THE NEXUS OF ENVIRONMENTAL DYNAMISM AND DIMENSIONS OF ENTREPRENEURIAL ORIENTATION IN SMALL BUSINESSES

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ABSTRACT

The relatively low total early stage entrepreneurial activity and consequent unsatisfactory performance of small businesses in South Africa is a problem. The problem may not be unrelated to the business environment and the entrepreneurial disposition of small firms; and it is concerning. Acting on this concern, this study examines possible associations between environmental dynamism (ED) and the individual dimensions of entrepreneurial orientation (EO). The focus on EO dimensions as dependent variables is rare as EO is often conceptualised as a consolidated construct. The study used a quantitative methodological approach and relied on data obtained through a survey of 1031 randomly selected small firms. Descriptive and exploratory factor analysis (EFA) were conducted on the data, and partial-least-square structural equation modelling (PLS-SEM) was used to test the hypothesised relationships. The findings revealed that only four dimensions of EO were statistically recognisable by respondents to this study, contrary to the five dimensions propounded in theory. Nevertheless, positive associations were observed between environmental dynamism and each of the dimensions of EO albeit to varying degrees. This finding highlights the importance of a dynamic, opportunity-yielding environment that enhances entrepreneurial action especially among small businesses.

Keywords: Environmental Dynamism, Entrepreneurial Orientation, Entrepreneurship, Small Business.

INTRODUCTION

The current business environment in South Africa (SA) is typified by limited resources, high levels of uncertainty and intense competition. The challenges in the environment are compounded by inadequate infrastructure, shortage of skills and excessive bureaucracy (Small Enterprise Finance Agency, 2016). These problems create a collage that inevitably encumber entrepreneurship initiatives and small business performance in the country. Against this background, it is unsurprising that Nieuwenhuzien (2014) advocates for the creation of a more enabling environment aimed at raising South Africa's level of entrepreneurship. The advocacy is justified by the observation of Herrington et al. (2017) that South Africa's business discontinuance to total early stage entrepreneurial activity (TEA) ratio is 2:3, which implies that South Africa is performing relatively poorly with respect to entrepreneurial activity.

Given the much touted role of small businesses in the overall economic growth of nations, there is no gainsaying that for the country to get on a growth trajectory, the challenges obstructing entrepreneurship performance are worthy of some attention. Indeed, it would seem

rational to contend that issues relating to the business environment and the entrepreneurial orientation (EO) of small businesses must remain on the front burner of academic and societal discourse if the unsatisfactory entrepreneurship levels are to be addressed. This essentially, is the basis from which this paper derives its impetus.

Although extant literature comprises some studies focusing on EO and its role in businesses (see Madsen, 2007; Moreno & Casillas, 2007; Lotz & van der Merwe, 2013) it is noteworthy that insufficient attention has been dedicated to the elucidation of its antecedents. From a broad perspective, it is largely unclear, what factors precipitate entrepreneurial behaviour of firms and to what extent. For research purposes, EO is often considered as a composite construct and this does not contribute to an understanding of the distinct dimensions that make up the construct. To be sure, the relationships between the business environment and the individual dimensions of EO are yet to be fully explored in the context of small businesses in South Africa and this is the gap that this empirical study seeks to fill. Consequently, the study's cardinal objective is to explicate the relationships between dynamism of the environment in which small businesses operate and the distinct dimensions of EO.

Entrepreneurial Orientation and its Dimensions

EO manifests within firms as a strategic posture through entrepreneurial behaviours and processes (Ireland et al., 2009). The concept of EO provides a useful framework in explaining the mind-set of firms engaged in new ventures and for researching the intensity of their entrepreneurial activity (Lumpkin & Dess, 2001). Amongst the earliest researchers of EO are Miller & Friesen (1982) who, in their seminal piece, distinguished between two types of strategic behaviours by arguing that conservative firms decide to innovate only when constrained by a threatening environment whereas entrepreneurial firms innovate regularly while taking on considerable risk. Therefore, the extent to which a firm is entrepreneurial is assessed by a composite weighting of three variables–innovativeness, risk-taking and pro-activeness, which must co-vary (Miller, 1983). It is to the credit of this perspective that EO is often conceptualised as a unidimensional construct.

