Gordon Institute of Business Science
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A dynamic capabilities view of barriers to growth: comparison of social and commercial enterprises

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Abstract

Social enterprises play an important role in addressing issues of social welfare and catalysing social change. In a context characterised by inequality, poverty, and unemployment, the core social enterprise mandate of creating social value is an important one. Yet social enterprises struggle to grow and scale their impact. The strategic management framework of dynamic capabilities and its components of sensing, seizing, and transforming is concerned with how businesses maintain and sustain competitive advantage. This research study replicated a dynamic capabilities scale and an associated business performance survey instrument with social enterprise and commercial enterprise respondents. Statistical analysis was undertaken to determine how dynamic capabilities differed across these two enterprise groups and whether dynamic capabilities were levers of business performance for social enterprises. The results concluded that the dynamic capabilities scale showed strong validity and reliability within a social enterprise environment, but there was not a strong overall correlation to business performance. The findings of the study also revealed two potential barriers to growth where social enterprises differed markedly from their commercial enterprise counterparts around certain dynamic capability items. Finally, the study found that the organisational age and size of a social enterprise had a significant bearing on business performance.

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Keywords:

Social enterprise, social entrepreneurship, dynamic capabilities, business performance

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Philosophy (Corporate Strategy) at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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Julian John Halford Hewitt Date

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List of acronyms and abbreviations

AVE	average variance extracted
BP	business performance
CE	commercial enterprise
CFA	confirmatory factor analysis
EFA	exploratory factor analysis
CR	composite reality
DC	dynamic capabilities
EFA	exploratory factor analysis
RMSEA	root mean square error of approximation
SE	social enterprise
SEM	structural equation modelling

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CHAPTER 1. INTRODUCTION TO THE RESEARCH PROBLEM

1.1 BACKGROUND TO THE RESEARCH PROBLEM

In a world that is increasingly interconnected and complex (Hervieux & Voltan, 2018), systemic inequalities such as poverty, climate change, education, migration and population growth have become even harder to tackle (Bosma et al., 2020). These inherently difficult to resolve societal challenges (Littlewood & Holt, 2018) are known as wicked problems, a concept first described by Rittel and Webber (1973). New approaches and creative solutions (Bosma et al., 2020) are therefore essential in unravelling these Gordian knots.

One of the key sources of these institutional voids (Hu, Marlow, Zimmermann, Martin & Frank, 2019) or wicked problems is known as market failure. This is the result of a simultaneous failure from both government and markets to adequately respond to pressing social issues (Beaton & Dowin Kennedy, 2021; Douglas & Prentice, 2019). One of the outcomes of market failure has been what economists refer to as negative externalities that fall beyond the scope of being addressed through traditional market incentives (Lamy, 2019). Typified as neglected problems, these market failures and negative externalities (Pache & Andre, 2016) have resulted in societal disequilibrium (Hu et al., 2019) and are ripe to apply the type of positive social impact theory referenced by Estrin, Mickiewicz and Stephan (2016).

It is into this context that social entrepreneurship has attracted particular scholarly attention (Saebi, Foss & Linder, 2019) as it provides answers to overlooked or abandoned societal challenges (Siqueira, Guenster & Vanacker, 2018). A primary driving force is that social enterprises have an overarching focus on creating societal value, not just capturing it as is the case for commercial entities (Estrin et al., 2016). Social enterprises achieve this through a dual mission that focuses on achieving both financial goals and social impact (Rawhouser, Cummings & Newbert, 2019). Importantly though, in pursuing this combined agenda, social enterprises still place overall priority on creating social above economic value (Hlady-Rispal & Servantie, 2018).

The dual focus of social enterprises allows them to embrace best-practice, commercially-orientated, organisational approaches (Alter, 2007; Gupta, Chauhan, Paul & Jaiswal, 2020; Mogapi, Sutherland & Wilson-Prangley, 2019; Rawhouser et al., 2019) in driving positive social change (Stephan, Patterson, Kelly & Mair, 2016). The challenge is there are unique contexts and differences at play for an organisational entity that simultaneously embraces social and financial objectives (Hu et al., 2019; Rawhouser et

al., 2019). This provides the scope for greater application of management research within the field of social entrepreneurship (Hota, Subramanian & Narayanamurthy, 2019; Rey-Martí, Ribeiro-Soriano & Palacios-Marqués, 2016; Sassmannshausen & Volkmann, 2018; Stephan et al., 2016) to better understand what these differences are and how they impact on social enterprises in creating social value.

1.2 RESEARCH PROBLEM AND PURPOSE

Social entrepreneurship's importance in addressing issues of social welfare (Wry & York, 2017), inequality as well as acting as a catalyst for social change (Gupta et al., 2020) is a primary reason why the field of study has seen such significant growth within academic research over the past two decades (Hota et al., 2019; Rey-Martí et al., 2016). However, the inability of social enterprises to scale their operations (Davies, Haugh & Chambers, 2019) and increase their impact (Bacq & Eddleston, 2018) undermines their ability to deliver social value (Morris, Santos & Kuratko, 2020).

To gain better insight into these social entrepreneurship barriers to growth, this research study drew on the dynamic capability framework within the strategic management literature (Teece, Pisano & Shuen, 1997; Teece, 2007) to understand how firms maintain and sustain competitive advantage. The study aimed to replicate a dynamic capabilities (DC) instrument (Kump, Engelmann, Kessler & Schweiger, 2019) within a South African social enterprise (SE) and commercial enterprise (CE) environment. In attempting to answer the research problem, the aim of the research study was to understand the correlation of the DC components of sensing, seizing, and transforming in relation to business performance outcomes and whether there are noteworthy variations in how dynamic capabilities correlate to business performance (BP) between SEs and CEs.

