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ENTREPRENEURIAL ORIENTATION AND BUSINESS PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN KANO STATE, NIGERIA

BY

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Abstract

The objective of this study is to investigate the effect of entrepreneurial orientation on business performance of small business in Kano State Nigeria: A unique impact of risk taking, proactiveness and innovation. The study employed descriptive and inferential techniques for the data analysis. Based on the correlation matrix results, all the independent variables were positively and correlated with the dependent variable business performance. Multiple regression analysis result revealed that Autonomy, Proactiveness, Innovativeness, with coefficients (0.853, 0.041, 0.043) and significance level of each variable (P-value of 0.000, 0.008, 0.016) have positive and statistically significant effect on Business Performance. This implies that a 1% increase in Autonomy, Proactiveness, Innovativeness, will increase business performance by 85.3%, 4.1% and 4.3% respectively. While Risk-taking with coefficients and insignificance level of (-0.011, P-value 0.468,) has negative impact on Business Performance. This shows that a 1% decrease in Risk-taking, Competitiveness aggressiveness will decrease business performance by 1.1% and 1%. Therefore, the study recommends that, entrepreneurs should be encouraged to take calculated risks, rather than taking all the risks, since risk-taking does not influences business performance.

Keyword: Autonomy, Risk-taking, Proactiveness, business performance

1. INTRODUCTION

Over the decades, small and medium scale enterprises (SMEs) have been considered as an engine of growth for both developed and developing economies. Small and medium enterprises play an important role in the global economy, they promote inclusive and sustainable economic growth, ensure decent jobs, encourage sustainable industrialization and innovation and reduce income inequalities. (OECD, 2017).In many developing countries, small and medium scale enterprises (SMEs) constitute the bulk of industrial base and play an increasingly important role as they address poverty by creating jobs; disperse economic activities in the countryside and provide broad-based sources of growth (European Commission, 2011; Mohammad, & Ezaz, 2012; Kormawa, Wohlmuth & Devlin, 2011).

In Nigeria, like many developing countries has also recognized the importance of SMEs as a catalyst for economic development and poverty alleviation (Magaji, 2015). Small and medium enterprises (SMEs) play a critical role in output diversification, employment generation, indigenous entrepreneurial development, local technology improvement and further integration with larger firms. SMEs represent 90% of the manufacturing and industrial sector in terms of number of enterprises in Nigeria. They contribute 48% of Nigerian GDP, account for 96% of businesses and 84% of employment (PwC Nigeria SMESurvey, 2017).

Entrepreneurial orientation represents the management's orientation towards seeking new vistas for the firm's progression in a competitive environment. As a result, firms with focus towards entrepreneurship show a higher tendency towards realizing growth through the process of exploratory strategic actions rather than the exploitative ones (Wales, 2016). Entrepreneurial orientation is the process, practice, and decision-making activity that leads to new entry. Scholars have delineated five dimensions of Entrepreneurial orientation including innovativeness, risk taking, pro-activeness, competitive aggressiveness and autonomy, which underlie nearly all entrepreneurial processes (Chang *et al.,* 2019).

Business firms' performance is a multi-dimensional issue and therefore requires multiple performance measures. SME performance is a measure that describes the health of an SME that may not only depend on the efficiency and effectiveness but also on the environment where the SME operates (Onyenma, 2019).

Kano State lack the same level of preference for innovation, proactivity, competitive aggression, and risk-taking, small and medium-sized firms around the area are more likely to fail. This is due to the undesirable attributes that businesses, their owners, and management exhibit (Ayeni-Agbaje & Osho, 2015). Due to entrepreneurs' inability to grow their enterprises into viable ones, entrepreneurial initiatives in Kano State have a low survival rate. The majority of new SMEs in Kano also do not progress from the first stage of existence to later stages, such as survival success, takeoff, and resource maturity (Fatoki, 2012). Numerous of the characteristics, issues, and problems listed above have been found to be significant contributors to low performance in SMEs throughout the world, including Nigeria and kano State in particular (Prijadi, et al., 2017). As a result, it is important to develop an understanding of the key entrepreneurial orientation and business practices that can help in the understanding and promotion of SMEs for better performance. Therefore, this study intends to analyses the effect of entrepreneurial orientation and business performance of small and medium enterprises in Kano State, Nigeria.

