level of education achieved. Nearly a quarter of the respondents had successfully acquired a College Diploma, listed as the highest level of education attained. The other forms of schooling hardly occurred among our group of respondents. Close to a third, 33.2 percent of the respondents reported having had both prior business and management experience; respectively, it is essential to note that the scores for both experiences are the same. Apparently, the respondents may not have distinguished between the two. Almost half of the respondents were 30 years of age or younger. About one-third of the respondents were between 30 and 40 years of age. Slightly more than 20 percent were older than 40 years.

Table 1. Entrepreneur Profile

	Frequency	Percent
Highest level of education		
No education	4	1.3
Basic Education (Class 1-8)	48	15.9
Secondary Education (Form 1-4)	149	49.5
Trade School (Certificate Holder)	21	7.0
College Diploma	66	21.9
University Degree	10	3.3
Professional Qualification	2	0.7
Other	1	0.3
Total	301	100
Prior Business experience		
With	100	33.2
Without	201	66.8
Total	301	100
Prior management experience		
With	100	33.2
Without	201	66.8
Total	301	100
Age		
Under 20 years	14	4.7
20 to 30 years	126	41.9
31 to 40 years	99	32.9
41 to 50 years	40	13.3
51 to 60 years	21	7.0
Over 60 years	1.0	0.3
Total	301	100

Table 2, presents the profiles of the firms. The chart illustrates that more than half of the firms have only been in business since 2010. More than 40 percent was already in the business between 2000 and 2010. Only a small minority of the firms were already in business since the last century. Further, almost half of the firms were located in the town center, whereas more than one-quarter of the firms were located in one of the rural townships. More than 10 percent of the firms were situated in the outskirts or the peri-urban areas, respectively. Additionally, more than half of the firms had three employees. More than 35 percent of the firms had one or two employees. Only a small minority had four or five employees.

Table 2. Firm Profile

	Frequency	Percent
Years of founding the Business		
1970 to 1980	3	1.0
1990 to 2000	22	7.3
2000 to 2010	123	40.9
2010 to 2015	153	50.8
Total	301	100
Location		
Town Centre	140	46.5
Outskirts	42	14.0
Peri-Urban areas	39	13.0
Rural Townships	79	26.2
Other	1	0.3
Total	301	100
Number of people working for the firm		
1.0	83	27.5
2.0	23	7.6
3.0	155	51.7
4.0	34	11.3
5.0	6	1.9
Total	301	100

For Table 3, there were seventeen entrepreneurial orientation scale items subjected to a principal component analysis with varimax rotation and Kaiser normalization (Kuckertz & Wagner, 2010). Two scale items on Autonomy were dropped for having a lower factor loading of less than 0.7. (My firm gives its employees authority and responsibility to act alone if

they think it to be in the best interests of the business; (My firm's employees have access to all vital information). All other scale items had factor loadings between .734 and .842 and were able to load on distinct factors. The internal consistency of the scales was deemed appropriate, as the explained variance for Risk-taking had a value of 64.06 percent, Innovativeness had an explained variance value of 60.77 percent, Proactiveness had an explained variance value of 63.44 percent, Competitive aggressiveness had an explained variance value of 63.32 percent, and Autonomy (after having dropped two scale items, see above) had an explained variance value of 63.36 percent. So, all elements retained were considered to represent a measure of good internal consistency with the total explained variance of above 50 percent (see also (Gelman & Pardoe, 2006; O'Grady, 1982). Our study design had the probability of introducing common method bias with the possibility of overestimating or underestimating the underlying interrelationships. We, therefore, used Harman's single-factor method to test this, and it resulted in 17 factors having eigenvalues of greater than 1, while the first factor accounted for 28% of the total variance, implying that should a common methods bias be present, it did not materially influence the results. This means that the first factor was below 50% and, therefore, could not affect the data; hence, the results. These results indicate that our instrument is sufficiently reliable to indicate the scores on entrepreneurial orientation, and consequently, we could proceed with further analysis of our data (see also (Podsakoff & Organ, 1986).

