Dimensions of Firm-Level Entrepreneurial Orientation as Antecedents to Employment Growth in SMMEs

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Abstract

Unemployment is a socio-economic challenge and small businesses are continually touted as vehicles for it. However, this is largely dependent on the entrepreneurial orientation (EO) of small, medium and micro enterprises

(SMMEs) which intensifies business performance. Although EO, as a consolidated construct, has been widely related to business performance, employment growth (EG) is rarely examined as a possible consequence of a firm's EO. Therefore, this study interrogates dimensions of EO and how each relates with EG in SMMEs. Using a quantitative research methodology that relied on data collected from 1, 031 respondents, the study revealed that the relationships between the dimensions of EO and EG were statistically-significant for medium-sized businesses (MSBs) exclusively; and not for other categories of SMMEs. Essentially, the study illuminates the relationships between the dimensions of EO and EG and advocates for increased support to MSBs, in the quest to address unemployment in a developing economy context.

Keywords: *Entrepreneurial Orientation, Employment Growth, Smmes, Msbs.*

JEL Classification: D21, M10

1. Introduction

The extant literature recognises the potential for entrepreneurship to advance economic growth, and small businesses, in particular, are considered the drivers of economic expansion and a mechanism for job creation (Ibrahim & Madichie, 2014; Acs, Estin, Mickiewicz & Szerb, 2018). So, small businesses are critical to the economic landscape in South Africa which is typified by sluggish growth and perennial unemployment that is estimated at 29 per cent (Statistics South Africa, 2019). The ramifications of these are an increase in crime, poverty and inequality, all of which threaten the country's social cohesion. The role of the small business sector in employment creation becomes pertinent against this background. This is understandably so as the small business sector accounts for approximately 91 per cent of all formal business entities, contributes between 51 and 57 per cent to gross domestic product (GDP) and provides about 60 per cent of total employment in South Africa (Fatoki, 2018).

On a conceptual level, how and to what extent the entrepreneurial proclivity of small, medium and micro enterprises (SMMEs) lend themselves to employment creation has remained elusive. This is partly because the relationships between the distinctive elements of firm-level EO and EG are yet to be explored and expounded adequately. Consequently, this study seeks to address the gap in the literature as identified by Lotz and Van der Merwe (2013), who aver that there is a

preponderance of studies investigating EO from a unidimensional perspective while scant attention is paid to its individual components. Indeed, Anderson Kreiser, Kuratko, Hornsby and Eshima (2015), along with Colla, Ruiz-Molina, De Grey and Deparis (2020), have stressed the individuality of EO dimensions and the need to consider them distinctly. Researchers such as Mthanti and Ojah (2018) appear inclined to study EO as a composite construct which has limited the understanding of the distinct dimensions that constitute the construct. As a fallout of this, the relationships between the individual EO dimensions and EG are yet to be fully investigated, both within the context of SMMEs and in an emerging economy like South Africa. Moreover, Urban and Verachia (2019), as well as Eresia-Eke, Dele-Ijagbulu and Moos (2019), reiterate the dearth of research on understanding EO in the African context. It is this reality that makes an empirical enquiry focused on the relationships between the distinct dimensions of EO and EG in South Africa's small business sector alluring.

2. Theoretical Framework

It is important to connect EO research to theory, as this would enhance the understanding of organisations and how they function (Miller, 2011). In response to this, it is important to indicate the theoretical basis for this study and the framework within which it is conducted. Arguably, two theories that have great potential and applicability in explaining the EO phenomenon and its relationship with possible antecedents and consequences are the resources-based view (Abdalla & Mohamed, 2020) and the dynamic capability perspective (Teece, Pisano & Shuen, 1997). The resource-based view (RBV) has become a prevailing paradigm employed in the field of entrepreneurship and strategic management (Hitt, Xu & Carnes, 2016) and suggests that businesses strive to differentiate themselves from competitors in order to achieve outstanding performance, through the effective utilisation of resources. Accordingly, it advocates that firms with high EO levels and corporate entrepreneurship are likely to gain a competitive edge and superior performance relative to others.

Jantunen, Puumalainen, Saarenketo and Kylaheiko (2005) contend that entrepreneurial firms create opportunities through their actions. Nevertheless, to take advantage of these opportunities, such firms will often need to reconfigure their resource base and their dynamic capabilities. Zahra, Sapienza and Davidson (2006) describe dynamic

capabilities as the potential to reconfigure a firm's resources and routines in the manner envisioned and deemed appropriate by its principal decision-makers. These dynamic capabilities can be understood as the key means for linking EO to firm opportunity exploitation and subsequent performance. In the context of this study, it is proposed that a firm's inclination to act entrepreneurially can engender EG.