Lumpkin & Dess (1996) expanded the EO construct by introducing the dimensions of competitive aggressiveness and autonomy while arguing that the five EO dimensions (see Hughes & Morgan, 2007; Pearce et al., 2010) do not need to co-vary for firm level entrepreneurial behaviour to be displayed. This study aligns itself with this opinion and therefore views EO as comprising five dimensions as presented in Table 1.

Table 1
DIMENSIONS OF ENTREPRENEURIAL ORIENTATION

Dimension	Definition
Autonomy	Independent action by an individual or team aimed at bringing forth a business concept or vision and carrying it through to completion.
Innovativeness	A willingness to introduce newness and novelty through experimentation and creative processes aimed at developing new products and services, as well as new processes.
Pro-activeness	A forward-looking perspective characteristic of a marketplace leader that has the foresight to seize opportunities in anticipation of future demand.
Competitive aggressiveness	An intense effort to outperform industry rivals. It is characterised by a combative posture or an aggressive response aimed at improving position or overcoming a threat in a competitive marketplace.
Risk-taking	Making decisions and taking action without certain knowledge of probable outcomes; some undertakings may also involve making substantial resource commitments in the process of venturing forward.

Source: Dess & Lumpkin (2005:148)

Whereas Miller (1983) views the EO construct as requiring the concurrent exhibition of innovativeness, risk-taking, and pro-activeness, the argument of Lumpkin & Dess (1996) that the five EO dimensions can vary, independent of each other in any given context is insightful. Indeed, it paved the way for the acknowledgement of a truly multi-dimensional perspective of EO. The import of this, is that specific dimensions of EO that are likely to contribute to the emergence or evolution of a business could be dependent on considerations that lie beyond the boundaries of the construct and are found in the environmental context in which the business operates.

Environmental Dynamism

Environmental dynamism refers to both the uncertainty and unpredictability of future market changes and developments (Miller & Friesen, 1983; Dess & Beard, 1984; Rosenbusch, Rauch & Bausch, 2013). Dynamic environments have been described as markets in which products have a short life-cycle, the level of industry innovation is high and customers' demands as well as competitors' actions are highly unpredictable (Wiklund & Shepherd, 2005; Urban, 2010; Bratnicka, 2014). These market characteristics can apply befittingly to the small business environment in South Africa and they inevitably make the environment, uncertain. The uncertainty in dynamic environments may sprout from changes in customer needs, shifts in the behaviour of competitors and suppliers, or technological discontinuities. The consequences of the uncertainty are exacerbated by the extent of information asymmetry that exists in such environments, making the articulation of responses to such changes, a challenging prospect for small businesses.

Environmental Dynamism and the Dimensions of EO

Businesses operating in dynamic environments are more likely to benefit from new product innovation than those operating in stable environments (Miller, 1983; Prajogo, 2016). Sirmon et al. (2007) observe that market demand changes typically instigate innovation. For example demand affects a firm's disposition to develop and introduce innovations. When market demand is high or growing, businesses are more willing to invest in innovation as they perceive that there is a better chance of higher returns on such investments.

In turn, these innovations increase consumer expectations and concurrently trigger competitors into responding with similar or improved innovations. In this way, growing market demand tends to stimulate innovativeness. Using network theory to explain the contextual background to innovativeness, Rodrigo-Alarcon et al. (2017) found that a positive relationship exists between technological dynamism and the development of firm innovativeness. Influenced by the finding, this study elects to hypothesise that:

H_1: Environmental dynamism has a positive relationship with small business innovativeness

An entrepreneurial strategic posture makes it necessary for firms to search for new opportunities that arise in the market (Miller, 1983; Covin & Slevin, 1991; Lumpkin & Dess, 1996). According to Lumpkin & Dess (1997) pro-activeness suggests a forward-looking perspective characteristic of a market-place leader that has the foresight to act in anticipation of future demand. Since the industry conditions in a dynamic environment are subject to rapid change, businesses that are pro-active and actively seek out opportunities may out-perform those

that are unwilling to exploit market opportunities. This is the attraction that pro-activeness holds for businesses. Dynamic environments act to create many new opportunities and pro-active strategies can be utilised to seize these opportunities and gain competitive advantage (Zahra, 1991).