Table 3. Entrepreneurial Orientation: Factor Loadings and Explained Variance Values

	Factor Loading	Explained Variance
Risk-taking		
My firm has a strong predisposition for high-risk projects with chances of very high returns	0,835	
My firm often has had to take bold, wide-ranging acts necessary to achieve our objectives	0,806	64.06
My firm, when confronted with decisions involving uncertainty, typically adopts a bold posture in order to maximize the probability of exploiting opportunities.	0,757	

	Factor Loading	Explained Variance
Innovativeness		
My firm favors a strong emphasis on technological leadership and innovation	0,734	
My firm has had new lines of products/services as meted in the past 5 years	0,781	60.77
My firm's changes in product or service lines have usually been quite dramatic	0,822	
Pro-activeness		
My firm typically initiates action which competitors respond to	0,803	
My firm is very often the first business to introduce new products/services, administrative techniques, operating techniques etc.	0,810	63.44
My firm has a strong tendency to be ahead of others in introducing novel ideas or products	0,775	
Competitive aggressiveness		
My firm is intensely competitive	0,728	
My firm business takes a bold or aggressive approach when competing	0,834	63.32
My firm tries to undo and out-maneuver the competition as best as we can	0,821	
Autonomy		
My firm permits its employed people to act and think without interference	0,833	
My firm allows its employed people to perform jobs that allow them to make and instigate changes in the way they perform their work	0,787	63.36
My firm gives its employees the freedom to communicate without fear	0,842	

Exploratory factor analysis of entrepreneurial performance is represented in Table 4. Firm Performance had one item out of four dropped due to low factor loading lower than 0.7 (My firm's number of employed people in the last three years). Development of Personal Wealth had four items dropped for having factor loadings below 0.7 (I have been able to build/buy or start building a house; I have increased my assets (such as rental houses); I have contributed to my employed people's pension plan (such as NSSF and NHIF); I have acquired *Household Prestige* - items

(such as Satellite Television) and two items were retained. The same process was repeated on Social Performance, with seven items being dropped (My firm offers industrial attachments, internships to students; My firm donates money to charities in the communities where we operate; My firm uses a formal customer's complaints register for clients; My firm makes timely payment of taxes; My firm is active within an organization with a social purpose; and firm offers time and skills in voluntary activities) and three items retained. Thus, the dimensions of entrepreneurial performance represented distinct aspects, see also (Hurley et al., 1997), and therefore, we can proceed to conduct the regression analysis.

Table 4. Entrepreneurial Performance: Factor Loadings and Explained Variance Values

Firm Performance	Factor Loading	Explained Variance
Growth of my firm's profit	.815	
Development of my firm's sales	.818	67.56
Development of my firm's assets	.833	
Development of Personal Wealth		
I have managed to take my children to study in a high-cost private school	.796	
I have managed to acquire financial assets (such as stocks, treasury bills, checking accounts, savings bonds and accounts, trusts)	.796	63.33
Social Performance		
My firm supports orphans and the underprivileged in society directly or indirectly through existing institutions	.869	
My firm sponsors community activities such as sports, church buildings, culture, and traditional ceremonies.	.863	69.71
My firm sponsors students in schools.	.769	

In Table 5, as far as risk-taking is concerned. Hypothesis 1, *Risk-taking is positively related to entrepreneurial performance*, ($\beta=0.352$, $\rho<0.000$), and is partly confirmed as we only see the significance of social performance. Hypothesis 2, *Innovativeness is positively related to entrepreneurial performance*, ($\beta=0.181$, $\rho<0.05$), ($\beta=0.844$, $\rho<0.000$), and is greatly confirmed as it is significant with firm performance and social performance. Hypothesis 3, *Pro-activeness is positively related to*

entrepreneurial performance, ($\beta=0.199$, $\rho<0.000$), ($\beta=0.241$, $\rho<0.05$) is also greatly confirmed, as is significant with firm performance and social performance. Hypothesis 4 (*Competitive aggressiveness is positively related to entrepreneurial performance*) is fully rejected as it is not significant with any aspect of entrepreneurial performance. Hypothesis 5, (*Autonomy is positively related to entrepreneurial performance* ($\beta=0.187$, $\rho<0.05$)), was partly confirmed as it is only significant with only one aspect of social performance.