2. EMPIRICAL LITERATURE

Adim, Akintokunbo and Adubasim (2018), examine the relationship between entrepreneurial innovativeness and performance of women entrepreneurs. The study adopted a cross sectional

survey design to solicit responses from women entrepreneurs in Rivers state, using simple random. The target population of Women Entrepreneurs in Rivers State is 329 obtained from the 2014 Directory of the Rivers State Ministry of Women Affairs and Rivers State Ministry of Commerce and Industry. The sample size was 181 using the Taro Yamen's formula. After data cleaning, only data of 153 respondents were finally used for data analysis. Descriptive statistics and Spearman's rank correlation were used for data analysis. Findings revealed that innovativeness has significant relationship with women entrepreneurs to employment creation but the relationship was not significant with contribution to household sustenance. The study recommends that women should be engaged in entrepreneurial education to develop right competencies, skills and needed entrepreneurial capacities.

Rezaei and Ortt's (2018), study indicated several results. Firstly, there is a positive relationship between innovativeness and R&D performance. Secondly, there is a positive relationship between proactiveness and marketing and sales performance. Thirdly, there is a negative relationship between risk-taking and production performance. Overall firm performance, including return on equity, assets, and sales was strongly affected by entrepreneurial orientation.

Musthofa*et al.* (2017), noted that innovative entrepreneurial orientation and risk-taking entrepreneurial orientation significantly affect organization performance, while a proactive EO has no a significant influence on organization performance. Additionally, there is a significant and positive relationship between entrepreneurial orientation and firm performance, and the strongest relationship is between entrepreneurial posture and firm performance.

Davidkov and Yordanova (2017), commented that risk-taking, proactiveness, and innovativeness correlate strongly with higher firm performance. Also, there is a relationship between autonomy as a dimension of entrepreneurial orientation and firm performance.

Martijn and Daan (2017), investigated entrepreneurship, risk taking and firm performance in Tanzania, using 611 entrepreneurs. The study showed that risk taking is positively associated with business performance. In addition, the study also, categorized the entrepreneurs in four different groups based on their risk profile these are: (i) low risk perception and low risk propensity; (ii) high risk perception and low risk propensity; (iii) low risk perception and high-risk propensity; (iv) high risk perception and high-risk propensity. The study further showed that the worst performing entrepreneurs were those with low-risk perception and high risk propensity. Risk perception is not correlated to education, the age of the entrepreneur or other control variables. This implied that entrepreneurs who perform successfully consider risk profile when taking risk as it is positively associated with success of their businesses.

Yazeed (2017), evaluated the effect of entrepreneurial characteristics on the profitability of micro, small and medium scale enterprises in Kaduna State, Nigeria. Using survey research design and collected data from 174 owner/managers. Data analyzed with multiple regression to test the null hypotheses formulated for the study. It revealed that self-efficacy, risk taking and locus of control, have significant positive effect on the profitability of MSMEs in Kaduna State. This implied that entrepreneurs in SMEs are zealous in taking entrepreneurial business risk at all stages of their business cycle as risk taking has positive effect to performance and this make them remain and excel in business.

Haider, Asad and Minaa (2017), examined entrepreneurial orientation and business performance of manufacturing sector small and medium scale enterprises of Punja Pakistan. Effects of three entrepreneurial orientation dimensions including innovativeness, pro-activeness and risk taking were examined with regard to business performance.

Innovativeness, proactiveness and risk taking have significant impact on business performance of manufacturing sector of the SMEs. Results further indicated positive correlations among innovativeness, pro-activeness and risk taking with business performance of the SMEs. This suggests that SMEs entrepreneurs consider risk taking as option as it is positively associated with success of business.

Roy, Tripathy and Tripathy (2017), worked on assessment of factors affecting the performance of women entrepreneurs in SME in Polosara District of Ganjam, Odisha India. Using questionnaire, data was collected from 150 women entrepreneurs, result showed that business risk taking has influence on business performance. This implied that there is a clear connection between business risk taking and business performance as SMEs operators emphasize taking risk in their business.

Eldoret and Kitigin (2017), employed the ex-post facto research design. 1000 SMEs in Eldoret town were targeted according to Uasin Gishu Country Licensing Department. The study sought to investigate whether SMEs ventured into new markets in order to promote the performance of their businesses. It investigated whether SMEs committed a large amount of money to high-risk projects in order to improve the profitability of businesses and took bold aggressive action in their businesses in order to maximize the probability of exploiting new market which led to increased profitability. The findings of the research indicated that there is a strong positive correlation between risk-taking and business performance of SMEs in Eldoret town. The researcher concludes that committing business resources to venture in uncertain and unfamiliar environments could result in increased returns and market share for the business.