2.1 *Entrepreneurial Orientation*

The concept EO provides a useful framework for explaining the mindset of firms engaged in new ventures and to research the intensity of their entrepreneurial activity (Lumpkin & Dess, 2001:432). In a seminal piece, Miller (1983) argues that the extent to which a firm is entrepreneurial is determined by a composite weighting of three components—innovativeness, risk-taking and pro-activeness—which must co-vary for entrepreneurial behaviour to be established. The consideration of EO as a unidimensional construct can be attributed to this argument. However, Lumpkin and Dess (1996) expanded the EO construct by asserting that competitive aggressiveness and autonomy are also part of what constitute entrepreneurial venturing and that all EO components need not necessarily co-vary for firm-level entrepreneurial behaviour to be displayed. This position advances the idea that each EO component is distinctly reflective of entrepreneurial action. Furthermore, Miller and Bretton-Miller (2017) specify that EO is diverse in nature and it emphasises different, albeit overlapping drivers of courage and imagination. Based on this, the notion of EO as a multi-dimensional construct becomes tenable. This perspective has been reinforced by Hughes and Morgan (2007) and Pearce, Fritz and Davis (2010), who consider EO as a construct comprising five distinct variables. Dess and Lumpkin (2005) list them as autonomy, innovativeness, pro-activeness, competitive aggressiveness and risk-taking.

Autonomy (AN) describes the independence required to conceptualise and realise a business idea, which is a critical aspect of any entrepreneurial endeavour (Lumpkin, Cogliser & Schenider, 2009). Innovativeness (INNV) relates to the extent to which an organisation is willing to create processes, products or services, possibly to distinguish itself from competitors (Morris, Kuratko & Covin, 2008). Proactiveness (PA) is concerned with visionary thinking and action that allow businesses to anticipate emerging opportunities and take hold of them before the windows close (Rauch, Wiklund, Lumpkin & Frese, 2009).

Competitive aggressiveness (CA) relates to a concerted effort to combat rivals and emerging threats in a way that allows the organisation to maintain or grow its share of the market (Lumpkin & Dess, 1996). The outcomes of entrepreneurial actions are often attended by uncertainty, therefore, the EO component of risk-taking (RT) focuses on a firm's inclination to explore opportunities by making substantial resource commitments without being discouraged by the unpredictability of the future (Eresia-Eke *et al.*, 2019). Consistent with the multidimensional view, this paper projects these distinct dimensions as reflections of entrepreneurial behaviour and possible antecedents of EG.

2.2 *Employment Growth (EG) in SMMEs*

Dele-Ijagbulu, Moos and Eresia-Eke (2020) recently observed that the extant literature recognise the potential of entrepreneurship in advancing economic development. SMMEs in particular are known to be drivers of economic expansion and mechanisms for job creation. EG as a measure of firm performance has been found useful as it serves as an indicator of entrepreneurial success and represents a measure of the firm's economic contribution to society (Davidsson, Delmar & Wiklund, 2002) since jobs provide incomes for individuals and households. Firms' performance has been an object of attention for researchers (Audretsch, Coad & Segarra, 2014) and to gain an understanding of the factors that influence EG. Capelleras and Rabetino (2008) investigated 582 entrepreneurs and found that EG depends on the entrepreneur's characteristics, the environment as well as the firm's characteristics, such as start-up size and age.

Although SMMEs do not employ the largest number of people, they generate the newest jobs across country income groups (Klapper & Love, 2010). Using a longitudinal approach, Ayyagari*,* Demirguc-Kunt, and Maksimovic (2011) examined the relationship between firm size, employment and productivity growth in the formal sectors of 104 countries and found that a negative relationship exists between GDP per capita and small firm contributions to employment. This may have informed the position of Ledingone and Viljoen (2020), who state that there is increasing potential for employment creation within micro enterprises in South Africa. In spite of this, Mkhize (2019) expresses concerns about the inability of the South African economy to provide adequate employment for an increasing number of job seekers and posits that it is because the economy is more capital-intensive than it is labour-intensive. Although small firms are often touted as employment creators,

the extent to which their entrepreneurial behaviour can be associated with employment growth has not been sufficiently explicated. Consequently, this study investigates the possible associations between the entrepreneurial behaviours exhibited by SMMEs, as encapsulated by the EO dimensions and EG.

2.3 *Relationships between the dimensions of EO and EG*

In general, the idea that a higher EO will give rise to increased firm performance and growth seems predominant in the literature (Covin & Slevin, 1991; Lumpkin & Dess, 1996 Wiklund & Shepherd, 2005; Moreno & Casillas, 2008; Abdalla & Mohamed, 2020). The dynamics of this relationship, however, are yet to be fully ascertained with regard to EG since it is not often utilised as a measure of firm growth (Davidsson, Delmar & Wiklund, 2006). Besides, it is important to take note of Miller's (2011) call to pay attention to the EO components. This, in concert with the conceptual perspective that the EO dimensions are independent of each other (Lumpkin & Dess, 1996, Lumpkin & Dess, 2001), necessitates scholarly reflection on the relationships between each of the EO dimensions and EG.

2.3.1 *Innovativeness and employment growth*

An innovation strategy is one of the most typical roads to growth as it enables new business opportunities to be explored and the firm's competitive edge to be improved. This is possibly why Moreno and Casillas (2008) found that a strategy of innovation has a positive and significant influence on the firm's growth. Similarly, studies have established a close association between high-growth firms and strategic innovation (Cassia & Minola, 2012). Dachs and Peters (2014) examined the effect of innovation on EG of large foreign and locally-owned firms and found that product-innovation contributes to EG in both types of businesses.

Coad, Segarra and Teruel (2016) found that EG increases after research and development investment, if innovation results in higher demand and market share. Generally, there seems to be a consensus that a positive relationship exists between innovativeness and firm growth (Lumpkin & Dess, 1996; Rauch *et al.*, 2009). In deference to this, this study proposes that:

H₁: In SMMEs, innovativeness has a positive relationship with employment growth.