Table 5. Hierarchical Regression Model Results

	Firm Performance	Personal Wealth	Social Performance
Age	.011	-.001	-.018
Education	-.030	.015	-.053
Business Experience	-.058	.180	-.043
Management Experience	.276	.040	-.166
Risk-Taking	-.020	.018	.352***
Innovativeness	.181*	-.014	.844***
Pro-activeness	.199***	-.099	.241*
Competitive Aggressiveness	-.088	.032	.136
Autonomy	.005	.007	.187*
R2	.092	.032	.477
Adjusted R2	.063	.003	.461

Significant coefficients reported $p<.05^*$, $p<.01^{**}$, $p<.001^{***}$

Discussion

From our findings, we can observe that there is enough evidence to conclude that entrepreneurial orientation, as studied in the Western world, is partially correlated to entrepreneurial performance in the context of emerging economies. However, we see mixed support for the various aspects of entrepreneurial orientation. Risk-taking involves the strategic posturing of investing in uncertain outcomes (Hughes & Morgan, 2007). The result is unpredictable, and this may lead to increased costs of doing business, which may act as a deterrence to the female entrepreneurs in this research project. We can also note that female entrepreneurs do play an essential role in the family, and therefore, they only take moderate levels of risks and tend to avoid possible negative costs to the family (Hart, 1992;

Matsuno et al., 2002; Morgan & Strong, 2003). It is unlikely that autonomy would be an issue here since the female entrepreneurs already own their own enterprises and are already exercising their autonomy. Our results further demonstrate that the aspects of pro-activeness and innovativeness are the critical aspects of entrepreneurial orientation responsible for entrepreneurial performance (Lumpkin & Dess, 2001; Eijdenberg, Paas, & Masurel, 2015, Musyoka, Gathungu, & Gido, (2022). This may hold because incremental strategic actions involve only low levels of innovativeness, where products are less resource-intensive and have the ease of facilitating resource allocation.

It is also evident that entrepreneurial orientation enhances social performance, as the individual relationships concerning entrepreneurial orientation and social performance are mostly positive and significant. This can be attributed to the idea that female entrepreneurs run their businesses as a cooperative network of relationships rather than a primary profit-making organization (Wright et al., 1995)

Conclusion

In this paper, we attempted to answer the question of whether entrepreneurial orientation contributes to the entrepreneurial performance of female entrepreneurs in Kenya. The results imply that the aspects of pro-activeness and innovativeness are the key features of entrepreneurial orientation responsible for entrepreneurial performance. Social performance, on the other hand, as an aspect of entrepreneurial performance, was the most predicted by entrepreneurial orientation among female entrepreneurs in emerging economies.

This paper had certain limitations that should be taken into account while at the same time allowing new areas of possible research. First, our study explicitly concentrated on female entrepreneurs in Kenya and, therefore, caution should be exercised in generalizing these findings to other groups of entrepreneurs. Second, the study was undertaken on a cross-sectional basis: a longitudinal study may posit more insights in the role of entrepreneurial orientation for entrepreneurial performance. At the same time, our data's robustness further confirms the universal presence of the positive influence of entrepreneurial orientation on performance among entrepreneurs. We call on scholars to continue to study the differences in and linkages to entrepreneurial orientation in different cultural contexts and

to establish to what latitude our results are independent of the geographic and cultural context.

Funding

This research was supported by the MS Grietje Wille Legacy Under the ASALI project, a joint cooperation between VU University, the Netherlands, and Moi University, Kenya. ASALI project is an academic and co-learning arrangement that had no influence on the results.

Acknowledgements

We thank Prof. Kees Van Montfort of Nyenrode Business University and Amsterdam University of Applied Sciences, The Netherlands, for his guidance, supervision, and advice. We also thank Prof B.K. Nassiuma of Moi University for his invaluable advice. We likewise thank the two anonymous reviewers whose comments greatly improved this manuscript.