Rosenbusch et al. (2013) posit that the pro-active introduction of new products and services makes businesses less vulnerable to the danger of obsolescence. Businesses that are pro-active in nature will continually improve or even alter their resource base. This prevents them from creating rigidities within the firm which are a non-productive condition for firms operating in dynamic environments. Firms in dynamic environments can be viable in the long run only if they manage to retain a highly flexible resource base (Rosenbusch et al., 2013). Thus, a dynamic environment triggers the display of pro-activeness as an entrepreneurial attribute that embodies a focus on resource flexibility. Against this background, this study projects that:

H_2 : Environmental dynamism has a positive relationship with small business pro-activeness

Dynamism in the environment may be associated with organisational risk-taking as businesses that are risk averse under such conditions lose market share and will not be able to maintain a strong industry standing relative to more aggressive competitors (Lumpkin & Dess, 1996). Giley et al. (2002) confirm the role of dynamism in top management risk-taking, although they found that the benefit of risk-taking is reduced in more dynamic environments.

Nonetheless, Kreiser & Davis (2010) insist that organisations need to make bold, risky strategic decisions in order to cope with the constant state of change in dynamic environments in order to improve business performance. This assertion lends credence to the thinking that organisational risk-taking could be more positively associated with business performance in dynamic environments relative to stable environments. Cognisant of this, the study hypothesises that:

H_3: Environmental dynamism has a positive relationship with small business risk-taking

According to Lumpkin & Dess (1996) competitive aggressiveness requires firms to challenge their competitors directly and intensely to achieve entry or improve their positions. This entails the display of a combative and forceful approach toward rivals through pre-emptive actions and aggressive responses (Lumpkin & Dess, 2001). So it might be that small businesses in South Africa may adopt this leaning given the fact that they operate in a dynamic environment replete with changes.

Strangely though, Lumpkin & Dess (2001) also argue that competitive aggressiveness is consistent with exploitation but however it is more feasible in stable environments than in dynamic settings. Nadkarni et al. (2016) examined the relationship between industry velocity competitive aggressiveness and firm performance and found that competitive aggressiveness positively affected performance in a stronger manner within high-velocity industries compared to low-velocity industries. This finding inspires the current study to propose that in South Africa:

H_4: Environmental dynamism has a positive relationship with small business competitive-aggressiveness

Irrespective of the limited application and minimal number of studies available for evaluating autonomy in the literature (Magaji et al., 2017) this study has chosen to include it in its assessment of EO. "*Autonomy*" connotes the independence of actions and decision-making by individuals or teams towards bringing forth a concept or vision and carrying it through to

completion (Lumpkin & Dess 2001). Autonomy is more of a catalyst to entrepreneurial activity (Alexandrova, 2004) as it affords organisational members the freedom and flexibility to develop and enact entrepreneurial initiatives. It is the independent spirit that seeks the freedom to explore new opportunities by taking risks to create new ventures.

However, entrepreneurial individuals and teams could not operate in this manner without an environment that promotes independent economic behaviour and opportunity-seeking actions (Lumpkin et al., 2009). Much of this, could be more feasible in a dynamic environment which is subject to rapid changes in itself and possesses a higher propensity for opportunities than stable environments. Hence in this study, it is hypothesised that:

H_5: Environmental dynamism has a positive relationship with small business autonomy

RESEARCH METHODOLOGY

An ex post facto research design has been considered for this study as it entails events that have occurred already and present conditions (Leedy & Ormrod, 2015). As regards ontology, this study adopts an objectivistic position; as firm-level phenomena (such as entrepreneurial orientation and the environment) are considered independent of other social actors. Furthermore, this study is considered to have a positivistic approach (epistemological position) as it holds that only observable phenomena provide credible data and generate facts.