Magaji (2015), examines how individual dimensions of entrepreneurial orientation; innovativeness, proactiveness, risk-taking and competitive aggressiveness, influence the financial performance of SMEs in Kano State, Nigeria. The respondents of the study were the 352 owner/managers of the selected SMEs. Data were analyzed using multiple regressions analysis. Based on the result, the findings confirmed a significant positive relationship between the entrepreneurial orientation and firm financial performance.

Wambugu, Gichira, Wanjau & Mung'atu (2015), carried out a study to establish the influence of entrepreneurial risk taking and firm performance of agro processing small and medium enterprises in Kenya. The questions solicited respondents to evaluate (1) the firm's tendency to commit a large portion of its resources in order to grow (2) the firm's propensity to invest in high risk projects which promises high returns (3) the firm's predisposition to finance its major projects through heavy borrowing (4) the firm's affinity to continuously seek opportunities related to its present operations (5) the firm's tendency to use true and tried practices and technologies to explore new opportunities. Firm performance which included sales and employee growth and profitability was measured by using a five-point Likert scale. The findings of this study show that risk taking has a great impact on firm performance of agro processing SMEs in Kenya. Specifically, risk taking has a significant positive effect on firm performance of agro processing SMEs in terms of growth and profitability. The researchers conclude that performance of agro processing SMEs could benefit from its owner/mangers being risk takers.

Similarly, Esra and Kunday (2014) examined the role of entrepreneurial traits and human capital on the performance of SMEs in Turkey, using 159 owners. The findings showed that entrepreneurial traits (such as risk taking) had an effect on SME performance. Entrepreneurship is all about risk taking, for entrepreneurs to succeed, they must take risk, as

it is an important entrepreneurial trait which includes both determination and courage to exploit resources effectively.

Arshad *et al.* (2014) also claimed that the results of their study indicated there was a medium to the small relationship between entrepreneurial orientation and firm performance. The results also depicted that only four dimensions (innovativeness, proactiveness, risk-taking and competitive aggressiveness) have an effect on firm performance, while autonomy has no effect.

Fatoki (2011), examined the impact of human, social and financial capital on the performance of SMEs in South Africa. The results indicated that there is a significant positive relationship between human (risk taking ability), social and financial capital and the performance of SMEs. This implied that human capital acquired by owners, manager and staff such as ability to take risk has connection between them and business performance and that human capital embedded in owners, managers and staff enable them perform effectively.

Based on the above literature reviewed the current study identified that there is disagreement in the literature on the effect of entrepreneurial orientation and business performance, some studies found positive effect, some negative and other studies found mixed result. Example, Davidkov and Yordanova (2017) found positive result, Rezaei and Ortt's (2018) negative result, while Musthofa et al. (2017) found mixed result. Hence this is a gap. Therefore, this study will examine the effect of Entrepreneurial Orientation and Business.

3. RESEARCH METHODOLOGY

This current study adopted a cross-sectional survey design to analyze the effect of entrepreneurial orientation on business performance of SMEs in Kano State, Nigeria. The total population of this study is 986 Small and medium enterprises in Kano State identified from the data base of Directories of National Association of Small and Medium-Sized Enterprises (2022).Yamane (1967) formula was used in determine 400 sample size of SMEs that would represent the target population. In choosing the respondents of this study from its target population, the study will use probability sampling technique, where the researcher selected owners of Small and medium enterprises operating in Kano State, Nigeria. The study purposively selected nine Industrial District comprises of Dala, Fagge, Gezawa, Gwale, Kumbotso, Municipal, Tarauni, Nassarawa and Ungogo Industrial District of Kano State. These areas were selected due to the density of SMEs with a 30 mile radius (Magaji, 2015).Base on the standard principles of cross-sectional data analysis. The current study used primary data techniques for data analysis and interpretations in order to fully capture the objectives for which the study is dignified to achieved. The data was analyzed using descriptive and inferential statistical tools. The descriptive techniques will include mean, standard deviation, frequency, percentage. The inferential statistical tools include multiple regression, and correlation. The data were analysed using SPSS and STATA software. The questionnaire was tested using validity and reliability test. Reliability is stated as a coefficient ranging from 0 to 1.00; the larger the coefficient, the more reliable the test. Cronbach's Alpha coefficient will be used to assess the internal consistency and stability of the variables. A Cronbach alpha above 0.70 is generally preferred (Nunnally& Bernstein, 1994). Post estimation test were carried out, these include multicollinearity test (autocorrelation), normality test among other tests.