1.3 SCOPE OF THE RESEARCH

1.3.1 Social and commercial enterprises

Social entrepreneurship has been thought of by some researchers to be a contested (Morris et al., 2020) or even pre-paradigmatic concept (Hota et al., 2019). In a large part, this is attributed to the definition being highly contextual to the environment that the social enterprise operates within (Davies et al., 2019; Estrin et al., 2016). There is, however, broad consensus though that social entrepreneurship is defined as the dual pursuit of both social and financial goals (Rawhouser et al., 2019; Saebi et al., 2019).

A fundamental aspect of this research study was to employ a clear organisational delineation between an SE and a CE. The typology of this distinction is referenced from

Alter (2007) and it is highlighted in Table 1 below. The definitions of these three primary organisational classifications provides a helpful spectrum view into their characteristics and the context in which they operate. The scope of this research study included only considering SEs and CEs. Based on the model proposed by Alter (2007) and for the purposes of this research, hybrid entities that blend both a social and financial mandate have been referenced as SEs (Bauwens, Huybrechts & Dufays, 2020; Hota et al., 2019; Mogapi et al., 2019; Weerawardena, Salunke, Haigh, & Sullivan Mort, 2019). Purely commercial entities have been classified as CEs (Davies et al., 2019; Estrin et al., 2016; Hota et al., 2019) and purely philanthropic organisations are referred to as non-profit companies (Morris et al., 2020; Wry & York, 2017).

Table 1: Spectrum of practitioners

	Purely Philanthropic	**Hybrid**	**Purely commercial**
Motives	Appeal to goodwill	Mixed motives	Appeal to self-interest
Methods	Mission-driven	Balance or mission and market	Market-driven
Goals	Social value creation	Social and economic value creation	Economic value creation
Destination of income / profit	Directed towards mission activities of non-profit organisation	Reinvested in mission activities or operational expenses, and / or retained for business growth and development (for profits may redistribute a portion)	Distributed to shareholders and owners

Source: Alter, 2007, p. 13

1.3.2 Dynamic capabilities

As this research study aimed to replicate the DC scale developed by Kump et al. (2019), the scope of the research was anchored on their theoretical basis. In this context, DCs have been defined according to Teece et al. (1997) as *"the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments"* (p. 516). The micro foundations of sensing, seizing, and transformation have been used as the construct basis for the DC scale (Teece, 2007, 2014). Part of their reliance on Teece's conceptualisation of DCs is that most of the empirical studies undertaken to date have also referenced his material (Kump et al., 2019; Schilke, Hu &

Helfat, 2018). The scope of this research study considered and replicated the same DC constructs, sub-scales, and items.

1.3.3 Business performance

Through the development of a DC scale, Kump et al. (2019) were able to demonstrate that in addition to showing high internal reliability and construct validity, the scale itself was a strong predictor of BP. This BP construct comprised four sub-scales including market performance, customer-related performance, financial performance, and employee-related performance. Each sub-scale comprised three items and was devised from BP literature sources such as those by Hult, Hurley and Knight (2004), Ottenbacher (2007), and Wiklund and Shepherd (2005). The scope of this research study also considered and replicated the same BP constructs, sub-scales, and items.

1.4 BUSINESS RATIONALE

This study seeks to contribute to the growing interest of applying management theories to the social entrepreneurship domain (Ince & Hahn, 2020; Littlewood & Holt, 2018). The specific theoretical problem that the study aimed to solve is whether dynamic capabilities (Teece et al., 1997), as a framework within strategic management research, can be extended to the entrepreneurial literature and applied within a social entrepreneurship context. To date, while there has been little dedicated dynamic capabilities research within the social entrepreneurship domain, there is initial evidence to support its applicability (Ince & Hahn, 2020).

1.5 ACADEMIC RATIONALE

Despite the increased academic focus on social entrepreneurship, the majority of academic research to date has concerned itself with the description of social entrepreneurship or providing a broad overview of the phenomenon and its taxonomy (Gupta et al., 2020; Sassmannshausen & Volkmann, 2018). Without clearer academic constructs to guide further research, the establishment of social entrepreneurship as a unique concept is restricted, while the cumulative knowledge-creation process is also limited (Saebi et al., 2019). In addition, the legitimacy and validity of the field is also called into question (Morris et al., 2020). In response to furthering the field of social entrepreneurship research, numerous journal articles have recommended greater application of management research within the field (Sassmannshausen & Volkmann, 2018; Stephan et al., 2016).

Most research within the social entrepreneurship field has also been qualitative. As part of a recent assessment into the breakdown of methodologies used in social entrepreneurship research, less than 10% of accredited journal articles within this field made use of quantitative statistical methods (Sassmannshausen & Volkmann, 2018). In support of this analysis, there have also been numerous other requests to increase the output of quantitative studies (Rawhouser et al., 2019).

The first envisaged empirical contribution of this research study is to replicate the DC scale within a new commercial environment, thereby contributing to further concretising the validity of the research instrument (Kump et al., 2019). A second potential contribution lies in deploying a strategic management framework within an SE environment and in doing so, furthering the scope of current SE (Hota et al., 2019; Rey-Martí et al., 2016) and DC research (Ince & Hahn, 2020). The final envisaged contribution is with regards to the quantitative nature of this study that will add to the limited scope of existing social entrepreneurship literature in this space (Gupta et al., 2020; Hota et al., 2019).

1.6 DOCUMENT STRUCTURE

Chapter 1 – Provides a background into the context and rationale behind the research.