Consequently, this has informed a quantitative methodological approach which is not uncommon in EO research. Moreover, seminal studies on the construct have largely done the same (see Rauch et al., 2009; Wales et al., 2013; Wales, 2016) and this affords a logical basis for comparison. Fundamentally, the research pathway that this study has followed, aligns with a deductive reasoning process which according to Cooper & Schindler (2014) purports to be conclusive, leveraging on precursory reasons provided. The fact that the study focusses on the construct of environmental dynamism that could play an explanatory role in foretelling the distinct nature of EO in the studied small businesses, means that it is essentially a causal explanatory study.

The execution of the study entailed an online survey of small, medium and micro enterprises (SMMEs) across South Africa. A simple random probability sampling technique was utilized to identify and select respondents. With the use of self-administered questionnaires, data was collected in a cross-sectional manner. In measuring the dimensions of EO, the Hughes & Morgan (2007) scale was utilised while environmental dynamism (ED) was measured using Miller & Friesen's (1982) scale. Both the EO and ED measurements were based on seven-point Likert scale items with measures ranging from 'strongly disagree' to 'strongly agree'. Responses were extracted from returned questionnaires and coded. Subsequently, descriptive and inferential statistical techniques were utilised for purposes of analysis of the collected data.

DATA ANALYSIS RESULTS AND DISCUSSION

A total of 2,240 questionnaires were distributed and 1501 questionnaires returned. However, for analysis, the study excluded responses with missing values or data errors. Consequently, 470 questionnaires were eliminated, leaving 1031 valid responses for analysis. This translates to an effective response rate of 46%. Descriptive analysis of data collected, profiles the small businesses in this study according to the following variables; economic sector,

phase of business operation and total annual turnover. Table 2 presents the sample characteristics.

Table 2 SAMPLE CHARACTERISTICS (n = 1031)			
Economic Sector	**Service Based Firms**	439	42.6%
	Non-Service Based Firms	592	57.4%
Phase of Business Operation	**Start-Up (< 3.5 years in operation)**	48	4.7%
	Established (≥ 3.5 years in operation)	983	95.3%
Total Annual Turnover	**≤ R 3 000 000**	452	43.8%
	R3 000 000 to R6 000 000	146	14.2%
	R6 000 000 to R10 000 000	80	7.8%
	R10 000 000 to R 14 000 000	75	7.3%
	R14 000 000 to R 16 000 000	121	11.7%
	≥ R 26 000 000	157	15.2%

Source: Author's own compilation.

Table 2 indicates that there were more non-service based businesses (57.4%) in comparison to service-based businesses (42.6%) and this was surprising given that service-based businesses often require relatively lower amounts of start-up capital. It was therefore expected that small businesses who participated in the study would be from the service-based cohort but this was not the case. Instructively, the businesses who partook in the study were predominantly those who had been in operation for excess of 3.5 years.

This augurs well for the data collected by the study as the majority of the respondents are from businesses that have stemmed the tide of the *liability-of-newness* that often overwhelms start-up ventures; and may therefore be more informed about the business environment. Characteristic of the small business environment in South Africa, 452 (43.8%) of businesses in the study's valid sample had a total annual turnover under R3 000 000.

Evaluating the Measurement Model

Construct validity of the measurement instrument was assessed through exploratory factor analysis (EFA). Kaiser-Meyer-Olkin (KMO) test for sampling adequacy and Bartlett's test of sphericity which assesses the suitability of the data for factor analysis was conducted. The KMO and Bartlett's test values for these data are 0.919 and 11,170.793 respectively and these are statistically significant given that the applicable *p*-value obtained was 0.000. Hence these values confirm the suitability of the data for the purpose of EFA.

The items measuring the dimensions of EO and ED were analysed using principal component analysis (PCA) and Varimax rotation. Table 3 shows the rotated component matrix. The data collection instrument had twenty-three items for the measurement of the five EO dimensions (Autonomy, items A1-A6; Innovativeness, items I1-I3; Pro-activeness, items P1-P3; Competitive aggressiveness, items C1-C3; Risk-taking, items R1-R3) and ED. Although Lumpkin & Dess (1996); Hughes & Morgan (2007) posit five dimensions of EO, results of the analysis showed that "*Innovativeness*" and "*Pro-activeness*" dimensions loaded together as a single factor.