4. DATA ANALYSIS AND PRESENTATION OF RESULTS

4.1 RELIABILITY TEST

Table 4.1 presented Cronbach's alpha results of the dependent variable business performance and independent variable entrepreneurship orientation measured by autonomy, competitiveness, proactiveness, innovativeness and risk taking. From the result, the overall reliability value was 0.7873 which is higher than the minimum alpha value of 0.70. This suggested that the questionnaire was reliable (Nunnally, 1978). The Cronbach's alpha results of each item used in the questionnaire is presented as:

Table 1 Reliability test results

Reliability Statistics		
List of variables	Cronbach's Alpha	**N of Items**
Business Performance	0.6333	5
Autonomy	0.6382	5
Competitive aggressiveness	0.7218	3
Proactiveness	0.6357	3
Innovativeness	0.7232	3
Risk Taking	0.6226	3
Overall Reliability	0.7873	5

Source: Field Work, 2024

4.2 DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Table 4.2 presented the demographic characteristics of the respondents of the study. From the table, the demographic distribution of the sex of the respondents showed that 75% were male and 25% female. This indicates that the majority of SMEs owned/managers were male. Based on age distribution of the respondents, majority of the respondents fall within 21-30 age brackets and accounted for 25.5%. This showed that most of the respondents who owned/ managed the SMEs were active youth. The educational level of the respondents shows that 34.50% of them had secondary school certificate, this implies that the most of the respondents had basic education. From the distribution of the firm employees, majority of the firms have 1-5 employees which accounted for 38.50 %, and employed by the sole proprietorship which accounted for 37.50%, partnership 30.00% and limited 25.50%. From the table also majority of the firm age distribution of the respondents fall within 1-5 years accounted for 41.5 %. This showed that most of the SMEs were infants and managed by active sole proprietors' youth. With regards to total capital, less than 2000000 accounted for 43.25%. While, 23.25%, 24.00%, 6.00%, and 3.50% of them have a total capital of 2.1 - 4million; 4.1 - 6million; 6.1 - 8million; 8.1 & above respectively.

Table 2: Demographic profile of the Respondents

VARIABLES	FREQUENCY	PERCENT
SEX		
MALE	300	75
FEMALE	100	25
TOTAL	400	100.0
Age of Respondents		
Less than 20 years	51	12.75
21-30 years	102	25.50
31-40 years	97	24.25
41-50 years	77	19.25
51 years & above	73	18.25
TOTAL	400	100.0
Education Level		
Postgraduate	11	2.75
Degree	34	8.50
Diploma	98	24.50
Secondary Certificate	138	34.50
Others	119	29.75
Total	400	100.0
Firms Employees		
1- 5	154	38.50
6-10	50	12.50
11-15	73	18.25
16-20	87	21.75
20 & above	36	9.00
Total	400	100.0
Firm Age		
1-5 years	61	41.5
6-10 years	49	33.3
11-15 years	23	15.6
16 years & above	14	9.5
Total	400	100.0
Structure of Business		
sole proprietorship	190	47.50
Partnership	120	30.00
limited company	90	25.50
Total	400	100.0
Capital of Business		
Less than 2million	173	43.25
2.1 - 4million	93	23.25
4.1 - 6million	96	24.00
6.1 - 8million	24	6.00
8.1 & above	14	3.50
Total	400	100.0

Source: Field Work, 2024

4.3 CORRELATION MATRIX RESULT

Correlation analysis was conducted to analyse the relationships between entrepreneurial orientation and business performance of small and medium scale enterprises (SMEs) in Kano State, Nigeria. From the table 4.3 below, using the coefficient of Pearson's product-moment correlation (r), all the independent variables were positively and significantly ($p<0.05$) correlated with the dependent variable business performance. Highest correlation was reported for the independent variable autonomy (r=0.9811), and Proactiveness (r=0.8798). This revealed that autonomy and Proactiveness have a positive and strong correlation with business performance. Innovativeness, risk taking and competitiveness (r=0.4679, r=0.0170 r=0.3717) have a positive but weak correlation with business performance as explained by Taylor, (1990).