References

- [1] **Alia, N., Halim, A., and Razak, N. A.** (2014). Communication Strategies of Women Leaders in Entrepreneurship. *Procedia - Social and Behavioral Sciences*, 118, 21–28.
- [2] **Boso, N., Story, V. M., and Cadogan, J. W.** (2013). Entrepreneurial orientation, market orientation, network ties, and performance: Study of entrepreneurial firms in a developing economy. *Journal of Business Venturing*, 28, 708–727.
- [3] **Brooks, W., Donovan, K., and Johnson, T. R.** (2018). Mentors or teachers? Microenterprise training in Kenya. *American Economic Journal: Applied Economics*, 10(4), 196–221.
- [4] **Covin, J. G., and Slevin, D. P.** (1990). New venture strategic posture, structure, and performance: An industry life cycle analysis. *Journal of Business Venturing*, 5(2), 123–135.
- [5] **Forest, B., and Kali, J.** (2009). Uasin Gishu county Annual Development Plan 2016 – 2017 FY. In *Uasin Gishu county government: Vol. II* (p. 59).
- [6] **Gelman, A., and Pardoe, I.** (2006). Bayesian Measures of Explained Variance and Pooling in Multilevel (Hierarchical) Models. *Technometrics*, 48(2), 241–251.

- [7] **Grewal, R., and Tansuhaj, P.** (2001). Building Organizational Capabilities for Managing Economic Crisis: The Role of Market Orientation and Strategic Flexibility. *Journal of Marketing*, 65(2), 67–80.
- [8] **Griffith, D. A., Noble, S. M., and Chen, Q.** (2006). The performance implications of entrepreneurial proclivity: A dynamic capabilities approach. *Journal of Retailing*, 82(1), 51–62.
- [9] **Hans K Hvide and Jarle Møen.** (2007). *Liquidity Constraints and Entrepreneurial Performance* (No. 6495; DISCUSSION PAPER SERIES No., Issue 6495).
- [10] **Hart, S. L.** (1992). An Integrative Framework for Strategy-Making Processes. *The Academy of Management Review*, 17(2), 327–351.
- [11] **Hughes, M., and Morgan, R. E.** (2007). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Industrial Marketing Management*, 36(5), 651–661.
- [12] **Hurley, A. E., Scandura, T. A., Schriesheim, C. A., Brannick, M. T., Seers, A., Vandenberg, R. J., and Williams, L. J.** (1997). Exploratory and confirmatory factor analysis: Guidelines, issues, and alternatives. *Journal of Organizational Behavior*, 18(6), 667–683.
- [13] **Isaga, N.** (2018). Start-up motives and challenges facing female entrepreneurs in Tanzania. *International Journal of Gender and Entrepreneurship*, 2(10), 1–19.
- [14] **Keh, H. T., Nguyen, T. T. M., and Ng, H. P.** (2007). The effects of entrepreneurial orientation and marketing information on the performance of SMEs. *Journal of Business Venturing*, 22(4), 592–611.
- [15] **Kenya National Bureau of Statistics.** (2017). *Kenya Economic Survey 2017* (2017th ed.). Kenya National Bureau of Statistics.
- [16] **Kenya National Bureau of Statistics.** (2019). *Economic Survey 2019*. Kenya National Bureau of Statistics.
- [17] **Kiggundu, M. N.** (2002). Entrepreneurs and Entrepreneurship in Africa: What is Known and What Needs to be Done. *Journal of Developmental Entrepreneurship*, 17(3), 239–258.
- [18] **Kuckertz, A., and Wagner, M.** (2010). The influence of sustainability orientation on entrepreneurial intentions—Investigating the role of business experience. *Journal of Business Venturing*, 25, 524–539.
- [19] **Leutner, F., Ahmetoglu, G., Akhtar, R., and Chamorro-Premuzic, T.** (2014). The relationship between the entrepreneurial personality and the Big Five personality traits. *Personality and Individual Differences*, 63, 58–63.
- [20] **Lock, R., and Lawton Smith, H.** (2016). The impact of female entrepreneurship on economic growth in Kenya. *International Journal of Gender and Entrepreneurship*, 8(1), 90–96.