Chapter 2 – Presents the academic literature to establish the research study argument.

Chapter 3 – Outlines the research questions and hypotheses related to the study.

Chapter 4 – Summarises the research methodology and approach to data collection.

Chapter 5 – Details statistical results from the research instrument.

Chapter 6 – Interprets the results of the data in relation to the research questions.

Chapter 7 – Provides concluding remarks, and highlights research contributions and limitations.

CHAPTER 2. THEORY AND LITERATURE REVIEW

2.1 INTRODUCTION

There are three components to this literature review (Figure 1). The first aspect focuses on the concept of DCs and existing scale development attempts. The second component considers whether DC as a strategic management framework can be extended to the extant entrepreneurial literature. The third component then evaluates the comparability of DCs within an SE environment. In its entirety, this process creates the academic groundwork of a DC scale that is both theoretically relevant within an entrepreneurial environment while also being applicable to SEs.

Heading	2.2 Dynamic capabilities	2.3 Applicability of dynamic capabilities to entrepreneurship	2.4 Comparability of dynamic capabilities within social and commercial enterprises	2.5 Impact of age and size on business performance
Sub-Headings	2.2.1 Definition	2.3.1 Business performance	2.4.1 Sensing	2.5.1 Size of a social enterprise
	2.2.2 Measuring dynamic capabilities	2.3.1.1 Market performance 2.3.1.2 Customer-related performance 2.3.1.3 Financial performance 2.3.1.4 Employee-related performance	2.4.2 Seizing	2.5.2 Age of a social enterprise
	2.2.3 Scale development		2.4.3 Transforming	2.5.3 Conclusion
		2.3.4 Conclusion	2.4.4 Conclusion	

Figure 1: Structure of literature review
Source: Author's compilation

2.2 DYNAMIC CAPABILITIES

The objective of this literature review was to firstly deepen the theoretical understanding of dynamic capabilities and how the framework has developed as an important contribution to the strategic management literature. Following this, the literature review has looked at efforts to measure DCs with the objective of developing a more unified and comparative approach that enhances the practicality of this framework. Kump et al.'s (2019) approach to a DC scale is then discussed.

2.2.1 Definition

DCs are one of the most significant theories in current management research (Schilke et al., 2018). Defined as *"the firm's ability to integrate, build, and reconfigure internal and*

external competences to address rapidly changing environments" (Teece et al., 1997, p. 516), DCs are an important aspect of an organisation's ability to maintain and sustain competitive advantage (Schilke et al., 2018; Mitrega, Forkmann, Zaefarian & Henneberg, 2017). DCs are a theory to explain competitive advantage in dynamic and volatile markets (Felin & Powell, 2016) and in this way, are differentiated from the resource-based view (Barney, 2001) that defines competitive advantage from a more static perspective of resources and operating capabilities (Teece, 2012). It is the ability of businesses to intentionally create, respond or renew their resource base under rapid change that has made DCs such a compelling theory (Schilke et al., 2018). DCs also differ from ordinary capabilities in that ordinary capabilities determine industry best practice and are captured organisational routines, while DCs are strategic in nature and can enable a firm to preserve or extend its competitive advantage over and above ordinary capabilities (Teece, 2012).

2.2.2 Measuring dynamic capabilities

Teece first proposed DCs as a concept in 1997 and even though over 125 peer-reviewed journal articles have subsequently employed DC-related surveys (Kump et al., 2019), there is no widely accepted survey instrument to evaluate and compare DCs across companies and industries. This review of the DC literature revealed that there have only been two prior attempts to develop a DC scale that satisfies scale construction best practice. A study by Wilden, Gudergan, Nielsen and Lings (2013) focused on the frequency and activities while a recent article (Kump et al., 2019) went a step further in constructing an outcomes-based DC scale. The 14-point DC scale developed by Kump et al. (2019) was used as the basis for this theoretical review. It incorporates the dynamic capability dimensions of sensing, seizing, and transforming (Teece, 2007).

2.2.3 Scale development

As part of the scale development process, Kump et al. (2019) conducted a scale confirmation study that comprised of 21 items measuring BP (Hult et al., 2004; Ottenbacher, 2007; Wiklund & Shepherd, 2005). Based on the results their findings, the DC scale was found to be a "*solid predictor of business and innovation performance"* (Kump et al. 2019, p. 1149). As this DC scale was developed as a framework strategic management theory, the second component of this literature review is to determine whether dynamic capabilities can be extended to the entrepreneurial domain.

2.3 APPLICABILITY OF DYNAMIC CAPABILITIES TO ENTREPRENEURSHIP

DCs are a strategic management theory and as such have been frequently referenced within the management research environment (Schilke et al., 2018). In noting that *"enterprises with strong dynamic capabilities are intensely entrepreneurial",* Teece (2007, p. 1319) provided initial evidence that dynamic capabilities have applicability within the entrepreneurship field. What the subsequent entrepreneurship theory review aims to address is whether dynamic capabilities can be extended to the entrepreneurial literature. This necessitates assessing the BP dependent variables from Kump et al.'s (2019) study against supporting entrepreneurial literature to determine the entrepreneurial applicability of the overall scale. It has already been noted that entrepreneurial literature has been extended to study social entrepreneurship (Hota et al., 2019) and therefore this entrepreneurial review also encompasses the social entrepreneurship. Specific references to unique SE contexts are also highlighted.