Table 3 Pearson Correlation Matrix

	1	2	3	4	5	6
BUSINESS PERFORMANCE	1.0000	-	-	-	-	-
AUTONOMY	0.9811**	1.0000	-	-	-	-
PROACTIVENESS	0.8798**	0.8887**	1.0000	-	-	-
RISK TAKING	0.0170**	0.0215**	-00182	0.1766**	1.0000	-

**Correlation is significant at the 0.05 level (two tailed)

Source: Computed and Compiled by the Researcher using STATA 14 (2024).

4.4 MULTIPLE REGRESSION ANALYSIS RESULT

Goodness of fit the Model

Table 4.4 shows the model fit, or how well the model equation fits the data. The adjusted R^2 was used to determine the study's model predictive power, and it was found to be 0.963 meaning that predictor variables explain 96.3 percent of the variances in SME Performance across the selected SME firms, leaving 3.7 percent unexplained.

Table 4: Goodness of Fit of the Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	**0.982[a]**	**0.964**	**0.963**	**0.497**

Predictors: (Constant), Competitiveness, Risk-taking, Innovativeness, Autonomy, Proactiveness

4.5.2 One-Way ANOVA Result

The regression association was very significant in predicting how autonomy, innovativeness, risk-taking and proactiveness, competitiveness affects SMEs business performance of the selected entrepreneurs operating within Kano State, Nigeria. From the regression, the R-squared was obtained at 0.964 with a significant level p 0.000. This means that the independent variables explain 96.4% of the variation in the dependent variables. The p-value for the F statistic is 0.000 which means that the independent variables are significant predictor of the dependent variable.

Table 5: One-Way ANOVA Result

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2577.112	5	227.317	2.0833	.000[a]
	Residual	97.486	394	3.182		
	Total	2674.598	399			

Dependent Variable: Business Performance

Predictors: (Constant), Proactiveness, Innovativeness, Risk-taking, autonomy, competitiveness

4.6 COEFFICIENTS OF REGRESSION EQUATION

The regression coefficient explains the change in the dependent variable results from a unit change in the independent variables in the regression. The higher the value of Beta coefficient of the independent variables the more important the independent variables have in predicting the dependent variable. The prediction equation is based on the unstandardized coefficient. From the table, the findings show that Autonomy, Proactiveness, Innovativeness, with coefficients (0.853, 0.041, 0.043) and significance level of each variable (P-value of 0.000, 0.008, 0.016) have positive and statistically significant effect on Business Performance. While Risk-taking, Competitiveness aggressiveness, with coefficients (-0.011, -0.010) and insignificance level of each variable (P-value of 0.468, 0.455) have negative impact on Business Performance. This implies that a 1% increase in Autonomy, Proactiveness, Innovativeness, will increase business performance by 85.3%, 4.1% and 4.3% respectively. While a 1% decrease in Risk-taking, Competitiveness aggressiveness will decrease business performance by 1.1% and 1%.

Table 6: Coefficients of regression equation

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1 (Constant)	-2.765	0.339		-8.159	0.000		
AUTONOMY	0.853	0.021	0.915	39.734	0.000	0.174	5.737
PROACTIVENESS	0.041	0.015	0.064	2.670	0.008	0.162	6.172
RISKTAKING	-0.011	0.015	-0.007	-0.726	0.468	0.952	1.050

Source: Computed and Compiled by the Researcher using SPSS -16 (2024)

Multicollinearity Test

When two or more predictor variables are correlated, a problem may occur. It occurs when there are substantial correlations between two explanatory variables such that one variable can be used to predict the other (Garson, 2012). Variance inflation factors (VIF) were utilized for each variable to check for multicollinearity in the study. By assessing the degree to which the variance has been inflated, the VIF detects multi collinearity. The threshold is 1-10, if a

VIF larger than 10 indicates harmful multicollinearity. From the result in as shown in Table 4.6, Tolerance values are 0.174, 0.709, 0.952, 0.635 while VIF values are 5.737, 6.127, 1.411, 1.050 and 1.575 for all the independent variable under study. The fundamental assumption is that the error terms for various observations are unrelated i.e., absence of autocorrelation.