2.3.2 *Proactiveness and employment growth*

Proactiveness relates to being the first mover (Lumpkin & Dess 1996) amongst competitors which can be leveraged on to ensure growth. Consequently, it is considered to be an inherent attitude of a market leader, as opposed to that of a follower. In a study of young high-technology firms, Hughes and Morgan (2007) found proactiveness to be positively related to both product and customer performance. This amplifies the notion that proactiveness will engender higher performance returns because it implies customer-centrality.

In a study of Spanish SMEs, Casillas and Moreno (2010:276) found that proactive businesses in the studied population experienced higher firm growth. In a similar vein, Stenholm, Pukkinen and Heinonen's (2016) comparative study of non-family and family firms, found proactiveness to be associated with firm growth in both firm-types. Rauch *et al.* (2009) also found proactiveness to be associated with business performance. Duly cognisant of these findings in the extant literature, this study elects to hypothesise that:

H₂: In SMMEs, proactiveness has a positive relationship with employment growth.

2.3.3 *Risk-taking and employment growth*

From a broad perspective, the ability to assume risk enables firms to take on investment projects with less predictable results. However, if firms' organisational capabilities are taken as constant and the risk associated with a business activity is considered typical of the industry, then it would seem logical that firms which are capable of taking on high risk projects will tend to be rewarded substantially. In harmony with this assertion, Nickel and Rodriguez (2002) argue in favour of a positive relationship between risk and return. In this sense, Lumpkin and Dess (1996) note that firms with an EO are often typified by RT behaviour, such as incurring heavy debt or making large resource commitments in the interest of obtaining high returns.

Lotz and van der Merwe (2013) attest to the obscurity of the relationship between RT and firm growth by elaborating on Wiklund and

Shepherd's (2005) argument that, while reliable strategies may lead to high performance, risky strategies may lead to performance variation since some projects fail while others succeed. Interestingly, Naldi, Nordqvist, Sjoberg and Wiklund (2007) found that among Swedish family firms, entrepreneurial RT is negatively related to performance. In contrast, Fairoz and Hirobami (2016) found a positive relationship between RT and performance amongst SMEs in Japan. Ahmed and Brennan (2019) also found a positive relationship between RT propensity and the degree of export which is indicative of higher performance levels. Mindful of these findings, this study chooses to hypothesise that:

> H_3*: In SMMEs, risk-taking has a positive relationship with employment growth.*

2.3.4 *Competitive aggressiveness and employment growth*

Lumpkin and Dess (2001) observe that CA has been investigated less frequently; therefore, not much is known about its association with firm growth and performance. Nonetheless, Casillas and Moreno (2010) found no relationship between CA and firm growth possibly because it is merely a reactive behaviour towards competitors in defence of a market position. Le Roux and Bengesi (2014) concur that CA implies a tendency to challenge competitors to achieve entry or outperform industry rivals in the marketplace. This corroborates the notion that CA is more a response to rivals' competitive threats than a posture to defend a firm's own competitive advantage. Furthermore, Yang and Ju (2018) investigated the combinations of PA and CA and found that CA was useful mainly for large firms and exclusively at the initial stages of the firm's evolutionary path. This argument leads to the formulation of the hypothesis that:

> H_4*: In SMMEs, business competitive aggressiveness has a negative relationship with employment growth.*

2.3.5 *Autonomy and employment growth*

Moreno and Casillas (2007) argue that the ability of SMEs to enter into agreements with other firms that allow them the use of resources and capacities without the burden of owning them, engenders SME growth. The literature (see Burgelman, 1983; Brock, 2003) support the view that

autonomy encourages innovation, promotes the launching of entrepreneurial ventures and increases the competitiveness of firms. In contrast, firms that are overly dependent on collaboration in decision-making and require consensus to be reached before launching entrepreneurial initiatives may suffer financially (Covin, Green, & Slevin, 2006). Based on the arguments above, researchers tend to defend a positive relationship between autonomy and firm growth (Casillas & Moreno, 2010); a stance which is also supported by Lotz and Van der Merwe (2013). Hence, this study hypothesises that:

H₅: In SMMEs, autonomy has a positive relationship with employment growth.

3. Research Methodology

A quantitative methodological approach, which is not uncommon in EO research, was utilised for this study. As seminal studies on the construct have largely done the same (see Lumpkin & Dess, 1996; Rauch *et al.,* 2009; Wales, 2016), 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 and Schindler (2014), purports to be conclusive, leveraging on precursory reasons provided. The fact that the study focusses on the individual components of EO in relation to EG, implies that it is essentially a causal explanatory study.

The execution of the study entailed an online survey of SMMEs across South Africa. A simple random probability sampling technique was utilized to identify and select respondents. Over a two-month period, 2,230 questionnaires were emailed to SMMEs. The mailing list was drawn primarily from South African national directories of business incubators, and business financing houses. The databases of governmental agencies, such as the Small Enterprise Development Agency, the Sector Education Training Authorities and the National Youth Development Agency were also utilised. The responding firms cuts across economic sectors such as professional services, consulting services, agriculture and food processing, manufacturing and construction. An initial response rate of 67.3 per cent was achieved as 1,501 small businesses owners and managers returned their completed questionnaires. Since in this study, EG is considered as the increase in the number of employees, a selective process was utilised to retain businesses that showed positive growth and eliminate businesses that did

not. Subsequently, 470 respondents were excluded from the study, leaving 1,031 responses for analysis, as the study focused exclusively on firms that had recorded positive EG. This equates to a final response rate of 46.2 per cent.