2.3.1 Business performance

Kump et al.'s (2019) contribution to the literature was not just to develop a DC scale but to develop a scale of which the capacities were proven to be a predictor of BP. To predict BP, the researchers developed a BP construct that was administered as part of their scale confirmation exercise. The four constructs of BP that were identified by Kump et al. (2019) were market performance, customer-related performance, financial performance, and employee-related performance. Each component comprised three items. These components and their representative items were assessed according to the entrepreneurial literature below.

2.3.1.1 Market performance

The underlying components of market performance were identified by Kump et al. (2019) as the ability to attract new customers, opening of new markets and the developing of market share. In the entrepreneurship literature, it has been noted that marketing orientation and entrepreneurial orientation (Miles & Arnold, 1991) are related strategic responses within a dynamic business environment. A literature review into the role of marketing within SMEs (Bocconcelli et al., 2018) highlighted the positive relationship between marketing and performance within the SME sector, while Hong, Song and Yoo (2013) found that marketing orientation had a positive effect on new product performance, particularly through new product development adeptness and the meaning assigned to new products. Companies with a higher entrepreneurial orientation were also able to expand faster based on their ability to improve profitability (Rauch, Wiklund, Lumpkin & Frese, 2009). These attributes of marketing orientation identified by various

researchers (Bocconcelli et al., 2018; Hong et al., 2013; Miles & Arnold, 1991; Rauch et al., 2009) support the attraction of new customers, that provide entrepreneurially-orientated business to grow existing market share and enter new markets.

2.3.1.2 Customer-related performance

A customer's image of a company, their customer satisfaction and consumer loyalty were identified (Kump et al., 2019) as essential aspects of customer-related performance. In the entrepreneurship literature, Geiger et al. (2012) referred to the important role that the founders of new entrepreneurial ventures play with regards to the marketing function in areas such as building customer relationships and developing a customer-centric approach. This was emphasised by Lam and Harker (2015) who saw both the entrepreneur and customer as key role players in the success of a business. This strong relational component to the marketing function of entrepreneurial ventures added to the customer loyalty of the business. From an entrepreneurial perspective, there is an overly strong emphasis on the role of the founder regarding the business' customer-related performance (Lam & Harker, 2015) that is differentiated from a more institutional role that this function plays in an established business.

While the concepts of customer satisfaction and consumer loyalty are very supported, if not even elevated within an entrepreneurial setting, it is noted that organisational image within an SE environment can prove more problematic. Part of the institutional complexity of SEs is that in pursuing a simultaneous social and financial mission (Morris et al., 2020; Muñoz & Kimmitt, 2019), their messaging to external and internal clients can be perceived as confusing (Ince & Hahn, 2020). This has the potential to impact on the clarity with which their organisational identity is perceived.

2.3.1.3 Financial performance

Growth in sales, growth in profits, and profitability were identified by Kump et al. (2019) as the underlying items of financial performance. In the entrepreneurship literature, there are strong overlaps. Lam and Harker (2015) referred to the profit motive being at the heart of a new venture. Rauch et al. (2009) noted that companies with a higher entrepreneurial orientation were able to better serve premium markets, thereby providing them with larger profits. Putniņš and Sauka (2019) identified that entrepreneurs were aware of profit opportunities and focused on taking advantage of these opportunities, while Covin, Green and Slevin (2006) saw sales growth as a key indicator of entrepreneurial orientation. The pricing capabilities of entrepreneurial firms and how this

capability impacted on their profitability was also identified by Flatten, Engelen, Möller and Brettel (2015).

From an SE perspective, a unique consideration is that they place a priority on societal value over economic value. This adds a level of ambiguity in terms of sales and profit maximisation (Bacq & Janssen, 2011; Hlady-Rispal & Servantie, 2018) and places pressure on SEs to optimise the environment where generating revenue is aligned to the creating social impact (Doherty, Haugh & Lyon, 2014). Financial performance is therefore closely linked to how effectively this social mission and value contribution is communicated to customers and other primary stakeholders (Hlady-Rispal & Servantie, 2018).

2.3.1.4 Employee-related performance

Employee satisfaction, employee commitment, and long-term staff membership or low employee fluctuation were identified Kump et al. (2019) as the underlying items of employee-related performance. In the entrepreneurship literature, there is a widely held caution about the impact that role ambiguity places on staff in entrepreneurial firms (Andersén, 2017; Eatough, Chang, Miloslavic & Johnson, 2011; Flatten et al., 2015; Moser, Tumasjan & Welpe, 2017). Role ambiguity is characterised by a perceived lack of job certitude. This role ambiguity has resulted in increased stress and uncertainty (Andersén, 2017), and it impacts staff retention (Monsen & Boss, 2009) and reduced employee commitment (Eatough et al., 2011). Role ambiguity is particularly prevalent in entrepreneurial firms who emphasise flexibility instead of most structured working environments (Kanter, 1985), that building suitable human resource systems is a capacity constraint on managers (Flatten et al., 2015) and may represent a recurring source of tension for SME managers (Andersén, 2017). There are ways to mitigate the impact of this employee uncertainty such as hiring entrepreneurially-minded (Moser et al., 2017), autonomous employees (Lumpkin & Dess, 2001) or by cultivating social relationships within the business (Andersén, 2017). These approaches would serve to increase levels of employee satisfaction in new ventures. Within an SE environment, the lack of perceived clarity around vision can cause internal staffing tension (André, Cho & Laine, 2018) and increase the lack of role clarity (Saebi et al., 2019). Given all these considerations from the entrepreneurship literature, there is thus sufficient evidence that employee-related performance is bounded by a unique context that is not as applicable within the strategic management literature.