Since innovativeness and pro-activeness loaded as a single factor, they will subsequently be referred to as "*Proactive-innovation*" (P-I). This follows the precedence of Neneh & van Zyl (2017) as well as Matachba-Hove & Goliath (2016) who examined the dimensions of EO amongst SMEs in South Africa and found a similar result. Factor 2 in Table 3 is therefore considered as "proactive-innovation" (P-I) and consequently, it is appropriate to restate the research hypotheses related to pro-activeness (H_1) and innovativeness (H_2) as:

$H_{1\&2}$: Environmental dynamism has a positive relationship with small business proactive-innovation.

In addition, Table 3 also shows the rotated component matrix for environmental dynamism. It is noteworthy that the five items measuring ED loaded as a single factor. However, ED3 and ED4 showed loadings of 0.328 and 0.298 respectively. Since these values are less than the 0.5 threshold, they were excluded from further analysis following the precedence of Lotz & van der Merwe (2013).

Table 3
EFA FOR EO AND ED ITEMS: ROTATED COMPONENT MATRIX

EO and ED Items	Factor Components				
	1	2	3	4	5
A3	0.853	0.118	0.055	0.082	0.081
A5	0.826	0.083	0.102	0.125	0.052
A4	0.800	0.083	0.109	0.113	0.033
A2	0.798	0.221	0.152	0.063	-0.025
A1	0.784	0.185	0.138	0.090	0.004
A6	0.606	0.100	0.061	0.083	-0.001
I2	0.188	0.826	0.166	0.214	0.031
I3	0.178	0.825	0.177	0.203	-0.006
I1	0.123	0.806	0.141	0.223	0,002
P1	0.192	0.647	0.439	0.170	-0.027
P2	0.154	0.619	0.487	0.077	-0.027
P3	0.166	0.543	0.530	0.049	-0.008
C2	0.118	0.279	0.822	0.167	0.083
C3	0.192	0.183	0.813	0.116	0.151
C1	0.069	0.156	0.765	0.168	0.057
R2	0.161	0.281	0.144	0.826	-0.064
R1	0.132	0.113	0.250	0.820	-0.044
R3	0.200	0.482	0.087	0.667	-0.125
ED1	0.177	0.020	0.206	0.116	0.610
ED2	0.054	0.037	0.166	0.027	0.750
ED3	-0.003	-0.022	0.161	0.056	0.328
ED4	-0.015	-0.003	0.132	0.040	0.295
ED5	0.097	0.063	-0.054	-0.041	0.771

Source: Author's own compilation.

Inferential Statistical Results

The study utilised SEM to interrogate the existence (or lack of it) of a relationship between ED and the individual EO dimensions. The results of the analysis are presented in Table 4. It is on the basis of these results that the study either declares that a hypothesised relationship is supported or otherwise. When the association between environmental dynamism (ED) and

proactive-innovation (P-I) was examined, the analysis yielded a path coefficient of 0.234, t-statistic of 7.249 at a *p*-value of 0.000. These findings indicated statistical significance and a positive relationship between ED and P-I. Consequently, the hypothesis linking environmental dynamism to pro-activeness- innovation $H_{1\&2}$ was found to be supported. As it relates to the relationship between environmental dynamism (ED) and risk-taking (R) the results of the SEM analysis show that this relationship yielded a path co-efficient of 0.203, t-statistic of 6.273 and a *p*-value of 0.000. These findings point to a statistically significant positive association between ED and R. Hence the hypothesis linking the environmental dynamism to risk-taking (H_3) is supported.

Table 4
STRUCTURAL EQUATION MODELLING RESULTS AND STATISTICAL INFERENCES

Hypothesised Relationship	Associated Hypothesis	Path Co-efficient	t-Statistic	*p*-Value	Hypothesis Decision
ED ⟶P-I	$H_{1\&2}$	0.234	7.249	0.000	Supported
ED ⟶R	H_3	0.203	6.273	0.000	Supported
ED ⟶C	H_4	0.101	3.225	0.001	Supported
ED ⟶A	H_5	0.095	2.832	0.005	Supported

Source: Author's own compilation.