. With the use of self-administered questionnaires, data were collected in a cross-sectional manner. In measuring the dimensions of EO, Hughes and Morgan's (2007) seven-point Likert scale options ranging from 'strongly disagree' to 'strongly agree' are utilised. EG is assessed objectively with the use of Gibrat's law of proportionate effect which assumes that the growth rate of a firm is constant and is mathematically expressed as:

$$S_1 = S_0 (1 + G)^{T_1 - T_0}$$

Where:

T_1 *is current year of operation*

T_0 *is firm birth year*

S_1 *is the current number of employees*

S_0 *is the number of employees at firm birth*

G *is the annual growth rate of the number of employees*

It is instructive to note that this approach to assessing EG is less sensitive to the initial size of the firm (Davidsson & Wiklund, 2006) when compared to other methods such as the relative variation index (see Janssen, 2009). The relative variation index has been criticised for its bias towards small firms due to size/growth effects (Davidsson *et al.*, 2002). However, utilising Gibrat's law ameliorates this predisposition as growth is assumed to be continuous. Hence, it considers the annual growth rate (G) as the EG indicator, which is measured on a ratio scale. Responses were extracted from returned questionnaires and coded.

Subsequently, descriptive and inferential statistical techniques were used to analyse the study's data. In specific terms, a frequency analysis was undertaken to describe the characteristics of SMMEs, an exploratory factor analysis was conducted to ascertain construct validity, and a Pearson correlation analysis was employed to test the hypothesised relationships in the study.

4. Results and Discussion

A descriptive analysis of the data profiles the SMMEs according to economic sector, phase of business operation and total annual turnover. Table 1 reveals that the studied sample comprised of 57.4 per cent of non-service-based businesses and 42.6 per cent of service-based businesses.

According to Singer, Amorós, Arreola and GERA (2015) in a Global Entrepreneur Monitor (GEM) report, businesses that have been in operation for at least 3.5 years are classified as established; otherwise they are start-ups. Accordingly, 95.3 per cent of businesses that participated in the study fall within the established business category. The sample consists largely of businesses that have stemmed the tide of the "liability-of-newness" that often overwhelms start-up ventures. This means that respondents may be better informed about the EO and EG of their firms. Furthermore, these businesses have transitioned into the growth phase which according to the GEM Report (Singer *et al.*, 2015), is a reflection of prior entrepreneurial action which indicates that they possibly embody an effective EO. Characteristic of the small business environment in South Africa, 452 (43.8 per cent) of businesses in the study's valid sample had a total annual turnover under R3 000 000.

Table 1: Sample Characteristics (n = 1031)

		n	**%**
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

As part of the statistical analysis, the measurement model of the study was evaluated. Construct validity of the measurement instrument was assessed through exploratory factor analysis (EFA). The items measuring the dimensions of EO and EG were extracted using principal axis factoring (PAF) and varimax rotation. Table 2 shows the rotated factor

matrix. Prior to that, the Kaiser-Meyer-Olkin (KMO) test for sampling adequacy and Bartlett's test of sphericity, which assesses the suitability of the data for factor analysis, were conducted. The KMO and Bartlett's test results obtained are 0.919 and 11,170.793, respectively. These values are statistically-significant, given that the applicable associated *p*-value was 0.000 and this implies the suitability of the data for the conduct of an EFA.

Table 2: EFA Results for the Constructs of the Study

Rotated Factor Matrix[a]						
Question Items	**Item Labels**	**Factors**				
		1	**2**	**3**	**4**	**5**
Q1.1	**RT1**	0.241	0.155	0.170	0.621	0.081
Q1.2	**RT2**	0.335	0.177	0.072	0.792	0.052
Q1.3	**RT3**	0.489	0.217	0.041	0.555	0.033
Q1.4	**INNV1**	0.757	0.141	0.065	0.181	-0.025
Q1.5	**INNV2**	0.814	0.200	0.064	0.161	0.004
Q1.6	**INNV3**	0.817	0.188	0.059	0.149	-0.001
Q1.7	**PA1**	0.675	0.204	0.305	0.150	0.031
Q1.8	**PA2**	0.635	0.170	0.370	0.104	-0.006
Q1.9	**PA3**	0,558	0,179	0,422	0,091	0,002
Q1.10	**CA1**	0.316	0.075	0.527	0.104	-0.027
Q1.11	**CA2**	0.412	0.122	0.739	0.157	-0.027
Q1.12	**CA3**	0.331	0.192	0.664	0.105	-0.008
Q1.13	**AN1**	0.208	0.746	0.110	0.077	0.083
Q1.14	**AN2**	0.243	0.778	0.118	0.043	0.151
Q1.15	**AN3**	0.124	0.828	0.042	0.062	0.057
Q1.16	**AN4**	0.115	0.747	0.070	0.094	-0.064
Q1.17	**AN5**	0.094	0.787	0.093	0.104	-0.044
Q1.18	**AN6**	0.113	0.514	0.053	0.075	-0.125
	G	-0.002	0.012	0.059	-0.002	0.031

ExtractionMethod: PAF.
Rotation Method: Varimax with Kaiser Normalisation.
a. Rotation converged in five iterations.