2.3.2 Conclusion – Applicability of BP to entrepreneurship research

A summary of the BP constructs and their applicability based on the entrepreneurial literature is referenced in Table 2. While there was not adequate evidence to support employee-related performance as a valid construct within the broader entrepreneurial literature, there was sufficient overall indication that the BP construct that is linked to the DC scale can be deployed within the entrepreneurship sector. This section of the literature review forms part of this study's first research question (replicating the DC scale) as well as the third research question (correlating the whether DCs are drivers of BP for SEs and CEs).

Table 2: Business and innovation performance within the entrepreneurial literature

No	Category	Section	Academic validity within the entrepreneurial field
1	Business performance	Market performance	Yes
2	Business performance	Customer-related performance	Yes – with emphasis placed on founder's role
3	Business performance	Financial performance	Yes
4	Business performance	Employee-related performance	No – role ambiguity a major influencing differentiator

Source: Author's compilation

2.4 COMPARABILITY OF DCS WITHIN SOCIAL AND COMMERCIAL ENTERPRISES

This third section of the literature review seeks to determine the comparability of SEs to CEs when benchmarked against the DC components of sensing, seizing, and transforming. What this section aims to achieve is to determine the academic applicability of the DC framework within the field of social entrepreneurship literature. Each of the DC components below have been unpacked from a definitional perspective and they manifest within the extant social entrepreneurship literature. In each instance, conclusions have been made about how SEs are expected to engage in a similar or different manner to their CE counterparts.

2.4.1 Sensing

The sensing component of the DC scale refers to an organisation's capability to constantly scan the organisational environment (Kump et al., 2019; Makkonen, Pohjola, Olkkonen & Koponen, 2014; Teece, 2007). By the continuous processing information

both inside and outside the firm (Helfat & Peteraf, 2014), the organisation is in the position of assessing technology changes, customer requirements and key threats. In relation to social enterprises, a defining aspect is the central role that stakeholders and networks play (Ince & Hahn, 2020). The social capital embedded in these networks is often inaccessible to corporate entities, is an important resource in overcoming barriers to their growth (Davies et al., 2019), and is enhanced through collaborations with other social enterprises or institutional players (Saebi et al., 2019). Sensing is viewed as a special capacity of social enterprises (Moss, Short, Payne & Lumpkin, 2011). In conclusion, combined with their hybrid focus on social and financial goals, the hypothesis is that social enterprises have a greater organisational mandate and network than commercial enterprises. This should support SEs have a higher sensing function to CEs.

2.4.2 Seizing

Seizing refers to the identification and development of opportunities that fit within an organisation's strengths and weakness profile while still being aligned to its environment (Teece, 2007). This implies a dynamic response that minimises threats or realises new opportunities. Seizing may require new investments or configuration of new business models (Helfat & Peteraf, 2014; Schilke et al., 2018) and as a result is closely linked to strategic decision-making (Kump et al., 2019). In relation to social enterprises, the vast networks that they have access to through their social capital, collaboration and multiple institutional stakeholders enables their heightened sensing function but is can ultimately be more of a hinderance in flexibly navigating these many networks (Ince & Hahn, 2020) when acting on an opportunity or minimising a threat. In this regard, institutional theory (Scott, 2004) explains the concerns expressed by external stakeholders with regards to the legitimacy of a social enterprise. Social enterprises are judged according to recognised institutional values and need to legitimise their actions both from an ethical and a capability perspective (Moss et al., 2011). Therefore, not only then do social enterprises need to consider financial performance, but also their legitimacy in terms of social outcomes (Davies et al., 2019; Kim, Lee & Chandra, 2019; Wry & York, 2017). The social value nature of social enterprises also decreases their appeal to banks and venture capital organisations in funding potential opportunities (Doherty et al., 2014).

However, despite these SE attributes that can be potentially derailing from a seizing perspective, SEs display characteristics that typify entrepreneurial orientation (Saebi et al., 2019). They also demonstrate these abilities within spaces that are often highly inefficient and present a multitude of neglected problems (Siqueira et al., 2018). In conclusion, while it is hypothesised that there is an additional social and financial burden

in seizing opportunities that are more prevalent with SEs, they also embrace an entrepreneurial mindset in a space with more opportunities and less competition. It is therefore expected that SE respondents have a similar score to CEs on this seizing DC scale.

2.4.3 Transforming

Transforming refers to an organisation's dynamic capability to renew itself from within by recombining and reconstituting its tangible and intangible assets in response to internal growth or external changes (Teece, 2007). Through this process of renewal, an organisation can avoid stagnation and path dependencies (Kump et al., 2019). In relation to social enterprises, the hybridity (André et al., 2018; Doherty et al., 2014; Smith, Gonin & Besharov, 2013) of a social enterprise in its aim to fulfil a joint social and financial mission adds an additional layer of conflict (Ince & Hahn, 2020; Moss et al., 2011), decision-making complexity (Estrin et al., 2016; Smith et al., 2013), institutional complexity (André et al., 2018; Hlady-Rispal & Servantie, 2018; Morris et al., 2020; Muñoz & Kimmitt, 2019), and mission drift (Muñoz & Kimmitt, 2019; Smith et al., 2013) to transformational undertakings. In conclusion, the internal and external restrictions within social enterprises are hypothesised to add additional friction, thereby decreasing their ability to transform and this should result in SEs scoring lower on this transforming dynamic capability scale than CEs.

2.4.4 Conclusion – Applicability of DCs to social entrepreneurship research

This section of the literature review considered how DCs have been defined in the Kump et al. (2019) study in reference to the social entrepreneurship literature. Based on this assessment, the academic argument concluded that the DC scale is applicable within an SE environment. For each of the DC components of sensing, seizing, and transforming, a hypothesis was made regarding how the literature suggested SEs would respond to the DC scale in comparison to CEs. These conclusions form the basis of the second research question that aimed to determine whether there is a significantly different way in which SEs and CEs engage with DCs.