The output of the SEM also provides evidence of the existence of a statistical significant and positive correlation between environmental dynamism and competitive aggressiveness. This deduction is premised on the results of a path co-efficient of 0.101, t-statistic of 3.225 and *p*-value of 0.001 with respect to ED and C. Hence the hypothesis linking environmental dynamism to competitive aggressiveness (H_4) was found to be supported. A similar outcome was also obtained when the relationship between environmental dynamism and (ED) and autonomy (A) was examined. The output of the model yielded, a path coefficient of 0.095, a t-statistic of 2.832 and *p*-value of 0.005 for ED and A. These findings show the existence of a statistically significant positive relationship between ED and A. Consequently, the hypothesis linking environmental dynamism to autonomy (H_5) is supported. On the basis of the empirical evidence, the study argues that among small businesses in South Africa, environmental dynamism has a positive relationship with all the dimensions of EO.

CONCLUSION

Given the context in which this phenomenon has been studied, the environment is supposedly a motivating factor for entrepreneurial action amongst small businesses in South Africa. Since the responding businesses to this study are largely established small businesses who have operated within their industry environment for at least 3.5 years and have some understanding of firm level entrepreneurial behaviour, these two concepts can be easily grasped and well related.

The findings of this study highlight the role of the environment in the entrepreneurial behaviour of firms. Since the relationships hypothesised between ED and P-I, R, C and A were statistically significant in the positive direction, it implies that increased environmental

dynamism can be related to higher display of firm-level entrepreneurial orientation. The findings of this study are consistent with the stance of earlier entrepreneurship theorists, who stated that the more dynamic the environment is, the more firms that operate within such environments will be entrepreneurial. In presenting entrepreneurship as a firm level behaviour, Covin & Slevin's (1991) model indicates a strong association between external variables such as dynamism of the environment and entrepreneurial posture. They argue in support of the inseparability of the external environment from the entrepreneurial process and assert that the external environment has a strong, if not deterministic influence on the existence and effectiveness of entrepreneurial activity.

The findings of this study are in alignment with findings made by Baron & Tang (2011) that firm level innovation is stronger in dynamic environments as compared with stable environments. Creativity is often considered as a raw material for innovation. In order for new ideas that are generated through creative thinking to be transformed into product or service innovation, firms must be motivated. Firms must be motivated to the extent that they will consider these creative ideas carefully and implement the ones that are most beneficial. According to Baron & Tang (2011), this motivation is often provided by a dynamic environment. In a dynamic environment which is very often competitive, firms have to be pro-active in their innovative practices, as they create and take opportunities. This combination of innovative and pro-active entrepreneurial actions is maintained largely by a motivating environment that is dynamic in nature. Yu et al. (2016) also corroborate this view point that pro-activeness as an entrepreneurial strategy is often displayed in a dynamic environment and that pro-activeness intensifies with increased environmental dynamism.

With regard to the relationship between environmental dynamism and risk-taking, the finding of this study aligns with the configuration matrix of entrepreneurial orientation, structure and environment presented by Kreiser & Davis (2010). This matrix demonstrates moderate to high risk-taking in a dynamic environment while the best that can be expected from a stable environment is moderate level risk-taking. This bares similarity with the positive relationship between risk-taking and environmental dynamism as observed in this study. So, in the dynamic environment in which small businesses in South Africa operate, businesses with a strong entrepreneurial orientation, that perceive environmental changes quicker, take calculated risks and are pro-active in seeking out the limited market opportunities, while aggressively pursuing their strategic intents ahead of competitors, retain the market share and possibly record growth.

The findings of the study bear useful implications for policy makers and practitioners in the small business arena. It is important to consider the fact, as revealed in this study, that innovativeness and pro-activeness go hand in hand and as noted by Anderson et al. (2015) they are a primary feature of entrepreneurial behaviour. As small enterprises seek to develop new products, better business models and processes they must act in anticipation of future demand from prospective customers and seek to take market opportunities ahead of their competitors. Such actions are a tacit expression of a proactive-innovation disposition and should benefit the small business. In addition, since it is apparent that the environment bears an association with entrepreneurial actions, the creation of an enabling environment that would allow for small business to thrive must remain the focus of government and policy makers in South Africa. Such an environment must encourage proactive-innovation, competitive aggressiveness, risk-taking and autonomy. This way, South Africa would have paved the way for improved entrepreneurial activity.