Accordingly, the items measuring the five dimensions of EO and EG were analysed together and the rotation converged into five iterations. The EFA results revealed that EG, indicated by the annual growth rate of employees (G) loaded separately as one factor. Similarly, the RT items (RT1 to RT3), the CA items (CA1 to CA3) and the AN items (AN1 to AN6) loaded as separate factors while the innovativeness and pro-activeness items (INNV1 to INNV3 and PA1 to PA3) loaded together as a single underlying factor. This indicates a strong correlation between the innovativeness and pro-activeness dimensions of EO.

Although Lumpkin and Dess (1996) as well as Hughes and Morgan (2007) propose five EO dimensions, this study's EFA results indicate that "innovativeness" and "pro-activeness" were perceived as a single construct by respondents. This finding is not unduly alarming as studies such as Neneh and Van Zyl (2017) and Matachba-Hove and Goliath (2016) which examined the components of EO amongst SMEs in South Africa found a similar result. In addition, Yeo (2001) and Soininen, Martikainen, Puumalainen and Kylaheiko (2012) examined the dimensionality of EO and found that the items measuring innovativeness and proactiveness also merged into a single component.

In harmony with these findings, Anderson, *et al.,* (2015) attempted to reconceptualise EO and suggested the existence of a positive co-variance between innovativeness and pro-activeness. This argument synchronises with a seminal description of an entrepreneurial firm by Miller (1983) which indicates that an entrepreneurial firm must display innovation proactively in order to attain an advantage over competitors.

According to Shafaeddin (2014), 'proactive-innovation' refers to an innovation approach in which a firm continually delineates new opportunities and challenges by pro-actively seeking different perspectives, generating ideas for new products, services, solutions and commercialising innovations far ahead of their followers. This perspective reinforces Miller's (1983) as well as Covin and Slevin's (1989) argument that these two dimensions need to co-vary for EO to exist. However, it is inconsistent with the view of Lumpkin and Dess (1996) as well as Hughes and Morgan (2007) who posit that the dimensions can vary independently.

Furthermore, Anderson *et al.,* (2015) identify two reasons for aggregating the innovativeness and pro-activeness components of EO into a single latent construct which they labelled "entrepreneurial behaviour". The first reason being that there is little face validity in the a priori assumption of an attitudinal element of innovativeness and pro-

activeness. This assertion stems from observations by Miller (1983) and Covin and Slevin (1991) that what gives meaning to innovation are actions involving the development of new products, processes, or business models. Similarly, pro-activeness does not exist without a firm actually entering a new market ahead of competitors and acting in anticipation of future demand (Lumpkin & Dess, 2001). The second reason for aggregating the two components into a single dimension is based on the suggestion that while innovation is a necessary condition for entrepreneurship, it is neither sufficient nor is it meaningfully independent from pro-activeness (Anderson *et al.*, 2015; Rosenbusch, Rauch & Bausch, 2013). In fact, Lumpkin and Dess (1996), aver that because pro-activeness suggests an emphasis on initiating activities, it is closely related to innovativeness and from an empirical standpoint, will probably co-vary with it.

In the light of these arguments and the EFA results obtained in this study, it would therefore seem conceptually inconsistent to create a theoretical distinction between pro-activeness and innovativeness as they are functionally equivalent reflections of an overarching entrepreneurial behaviour. Consequently, rather than have pro-activeness and innovativeness as independent constructs, this study considered them as a single dimension of EO. Since innovativeness and pro-activeness were loaded as one factor, it will be subsequently referred to as 'proactive-innovation' (PA-INNV), following the precedence set by Neneh and van Zyl (2017). This necessitates a restatement of the study's hypotheses that are based on these two EO dimensions. Hence hypotheses H_1 and H_2 are merged and restated as:

> $H_{1\&2}$: *In SMMEs, proactive-innovation has a relationship with employment growth.*

Table 3 presents the results of the correlation analysis undertaken to examine the study's hypothesised relationships between EO dimensions and EG, across the entire SMME cohort. The results reveal that a statistically significant relationship cannot be confirmed between any of the four EO dimensions: RT, PA-INNV, CA, AN and EG. Therefore, hypotheses $H_{1\&2}$, H_3, H_4, and H_5 are not supported since their associated p-values are statistically insignificant ($p > 0.05$) at 95% confidence level.

Table 3: Results of Correlation Analysis for the Entire Group of SMMEs (n= 1, 031)

Hypothesised Relationships	Associated Hypothesis	Correlation Coefficient	Level of Significance	Hypothesis Supported / Not Supported
Risk-Taking and Employment Growth (RT & EG)	H_3	0.006	0.851	Not Supported
Proactive-Innovation and Employment Growth (PA-INNV & EG)	$H_{1\&2}$	0.018	0.571	Not Supported
Competitive Aggressiveness and Employment Growth (CA & EG)	H_4	0.032	0.305	Not Supported
Autonomy and Employment Growth (AN & EG)	H_5	0.019	0.544	Not Supported

It was decided to investigate the hypothesised relationships further, by examining them based on the four SMMEs categories—micro-, very small-, small- and medium-sized businesses. The results, as presented in Table 4, show that among the MSBs, a statistically significant association exists between PA-INNV and EG, as well as between CA and EG. This implies that in the cohort of MSBs, the hypothesised relationships between CA and EG (H_4) and PA-INNV and EG ($H_{1\&2}$) are supported. Interestingly, this finding amongst MSBs differs from that of Altinay, Madanoglu, De Vita, Arasli and Ekinci (2016), possibly because they did not investigate the existence (or lack) of the relationship of interest within specific cohorts of SMMEs. This assertion is plausible given that this study's finding align with that of Neneh and van Zyl's (2017) study of MSBs.