2.5 IMPACT OF AGE AND SIZE OF BUSINESS PERFORMANCE

This final section of the literature review considers whether an SE's age and size have an impact on business performance. If there is sufficient evidence to suggest that these variables have an influence, then this will inform whether the research design takes these determinants into account. Kump et al. (2019) noted within their corporate respondent group, that as an organisation's size decreased, there was a slight improvement in

customer-related performance, while the age of an organisation had a slightly negative effect on a company's market and financial performance.

2.5.1 Size of an SE

The literature references that the larger an SE, the more it can capacitate important functional areas such as marketing and finance (Vickers & Lyon, 2014). Marketing is a particularly key function as one of the most important competitive advantages an SE has at its disposal is to leverage its social mission (Hlady-Rispal & Servantie, 2018). Increased marketing capacity supports an SE have a more institutional marketing function that is able to communicate this mission to a wider target audience and expand into new markets (Coviello, Brodie & Munro, 2000). Greater capacity in areas such as finance also enable an SE to explore new markets (Vickers & Lyon, 2014). It is hypothesised that the size of an SE will have a positive effect on business performance.

2.5.2 Age of an SE

SEs are highly influenced by their founders in areas such as their previous experience, past networks and in the shaping of organisational missions (Bauwens et al., 2020). Founders also have a high level of influence over monitoring an SE's operations and processes (Doherty et al., 2014) and opportunity recognition (Wry & York, 2017). Older organisations are able to establish a greater level independence from founders in expanding to new audiences and networks (Coviello et al., 2000). These functions typify sensing and seizing DC domains (Teece, 2007). It is hypothesised that the age of an SE will have a positive effect on business performance.

2.5.3 Conclusion

There is enough evidence from the literature to suggest that the size and age of an SE could have an influence on business performance. According to Kump et al. (2019), the effect of age and size had a statistically significant but small effect on business performance within a corporate environment. Based on these deductions, there is academic support to consider a fourth research question that analyses what effect an organisation's age and size have on its business performance.

2.6 OVERALL LITERATURE REVIEW CONCLUSION

2.6.1 Dynamic capabilities

The entrepreneurial literature suggests that the DCs of sensing, seizing, and transforming are valid constructs within the social entrepreneurship field. What is not known, however, is whether these constructs manifest in ways that are different from commercial entities. A primary driver of this uncertainty lies in the dual nature of an SE in pursuing both a social and financial mission. While social entrepreneurship literature places strong emphasis on this core organisational distinction, there has been inadequate research into what impact this has regarding DCs. What is also unconfirmed in the literature is the extent to which these DCs impact on the BP within an SE environment.

2.6.2 Business performance

Based on the literature review, there is sufficient evidence to suggest that the strategic management framework of DCs has applicability within an entrepreneurial field. In particular, the literature has provided suitable academic validation that the sub-constructs of market performance, customer-related performance and financial performance can be deployed within the entrepreneurship sector. What is not sufficiently clear is whether employee-related performance is an equally applicable sub-construct. The literature has shown that a higher level of role ambiguity within an entrepreneurial environment might compromise the reliability of employee-related performance as an indicator of overall business performance. What is also inconclusive from the social entrepreneurship literature is how significant the impact of an organisation's age and size is on BP.

CHAPTER 3. RESEARCH HYPOTHESES

3.1 RESEARCH QUESTIONS AND HYPOTHESES

The study replicated the DC instrument (Kump et al., 2019) within a South African SE and CE environment. The objective of the research study was to understand the correlation of the DC components of sensing, seizing, and transforming in relation to BP and whether there are noteworthy variations in how DCs predict BP between SEs and CEs. Four research questions were developed as an outcome from the literature review Each of these research questions has associated hypotheses (Table 3–6) that the study evaluated by means of statistical analysis.

Hypothesis 1: The dynamic capabilities scale developed by Kump et al. (2019) shows high construct reliability and validity when replicated within a new social enterprise and commercial enterprise environment.

The rigorous scale development and scale confirmation process undertaken by Kump et al. (2019) suggest that the scale can be employed within a new corporate environment and show similar levels of scale reliability and validity. There was also sufficient evidence from the literature that DCs have strong entrepreneurial characteristics (Teece, 2007) and that the entrepreneurial literature can be extended to the social enterprise environment (Hota et al., 2019). These aspects provided sufficient support regarding the applicability of the business performance sub-scales within an entrepreneurial environment. The aim of Hypothesis 1 was to determine if this DC scale replication does indeed have efficacy within a new social and commercial enterprise environment.

Hypothesis 2: The social enterprise group had a higher response to the dynamic capability sensing construct than the commercial enterprise group.

The academic evidence suggested that, in comparison to their CE counterparts, SEs demonstrate stronger DCs around the sensing construct (Ince & Hahn, 2020). This was particularly pertinent to the multi-sector (Rawhouser et al., 2019) and highly networked environment (Davies et al., 2019) that SEs operate within. The aim of Hypothesis 2 was to determine whether this assertion is true.

Hypothesis 3: The social enterprise group had a similar response to the dynamic capability seizing construct compared to that of the commercial enterprise group.