5. CONCLUSIONS, AND RECOMMENDATIONS

5.1 CONCLUSIONS

Drawing from the findings, this study concludes that EO dimensions; Autonomy, Proactiveness, innovativeness has positive and significant effect on SMEs business performance and Risk-taking, Competitive aggressiveness have negative and insignificant effect on business performance of SMEs in Kano State, Nigeria This show that activities related to autonomy, innovativeness, proactiveness, if adopted and practice well will lead to the development and growth of SMEs in Kano State, Nigeria.

5.2 RECOMMENDATIONS

Based on the findings, this study recommends the following:

1. Therefore, the study recommends that, entrepreneurs should be encouraged to take calculated risks, rather than taking all the risks, since risk-taking does not influences business performance.

2. The study also recommends the SMEs to borrow heavily so as to invest in new business products, technologies, markets and services.

3. It further recommends that SMEs should employ a brave and open-minded approach so as to achieve business goals.

4. It recommends that, it is important to engage SMEs in entrepreneurial education which seems pivotal to developing the right abilities, skills, competencies and orientation necessary for SMEs to make vital contributions through entrepreneurial ventures. Concrete assistance is needed from Government in the form of on-the- job training to familiarize SMEs with new methods, machines, equipment's, business practices, processes and management training.
5. Policies and programs should be directed at developing the Personal Entrepreneurial Characteristics, since a personal entrepreneurial characteristic has been established as having the capability of enhancing their performance in the study.
6. Government should provide and facilitate access to credit for SMEs, as lack of credit and financial capital are the major barriers for SMEs business owners' capability, performance and growth. Such credit assistance should be channeled through legally established channels such as cooperative societies. However, no collateral should be required as cooperative associations would guarantee the loan and monitor repayment and use of credit. The role of government institution would be just to render support.
7. the study recommends that policy makers should encourage entrepreneurship orientation training as entrepreneurial orientation assist owner managers of SMEs to make better decision regarding the choice of strategic resources acquired
8. Business owners should extend the tentacles of their risk-taking activities (investment) in diverse areas instead of only focusing on one business to spread the risk and gain more returns.

REFERENCES

Al Swidi, A. K., & Mahmood, R. (2011). How does organizational culture shape the relationship between entrepreneurial orientation and the organizational performance of banks? *European Journal of Social Sciences, 20*(1), 28–46.

Carton, R. B., & Hofer, C. W. (2006). *Measuring organizational performance: Metrics for entrepreneurship and strategic management research*. Edward Elgar.

Covin, J. G., & Lumpkin, G. T. (2011). Entrepreneurial orientation theory and research: Reflections on a needed construct. *Entrepreneurship Theory and Practice, 2*(1), 855–872.

Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal, 10*(1), 75–87.

Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship Theory and Practice, 16*(1), 7–25.

Deepa Babu, K. G., & Manalel, J. (2016). Entrepreneurial orientation and firm performance: A critical examination. *Journal of Business and Management, 18*(4), 21–28.

Idar, R., & Mahmood, R. (2011). Entrepreneurial and market orientation relationships to performance: The SME perspective. *Interdisciplinary Review of Economics and Management, 1*(2), 1–8.

Jantunen, A., Puumalainen, K., Saarenketo, S., & Kyläheiko, K. (2005). Entrepreneurial orientation, dynamic capabilities and international performance. *Journal of International Entrepreneurship, 3*, 223–243.

Kraus, S., Frese, M., Friedrich, C., & Unger, J. M. (2005). Entrepreneurial orientation: A psychological model of success among southern African small business owners. *European Journal of Work and Organizational Psychology, 14*(3), 315–344.

Kraus, S., Rigtering, C. J. P., Hughes, M., & Hosman, V. (2012). Entrepreneurial orientation and the business performance of SMEs: A quantitative study from the Netherlands. *Review of Management Sciences, 6*, 161–182.

Kreiser, P. M., Marino, L., & Weaver, K. M. (2002). Assessing the relationship between entrepreneurial orientation, the external environment and firm performance. In P. D. Reynolds, W. D. Bygrave, N. M. Carter, P. Davidsson, W. B. Gartner, C. M. Mason, & P. P. McDougall (Eds.), *Frontiers of entrepreneurship research* (pp. 268–282). Babson College.

Kropp, F., Lindsay, N. J., & Shoham, A. (2008). Entrepreneurial orientation and international entrepreneurial business venture start-up. *International Journal of Entrepreneurial Behaviour & Research, 14*(2), 102–117.