Table 4 Results of Correlation Analysis for the Different Categories of SMMEs

Business categories			RT	PA-INNV	CA	AN
Micro (1 to 5 Employees) n=322	G	Pearson Correlation	0.021	0.018	-0.011	0.040
		Sigma (2-tailed)	0.706	0.747	0.844	0.472
Very Small (6 to 10 Employees) n=227	G	Pearson Correlation	-0.064	-0.062	-0.093	-0.044
		Sigma (2-tailed)	0.340	0.352	0.163	0.512
Small (11 to 50 Employees) n=348	G	Pearson Correlation	0.081	0.014	0.035	0.009
		Sigma (2-tailed)	0.133	0.797	0.513	0.865
Medium (51 and Above) n=124	G	Pearson Correlation	-0.140	-0.235	-0.229*	0.027
		Sigma (2-tailed)	0.164	0.018	0.022	0.793

5. Conclusion

As it concerns MSBs, the study findings show that the two EO dimensions—PA-INNV and CA—have statistically significant associations with EG. Hence, $H_{1\&2}$ as well as H_4 are supported exclusively for this category of businesses. Hence, it is essential to highlight the relevant deductions that can be made from these findings and from which conclusions can be drawn.

Firstly, the findings lend support to the position that EG, in relation to a firm's EO amongst small businesses, may be subject to size-dependent idiosyncrasies. In essence, a blanket model that attempts to link the components of EO to EG, given its insensitivity to the size of the businesses may not suffice. This is likely to be the case as the extent of the quest for EG may differ between micro-, small- and medium-sized businesses.

Secondly, as observed in this study, the relationship between the EO dimensions of PA-INNV, CA and the outcome variable of EG within MSBs is negative. This position contradicts the findings of Karmendi's (2016) study of SMEs in Nairobi, Kenya that presented a regression model which depicted a positive relationship between innovativeness, pro-activeness, risk-taking and the dependent variable of EG. Indeed, Karmendi's (2016) study contends that risk-taking and proactiveness play the most significant roles in the growth of employment. To some extent,

the contrast between these findings amplifies the importance of context in EO studies.

Thirdly, while rational thinking may suggest that SMMEs which are proactively innovative and not risk-averse can record EG, this may not always be the case. As indicated by the findings, an orientation towards PA-INNV and CA may result in negative EG because EG is not the primary motivation for such entrepreneurial actions. SMMEs may become proactive, innovative or competitively aggressive primarily to enhance business performance or increase efficiency levels. Indeed, higher levels of efficiency are often attained by reducing the extent to which resources are utilised for the achievement of set goals. In the case of an MSB, this may entail utilising the same employee-complement to achieve higher business goals. Against this background, it is plausible to appreciate that an increase of entrepreneurial intensity along the PA-INNV and CA dimensions can be related to reduced rather than increased EG. Furthermore, increased innovation on the part of MSBs may be driven by the desire to boost performance by automating processes and reducing human interference which, in-turn, may lead to a reduction rather than an increase in employee numbers.

Lastly, the fact that a large proportion of MSBs who participated in this study offers consulting and professional services is instructive. The core of such businesses is the expert knowledge deployed to service clients and not the size of the firm in terms of employment. In essence, knowledge power rather than employee numbers is a critical variable of success among consulting and professional service firms. Given that operations in such businesses, are not particularly labour-intensive, better business performance engineered by a business' entrepreneurial intensity would not necessarily lead to increased employee numbers but as observed by Garba, Kabir and Mahmoud (2019), it may result in higher profit levels, among others.

6. Limitations of the study and recommendations for future research

This study was carried out in a cross-sectional manner, as data were collected at a specific point in time. This limitation therefore, is acknowledged and a longitudinal approach should be considered for future studies. Based on the fact that the events had already taken place, it is an ex post facto study. Therefore, the validity of this approach is largely dependent on the ability of respondents to recall past events and

appropriate them correctly. The adoption of an experimental research design will allow the researchers to control relevant study variables and beyond drawing conclusions about relationships, it makes it possible to ascertain if certain variables produce an effect on others. The experimental approach is recommended as Cooper and Schindler (2014) confirm that it produces the most powerful support possible for a hypothesis that expresses causation. Moreover, the finding that proactiveness and innovativeness are indistinguishable should be further investigated to either corroborate or refute this study's observation. This would further enhance the understanding of entrepreneurial behaviour and which actions must be considered together. In addition, future research should investigate the roles of selected moderation and mediation variables on the relationship PA-INNV, CA and EG.

References

Abdalla, A.M.A. & Mohamed, S.M.A. (2020), The effect of an entrepreneurial orientation on firm performance of the telecommunication sector in Sudan. *African Journal of Business Management* 14(5): 151-158.