There is support from the SE literature that SEs have both enabling and derailing characteristics in comparison to CEs regarding the DC construct of seizing. The highly

entrepreneurial nature of SEs (Saebi et al., 2019) and the often inefficient sectors they find themselves within (Siqueira et al., 2018) provide SEs with ample opportunity to capitalise on new opportunities (Teece, 2007). In contrast though, there are some barriers to growth that potentially compromise this action-orientation such as their legitimacy in terms of social and financial outcomes (Davies et al., 2019) and fundraising difficulties (Doherty et al., 2014). Based on these conflicting characteristics, Hypothesis 3 expected both SEs and CEs to share a similar response to the DC construct of seizing.

Hypothesis 4: The social enterprise group had a lower response to the dynamic capability transforming construct than the commercial enterprise group.

Hypothesis 4 was aimed at testing the assumption that SEs display a lower transforming DC than CEs do. This hypothesis is primarily based on the challenging dual nature of SEs in their pursuit of both social and financial outcomes (André et al., 2018). Consequently, it is envisaged that this increases organisational complexity (Morris et al., 2020) and this negatively influences their transformational ability. Hypothesis 4 aimed to validate whether the outcome of this complexity decreases the organisational renewal capability of SEs relative to their CE counterparts.

Hypothesis 5: Dynamic capabilities are strong predictors of business performance for social enterprises.

A primary finding in the development of a DC scale by Kump et al. (2019) is that there was a statistically significant correlation between DCs and BP. The objective of Hypothesis 5 was to determine if this finding also holds true within an SE environment. One of the overall objectives of this research study was to determine if DCs could provide an explanation as to why SEs struggle to grow the scale and impact of their organisations (Davies et al., 2019). Hypothesis 5 was therefore pivotal in providing statistical evidence to support if this assumption is true or not.

Hypothesis 6: The greater an organisation's age, the more positively this affects business performance.

There is evidence from the literature to suggest that SEs rely very heavily on their founders (Bauwens et al., 2020) and that older organisations have been able to overcome this risk by diversifying their operations (Doherty et al., 2014), networks (Coviello et al., 2000) and pursuit of new opportunities (Wry & York, 2017). The expectation is that the greater an organisation's age, the more this positively affects BP. Hypothesis 6 aims to test whether this assertion is true or not.

Hypothesis 7: The greater an organisation's size, the more positively this affects business performance.

The final hypothesis aimed to determine if the size of an organisation can be positively linked to business performance. The assertion is that the greater the resource capacity of an SE (as determined by the number of full time staff members), the more its ability to leverage the competitive advantage that its social mission affords it (Hlady-Rispal & Servantie, 2018). This is reinforced by increased capacity in specific areas such as marketing (Coviello et al., 2000) and finance (Vickers & Lyon, 2014).

Table 3: Research Question 1 and associated hypotheses

Research Question 1:			
Replication of dynamic capabilities scale			
Hypothesis No	Description	Study group	Hypothesis
1	DC scale reliability and validity	SE and CE	The DC scale developed by Kump et al. (2019) shows high construct reliability and validity when replicated within a new SE and CE environment.

Table 4: Research Question 2 and associated hypothesis

Research Question 2:			
Comparative dynamic capability response between SEs and CEs			
Hypothesis No	Description	Study group	Hypothesis
2	Sensing differences	SE and CE	The SE group had a higher response to the DC sensing construct than the CE group
3	Seizing differences	SE and CE	The SE group had a similar response to the DC seizing construct compared to that of the CE group
4	Transforming differences	SE and CE	The SE group had a lower response to the DC transforming construct than the CE group

Table 5: Research Question 3 and associated hypotheses

Research Question 3:			
Correlation between dynamic capabilities and business performance			
Hypothesis No	Description	Study group	Hypothesis
5	DC and BP correlation	SE	DCs are strong predictors of BP for SEs

Table 6: Research Question 4 and associated hypotheses

Research Question 4:			
Impact of organisational size and age on BP			
Hypothesis No	Description	Study group	Hypothesis
6	Impact of organisation age	SE	The greater an organisation's age, the more positively this affects BP
7	Impact of organisation size	SE	The greater an organisation's size, the more this positively this affects BP

3.2 CONCEPTUAL FRAMEWORK

The theoretical model for the research study is detailed in Figure 2. The DC construct is represented by three sub-constructs, namely sensing, seizing, and transforming. These formed the study's independent variables. BP was the dependent variable of the study to enable measuring whether the replicated DC scale is in fact a predictor of organisational success as was demonstrated by Kump et al. (2019). BP consists of four sub-constructs: market performance, customer-related performance, financial performance, and employee-related performance. There are also two moderating variables, defined as the age (number of years of operation) and size (number of full-time employees) of the organisation. The intention was to be able to isolate and measure the impact that these two variables have in effecting business performance.