Kuratko, D. F., & Hodgetts, R. M. (2002). *Entrepreneurship: A contemporary approach*. South-Western.

Lee, M. S., & Lim, S. (2009). Entrepreneurial orientation and the performance of service business. *Service Business, 3*, 1–13.

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review, 21*(1), 135–172.

Lumpkin, G. T., & 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.

Lyon, D., Lumpkin, G. T., & Dess, G. G. (2000). Enhancing entrepreneurial orientation research: Operationalizing and measuring a key strategic decision-making process. *Journal of Management, 4*(2), 1055–1085.

Mahmood, R., & Hanafi, N. (2013). Entrepreneurial orientation and business performance of women-owned small and medium enterprises in Malaysia: Competitive advantage as a mediator. *International Journal of Business and Social Science, 4*(1), 82–90.

Matchaba-Hove, T. M., & Vambe, A. K. (2014). Entrepreneurial orientation and performance of small businesses in the retail sector in the Eastern Cape Province of South Africa. *Journal of Marketing and Management, 5*(2), 12–39.

Messersmith, J. G., & Wales, W. J. (2013). Entrepreneurship orientation and performance in young firms: The role of human resource management. *International Small Business Journal, 31*(1), 115–136.

Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science, 29*(7), 770–791.

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

Mthanti, T., & Ojah, K. (2017). Entrepreneurial orientation (EO): Measurement and policy implications of entrepreneurship at the macroeconomic level. *Research Policy, 46*, 724–739.

Naldi, L., Nordqvist, M., Sjoerg, K., & Wiklund, J. (2007). Entrepreneurial orientation, risk-taking, and performance in family firms. *Family Business Review, 20*(1), 33–47.

Nunally, J. (1978). *Psychometric* (2nd ed.). McGraw-Hill.

Pearce, I. I., John, A., Fritz, D. A., & Davis, P. S. (2010). Entrepreneurial orientation and the performance of religious congregations as predicted by rational choice theory. *Entrepreneurship Theory and Practice, 34*(1), 219–248.

Rauch, A., Wiklund, J., Frese, M., & Lumpkin, G. T. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, 761–786.

Ronstadt, R. C. (1984). *Entrepreneurship*. Lord Publishing Company.

Stam, W., & Elfring, T. (2008). Entrepreneurial orientation and new venture performance: The moderating role of intra- and extra-industry social capital. *Academy of Management Review, 51*(1), 97–111.

Stam, W., Souren, A., & Elfring, T. (2013). Social capital of entrepreneurs and small firm performance: A meta-analysis of contextual and methodological moderators. *Journal of Business Venturing, 2*(2), 4–22.

Tang, J., Tang, Z., Marino, L. D., Zhang, Y., & Li, Q. (2008). Exploring an inverted U-shape relationship between entrepreneurial orientation and performance in Chinese ventures. *Entrepreneurship Theory and Practice, 32*(1), 219–239.

Taylor, R. (1990). Interpretation of the correlation coefficient: A basic review. *Journal of Diagnostic Medical Sonography, 6*(1), 35–38.

Thornberry, N. (2006). *Lead like an entrepreneur*. McGraw-Hill.

Vij, S., & Bedi, S. H. (2012). Relationship between entrepreneurial orientation and business performance: A review of literature. *Journal of Business Strategy, 8*(3), 18–31.

Wall, T. D., Mitchie, J., Patterson, M., Wood, S. J., Sheehan, M., Clegg, C. W., & West, M. (2004). On the validity of subjective measures of company performance. *Perspective of Psychology, 57*(1), 95–118.

Walter, A., Auer, M., & Ritter, T. (2006). The impact of network capabilities and entrepreneurial orientation on university spin-off performance. *Journal of Business Venturing, 3*, 541–567.

Wiklund, J., & Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation and the performance of small and medium-sized businesses. *Strategic Management Journal, 24*(13), 1307–1314.

Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing, 2*(1), 71–91.

William, T. Z., McNaughton, R. B., & Guild, P. (2011). ENTRE-U: An entrepreneurial orientation scale for universities. *Technovation, 31*(2), 128–137.

Wu, D., & Zhao, F. (2009). Performance measurement in the SMEs in the information technology industry. In F. Zhao (Ed.), *Information technology entrepreneurship* (pp. 79–99). Idea Group.