Acs, Z.J., Estrin, S., Mickiewicz, T. & Szerb, L. (2018), Entrepreneurship, institutional economics, and economic growth: An ecosystem perspective. *Small Business Economics*, 51(2): 501-514.

Ahmed, F.U., & Brennan, L. (2019), Performance determinants of early internationalizing firms: The role of international entrepreneurial orientation. *Journal of International Entrepreneurship*. 17(3): 389-424.

Altinay, L., Madanoglu, M., De Vita, G., Arasli, H. & Ekinci, Y. (2016), The interface between organizational learning capability, entrepreneurial orientation and SME growth. *Journal of Small Business Management*, 54(3): 871-891.

Anderson, B.S., Kreiser, P.M., Kuratko, D.F., Hornsby, J.S. & Eshima, Y. (2015), Reconceptualizing entrepreneurial orientation. *Strategic Management Journal*, 36(10): 1579-1596.

Audretsch, D.B., Coad, A. & Segarra, A. (2014), Firm growth and innovation. *Small Business Economics*, 43(4): 743-749.

Ayyagari, M., Demirguc-Kunt, A. & Maksimovic, V. (2011), Small vs Young Firms across the World. *Contribution to Employment, Job Creation and Growth*. Policy Research Working Paper, No. WPS 5631. Washington, DC: World Bank.

Brock, D.M. (2003), Autonomy of individuals and organizations: Towards a strategy research agenda. *International Journal of Business and Economics.* 2(1): 57-73.

Burgelman, R.A. (1983), A process model of internal corporate venturing in the diversified major firm. *Administrative Science Quarterly*, 28(2): 223-244.

Capelleras, J. & Rabetino, R. (2008), Individual, organisational and environmental determinants of new firm employment growth: Evidence from Latin America. *International Entrepreneurship Management Journal*, 4(1): 79-99.

Casillas, J.C. & Moreno, A.M. (2010), The relationship between entrepreneurial orientation and growth: The moderating role of family involvement. *Entrepreneurship and Regional Development*, 22(3-4): 265-291.

Cassia, L. & Minola, T. (2012), Hyper-growth of SMEs: Towards a reconciliation of entrepreneurial orientation and strategic resources. *International Journal of Entrepreneurial Behaviour and Research*, 18(2): 179-197.

Coad, A., Segarra, A. & Teruel, M. (2016), Innovation and firm growth. Does firm age play a role? *Research Policy*, 45(2): 387-400.

Colla, E., Ruiz-Molina, E., De Grey, C.C., & Deparis, M. (2020), Franchisee's entrepreneurial dimensions and performance. Evidence from France. *The International Review of Retail Distribution and Consumer Research*: https://doi org.uplib.idm.oclc.org/10.1080/09593969.2020.1768576 [Accessed 6th July, 2020]

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

Covin, J.G., Green, K.M. & Slevin, D.P. (2006), Strategic process effects on the entrepreneurial orientation-sales growth rate relationship. *Entrepreneurial Theory and Practice*, 30(1): 57-81.

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 behaviour. *Entrepreneurship Theory and Practice,* 16(1): 7-25.

Dachs, B. & Peters, B. (2014), Innovation, employment growth and foreign ownership of firms. A European perspective. *Research Policy*, 43(1): 214-232.

Davidsson, P., Delmar, F. & Wiklund, J. (2002), Entrepreneurship as growth; growth as entrepreneurship. in: Hitt, M.A., Ireland, R.D., Camp, S.M. & Sexton, D.L. (Eds). 2002. *Strategic Entrepreneurship: Creating a New Mindset.* Oxford, UK: Blackwell.

Davidsson, P. & Wiklund, J. (2006), Conceptual and empirical challenges in the study of firm growth. In: Davidsson, P., Delmar, F. & Wiklund, J. (Eds). 2006. *Entrepreneurship and the Growth of Firms.* Cheltenham, UK: Edward Elgar.

Dele-Ijagbulu, O., Eresia-Eke, C. & Moos, M. (2020), The Relationship Between Environmental Hostility and Entrepreneurial Orientation of Small Businesses. *Journal of Entrepreneurship and Innovation in Emerging Economies,* 6 (2):1-16.

Dess, G.G. & Lumpkin, G.T. (2005), The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *Academy of Management Executive*, 19(1): 147-156.

Eresia-Eke, C.E., Dele-Ijagbulu, O.J. & Moos, M.N. (2019), The Nexus of Environmental Dynamism and the Dimensions of Entrepreneurial Orientation. *Academy of Entrepreneurship Journal* 25 (4):1-12.

Fairoz, F.M. & Hirobami, T. (2016), Entrepreneurial orientation and business performance of small and medium scale enterprises in Japan. *Asian Journal of Management Science and Education,* 5(3): 64-70.

Fatoki, O. (2018), The impact of entrepreneurial resilience on the success of small and medium enterprises in South Africa. *Sustainability.* 10: 1-12.

Garba, A.S., Kabir, I. & Mahmoud, M.A. (2019), Entrepreneurial Orientation and Growth Potential of Microenterprises in Northwest Nigeria. *Journal of Developmental Entrepreneurship,* 24(2): 1-20.

Hitt M.A., Xu, K. Carnes, C.M. (2016), Resource based theory in operations management research. *Journal of Operations Management,* 41:77-94.

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.