RECOMMENDATIONS FOR FUTURE RESEARCH

This has been a cross-sectional study as data was collected at a specific point in time and an *ex post facto* study based on the fact that events had taken place. The accuracy of this approach is largely dependent on the ability of respondents to recall events of the past. The study acknowledges this limitation and recommends that a longitudinal study could be conducted in the future using the same research premise.

It is acknowledged that the geopolitical context within which this study has been conducted (South Africa), could restrict the generalizability of these findings for other countries. This is because the economic environment of each country is unique. Cross-country and cross-cultural research offer the benefit of comparison and can contribute immensely to the evolving debate on EO especially in developing economies.

Only one environmental variables (dynamism) has been examined in this study. Further research could consider other variables from the task environment such as environmental hostility and complexity. This will further illuminate the relationship between EO and the environment. In addition, future studies can investigate other variables that could moderate or mediate the relationships between the environment and the dimensions of EO. It is noteworthy that, the dimensions of innovativeness and pro-activeness were found to present remarkable results in this study as they were statistically indistinguishable and so were considered as a single dimension of proactive-innovation. Notably, this outcome of the statistical analysis is at variance with the widely accepted EO theory. This finding could be considered as inconclusive, as these two dimensions can be investigated further. Future research can focus on the relationship between these two dimensions both within and beyond the South African context.

REFERENCES

Alexandrova, M. (2004). Entrepreneurship in a transition economy: The impact of environment on entrepreneurial orientation. *Problem and Perspectives in Management*, *2*(2), 140-148.

Baron, R.A., & Tang, J. (2011). The role of entrepreneurs in firm-level innovation: Joint effects of positive affect, creativity and environmental dynamism. *Journal of Business Venturing*, *26*(1), 49-60.

Bratnicka, K. (2014). *Strategic Entrepreneurship and Firm Performance–Restoring the Role of the Task Environment. Research Papers of Wroclaw University of Economics*, (366), 59-67. Poland: Wraclaw.

Cooper, D.R., & Schindler, P.S. (2014). *Business Research Methods*. 12th Edition. New York: McGraw-Hill

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

Dess, G.G., & Beard, D.W. (1984). Dimensions of organisational task environments. *Administrative Science Quarterly*, *29*(1), 52-73.

Dess, G.G., & Lumpkin, G.T. (2001). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *Academy of Management Executive*, *19*(1), 147-156.

Giley, K.M., Walters, B.A., & Olson, B.J. (2002). Top management team risk-taking propensities and firm performance: Direct and moderating effects. *Journal of Business Strategies*, *19*(2), 95-114.

Herrington, M., Kew, P., & Mwanga, A. (2017). *Global Entrepreneurship Monitor South Africa Report 2016/2017. Can Small Businesses Survive in South Africa?* Cape Town: University of Cape Town Graduate School of Business.

Hughes, M., & 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.

Ireland, R.D., Covin, J.G., & Kuratko, D.F. (2009). Conceptualising corporate entrepreneurship strategy. *Entrepreneurship Theory and Practice*, *33*(1), 19-46.

Kreiser, P.M., & Davis, J. (2010). Entrepreneurial orientation and firm performance: The unique impact of innovativeness, pro-activeness and risk-taking. *Journal of Small Business and Entrepreneurship*, *23*(1), 39-51.

Leedy, P.D., & Ormrod, J.E. (2015). Practical research planning and design. 11th Edition. Pearson Education Limited. Edinburgh.

Lotz, H.M., & Van der Merwe, (2013). An investigation of the influence of entrepreneurial orientation on the perceived success of agribusinesses in South Africa. *South African Journal of Business Management, 44*(1), 15-32.

Lumpkin, G.T., Cogliser, C.C., & Schneider, D.R. (2009). Understanding and Measuring Autonomy: An entrepreneurial orientation perspective. *Entrepreneurship Theory and Practice, 33*(1), 47-69.