-
- [21] **Lumpkin, G., and Dess, G.** (1996). Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance. *The Academy of Management Review*, 21(1), 135–172.
- [22] **Lumpkin, G. T., and Dess, G. G.** (2001). Linking Two Dimensions of Entrepreneurial Orientation to Firm Performance: The Moderating role of Environment and Industry Life Cycle. *Journal of Business Venturing*, 16(5), 429–451.
- [23] **Mason, M. C., Floreani, J., Miani, S., Beltrame, F., and Cappelletto, R.** (2015). Understanding the Impact of Entrepreneurial Orientation on Smes' Performance. The Role of the Financing Structure. *Procedia Economics and Finance*, 23(October 2014), 1649–1661.
- [24] **Matsuno, K., Mentzer, J. T., and Özsomer, A.** (2002). The effects of entrepreneurial proclivity and market orientation on business performance. *The Journal of Marketing*, 66(3), 18–32.
- [25] **Miller, D.** (1983). The Correlates of Entrepreneurship in Three Types of Firms. *Management Science*, 29(7), 770–791.
- [26] **Miller, D., and Friesen, P. H.** (1982). Innovation in Conservative and Entrepreneurial Firms: Two Models of Strategic Momentum. *Strategic Management Journal*, 3(1), 1–25.
- [27] **Morgan, R. E., and Strong, C. A.** (2003). Business performance and dimensions of strategic orientation. *Journal of Business Research*, 56(3), 163–176.
- [28] **Muindi, K., Nassiuma, B. K., Masurel, E., and Montfort, K. Van.** (2020). Entrepreneurial Competences and Entrepreneurial Performance: Empirical Insights of Female Entrepreneurs in Kenya. *Studies and Scientific Researches. Economics Edition*, 1(32), 59–91.
- [29] **O'Grady, K. E.** (1982). Measures of explained variance: Cautions and limitations. *Psychological Bulletin*, 92(3), 766–777.
- [30] **Podsakoff, P. M., and Organ, D. W.** (1986). Self-Reports in Organizational Research: Problems and Prospects. *Journal of Management*, 12(4), 531–544.
- [31] **Radović-Marković, M., and Achakpa, P.** (2018). Employment Women Through Entrepreneurship Development and Education in Developing Countries. *Journal of Women's Entrepreneurship and Education*, 1(1–2), 17–30.
- [32] **Rauch, A., Wiklund, J., Lumpkin, G. T., and Frese, M.** (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship: Theory and Practice*, 33(3), 761–787.
- [33] **Sarri, K., and Trihopoulou, A.** (2005). Female entrepreneurs' personal characteristics and motivation: A review of the Greek situation. *Women in Management Review*, 20(1), 24–36.

- [34] **Shan, P., Song, M., and Ju, X.** (2016). Entrepreneurial orientation and performance: Is innovation speed a missing link? *Journal of Business Research*, 69(2), 683–690.
- [35] **Shepherd, D., Wiklund, J., Shepherd, D., and Wiklund, J.** (2005). Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing*, 20(1), 71–91.
- [36] **Stephan, U., Andries, P., and Daou, A.** (2019). Goal Multiplicity and Innovation: How Social and Economic Goals Affect Open Innovation and Innovation Performance. *Journal of Product Innovation Management*, 36(6), 721–743.
- [37] **Wiklund, J., Shepherd, D.** (2003). Knowledge-based resources, EO, and the performance of small and medium-sized businesses. *Strategic Management Journal*, 24(13), 1307–1314.
- [38] **Wright, P., Kroll, M., Pray, B., and Lado, A.** (1995). Strategic orientations, competitive advantage, and business performance. *Journal of Business Research*, 33(2), 143–151.
- [39] **Zahra, S. A.** (1991). Predictors and financial outcomes of corporate entrepreneurship: An exploratory study. *Journal of Business Venturing*, 6(4), 259–285.
- [40] **Zahra, S. A., and Covin, J. G.** (1995). Contextual influences on the corporate entrepreneurship-performance relationship: A longitudinal analysis. *Journal of Business Venturing*, 10(1), 43–58.

Article history: Received: March 30th, 2022

Accepted: September 12th, 2022