Ibrahim, M. & Madichie, N.O. (2014), Entrepreneurial orientation amongst SME Wood Manufactures in Ghana. *African Journal of Business and Economic Research.* 9(2-3): 87-115.

Janssen, F. (2009), Does the Environment Influence the Employment Growth of SMEs? *Journal of Small Business and Entrepreneurship,* 22(3): 311-326.

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

Karmendi, B. (2016), The Role of Entrepreneurial Orientation on the Growth of Small and Medium Enterprises in Nairobi County. Unpublished Masters Dissertation. University of Nairobi.

Kirchoff, B.A, Newbert, S.L, Hassan, I & Armington. C (2007), The Influence of University Research and Development Expenditure on New Business Formations and Employment Growth. *Entrepreneurship Theory and Practice,* 31(4): 543-559.

Klapper, L. & Love, I. (2010), *The Impact of Business Environment Reforms on New Firm Registration. Policy Research Working Paper WPS5493*, (Washington, DC, The World Bank).

Le Roux, I. & Bengesi, K.M.K. (2014), Dimensions of entrepreneurial orientation and small and medium enterprise performance in emerging economies. *Development Southern Africa.* 31(4): 606-624.

Ledingoane, C.M. & Viljoen, J.M.M. (2020), Employment growth constraint of informal enterprises in Diepsloot, Johannesburg. *Acta Commercii,* 20 (1): 1-15

Lotz, H.M & Van der Merwe, S.P. (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.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.

Matchaba-Hove, T.M. & Goliath, J.E. (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.

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

Miller, D. (2011), Miller (1983) revisted: A reflection on EO research and some suggestions for the future. *Entrepreneurship Theory and Practice.* 35(5): 873-894.

Miller, D. & Le Breton-Miller, I. (2017), Sources of Entrepreneurial Courage and Imagination: Three perspectives, Three Contexts. *Entrepreneurship Theory and Practice.* 667–675.

Mkhize, N.I. (2019), The Sectoral Employment Intensity of Growth in South Africa. *Southern Africa Business Review,* 23(1): 1-24.

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.

Moreno, A.M. & Casillas, J.C. (2008), Entrepreneurial Orientation and the Growth of SMEs: A Causal Model. *Entrepreneurship Theory & Practice*, 32(3): 507-528.

Morris, M.H., Kuratko, D.F. & Covin, J.G. (2008), Corporate Entrepreneurship and Innovation; Entrepreneurial Development within Organisations. South-Western College Publishers, Mason OH.

Mthanti, T. & Ojah, K. (2018), Institutions, human capital and entrepreneurial orientation: Implications for growth policy. *Journal of Entrepreneurship and Public Policy.* 7(2): 135-160.

Naldi, L. Nordqvist, M. & Sjoberg, K. & Wiklund, J. (2007), Entrepreneurial Orientation Risk-taking and Performance in Family Firms. *Family Business Review.* 20(1): 33-47.

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

Nickel, M.N. & Rodriguez, M.C. (2002), A review of research on the negative accounting relationship between risk and return: Bowman's paradox. *Omega,* 30(1): 1-8.

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.

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.

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.

Singer, S., Amorós, J.E., Arreola, D.M. & Global Entrepreneurship Research Association (GERA) (2015), *Global Entrepreneurship Monitor 2014 Global Report.* Global Entrepreneurship Research Association (GERA). London: London Business School.

Statistics South Africa. (StatsSA). (2019), Mid-year populations estimates. Statistical release P0302, available at: http://www.statssa.gov.za /publications/P0302/P03022019.pdf [Accessed: 10th, July 2020].

Stenholm, P., Pukkinen, T. & Heinonen, J. (2016), Firm Growth in Family Business- The Role of Entrepreneurial Orientation and the Entrepreneurial Activity. *Journal of Small Business Management* 54(2): 697-713.

Soininen, J., Martikainen, M., Puumalainen, K. & Kyläheiko, K. (2012), Entrepreneurial orientation: Growth and profitability of Finnish small and medium-sized enterprises. *International Journal of Production Economics,* 140(2): 614-621.

Shafaeddin, M. (2014), Competitiveness and Development: Myth and Realities: New York, NY: Anthem Press.

Teece, D.J., Pisano, G., & Shuen, A. (1997), Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.

Urban, B. & Verachia, A. (2019), Organisational antecedents of innovative firms: a focus on

entrepreneurial orientation in South Africa. *International Journal of Business Innovation and Research*, 18 (1), 128–144.

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

Wiklund, J., & Shepherd, D. (2005), Entrepreneurial Orientation and Small Business Performance: A Configurational Approach. *Journal of Business Venturing,* 20(1):71-91.

Yang, Y., & Ju, X. (2018), Evolution Paths of Start-ups and Large firms'Entrepreneurial Orientation: Combination of Proactiveness and Competitive Agressiveness. *Advances in Economic, Business and Management Research.* 54: 126-131.

Yoo, S.J. (2001), Entrepreneurial Orientation, Environmental Scanning Intensity and Firm Performance in Technology-Based SMEs. *Frontiers of Entrepreneurship Research,* 35: 356-367.

Zahra, S.A., Sapienza, H.J., & Davidson, P. (2006), Entrepreneurship and dynamic capabilities. A review, model and research agenda. *Journal of Management Studies*, 43(4): 917-955.