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., & Dess, G. (1997). Proactiveness versus competitive aggressiveness: Teasing apart key dimensions of an entrepreneurial orientation. In: Reynolds, P.D., Bygrave, W.D., Carter, N.M., Davidsson, P., Gartner, W.B., Mason, C.M. & McDougall, P.P. (Eds). *Frontiers of Entrepreneurship Research. 1977.* Wellesley, MA: Babson College.

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.

Matachba-Hove, T., & Goliath, J. (2016). The entrepreneurial orientation and business performance relationship: A study of young adult-owned small business. Proceedings of the 28th Annual Conference of the Southern African Institute of Management Scientists. 498-511.

Magaji, M.S., Baba, R., & Entebang, H. (2017). Entrepreneurial orientation and financial performance of Nigerian SMEs: The moderating role of environment: review of literature. *Journal of Management and Training for Industries, 4*(1), 25-41.

Madsen, E.L. (2007). The significance of sustained entrepreneurial orientation on performance of firms: A longitudinal analysis. *Entrepreneurship and Regional Development, 19*(2), 185-204.

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

Miller, D., & Friesen, P.H. (1983). Strategy-making and environment: The Third Link. *Strategic Management Journal, 4*(3), 221-235.

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

Moreno, A.M., & Casillas, J.C. (2007). High-growth SMEs versus non-high growth SMEs: A discriminate analysis. *Entrepreneurship and Regional Development, 19*(1), 69-88.

Nadkarni, S., Chen, T., & Chen, J. (2016). The clock is ticking ! Executive Temporal Depth, Industry Velocity and Competitive Aggressiveness. *Strategic Management Journal, 37*, 1132-1153.

Neneh, B.N., & Van Zyl, J. (2017). Entrepreneurial orientation and its impact on firm growth amongst SMEs in South Africa. *Problems and Perspectives in Management, 15*(3), 165-187.

Nieuwenhuizen, C. (2014). The nature and development of entrepreneurship. In: Nieman, G.H. & Nieuwenhuizen, C. (Eds). *Entrepreneurship: A South African Perspective*. 3rd Edition. Pretoria: Van Schaik Publishers.

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

Prajogo, D.I. (2016). The strategic fit between innovation strategies and business environment in delivering business performance. *International Journal of Production Economics*, *171*, 241-249.

Rauch, A., Wiklund, J., Lumpkin, G.T., & 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.

Rodrigo-Alarcon, J., Gracia-Villaverde, P.M., Parra-Requena, G., Ruiz-Ortgea, M.J. (2017). *Journal of Organizational Change Management*, *30*(4), 548-568.

Rosenbusch, N., Rauch, A., & Bausch, A. (2013). The mediating role of entrepreneurial orientation in the task environment-performance relationship: A meta-analysis. *Journal of Management*, *39*(3), 633-659.

Sirmon, D.G., Hitt, M.A., & Ireland, R.D. (2007). Managing firm resources in dynamic environment to create value: Looking inside the black box. *Academy of Management Review*, *32*(1), 273-292.

Small Enterprise Finance Agency (SEDA). (2016). IMBADU: Accelerating SMME Growth in South Africa. Official Quarterly Publication of SEDA. June 2016

Small Enterprise Finance Agency (SEFA) (2016). Annual Report. Investing in the growth and sustainability of SMMEs and cooperatives.

Urban, B. (2010). Technology and entrepreneurial orientation at the organisational level in johannesburg area. *SA Journal of Human Resource Management*, *8*(1), 1-9.

Wales, W.J. (2016). Entrepreneurial orientation: A review and synthesis of promising research directions. *International Small Business Journal, 34*(1), 3-15.

Wales, W.J., Gupta, V.K., & Mousa, F.T. (2013). Empirical research on entrepreneurial orientation: An assessment and suggestions for future research. *International Small Business Journal*, *31*(4), 357-383.

Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing*, *20*(1), 71-91.

Yu, G.Y., Kwon, K.M., Lee, J., & Jung, H. (2016). Exploration and exploitation as antecedents of environmental performance: The moderating effect of technological dynamics and firm size. *Sustainability, 8*(3), 200-214

Zahra, S.A. (1991). Predictors of financial outcomes of corporate entrepreneurship: An exploratory study. *Journal of Business Venturing*, *6*(4), 259-285.