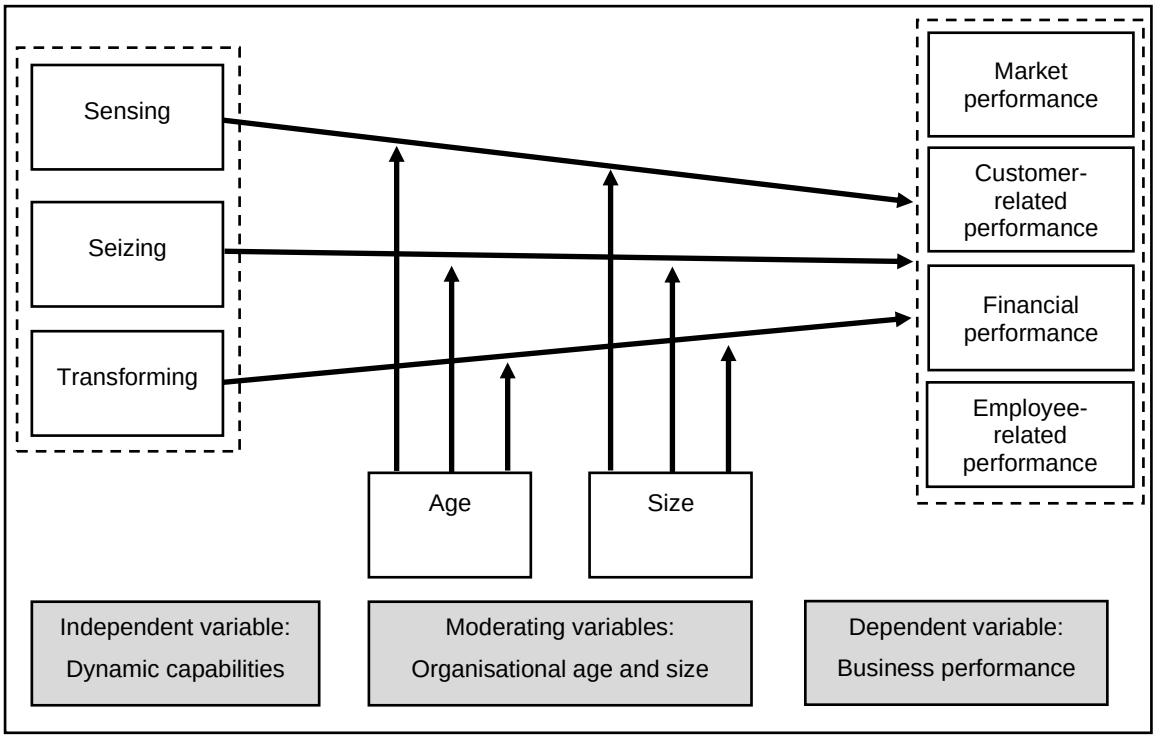

Figure 2: Research study conceptual study (Construct and variable view)

CHAPTER 4. RESEARCH DESIGN AND METHODOLOGY

4.1 RESEARCH DESIGN

The study's research design comprised a quantitative survey design. The intention was to replicate the same DC scale developed by Kump et al. (2019) and to incorporate the business performance survey instrument that was used as part of their scale confirmation study. The conceptual framework was developed to measure the relationship between three dynamic capability independent variables and the four dependent variable outcomes of business performance. The design was based on evaluating the hypotheses that were outlined in Tables 3 to 6 so that specific answers could be reached with regards to the research questions.

4.1.1 Metatheoretical consideration

The metatheoretical stance of the research considered how the world is seen (ontology), how the world is understood (epistemology), what research approach is taken (methodology) as well as the underlying causes that influence the world (aetiology) (Sousa, 2010). It can be argued that the quantitative nature of this research study supports a post-positivist approach for the research methodology (Creswell & Creswell, 2018). In addition, the nature of the study considered the cause and effect that various research components have on each other and how these are empirically observed (Sousa, 2010). There is also an implied reductionism (Creswell & Creswell, 2018) in how the DC constructs were reduced to discrete, micro-foundations (Kump et al., 2019; Teece, 2007) that were tested through the stated research questions and hypotheses. While in isolation, the researcher was of the opinion that the research methodology might better support a post-positivist approach; however, there is a case to be made that the metatheoretical stance of this research study is most suited to a critical realist philosophy.

4.1.2 Methodological fit

According to Sousa (2010), critical realism embodies the perspective that is critical of the world yet aims to describe and explain its phenomena. From an ontological perspective, critical realism research considers not just the current reality and also future possibilities where the world is an open system rather than a closed one that is described by post-positivism (Sousa, 2010). This critical realist approach aligns with the open system philosophy behind dynamic capabilities where organisations can sustain and maintain future competitive advantage by being open to and acting on current

opportunities (Teece et al., 1997). This specific view is also reinforced by Suddaby, Coraiola, Harvey and Foster (2020) who emphasized the importance of micro-events like DC in defining future change.

From an epistemological perspective, critical realism relies on a high level of complexity, interrelation, and multiplicity in how the natural world and society engage (Sousa, 2010). This speaks directly to the interconnectedness of SEs (Davies et al., 2019) and the complexity that underpins pursuing a social and financial vision (Weerawardena et al., 2019). One of the primary research tools available to researchers with a critical research approach is that of abstraction (Sousa, 2010). Abstraction allows a specific feature to be studied in isolation of the bigger multi-dimensional phenomenon that it is part of. Critical realist abstraction has been effectively utilised in other social entrepreneurship contexts (Hu et al., 2019) and supports the research methodology of abstracting dynamic capabilities from the multi-dimensional context of social entrepreneurship to grasp its unidimensional effect (Sousa, 2010). Based therefore on these considerations, the research study adopted a critical realist philosophy.

4.1.3 Measurement model

The conceptual framework of this research study employed two primary research constructs: DC and BP. A reflective measurement approach was taken in aggregating the items that relate to each construct. Given that this is a replication study, the same measurement approach taken by Kump et al. (2019) applied for this study too. There are several data points to justify the conclusion regarding what type of measurement model Kump et al. (2019) utilised. Firstly, Kump et al. (2019) developed a scale that by its nature comprises substitutable items rather than an index where the indicators are not substitutable (Diamantopoulos & Winklhoffer, 2001) Secondly, the use of statistical techniques such as average variance extracted and factor loadings (Coltman, Devinney, Midgley & Venaik, 2008) as well as Cronbach's alpha (Cronbach, 1951) in testing reliability and internal consistency of the construct items are supportive of a reflective measurement approach. In mirroring this reflective measurement model, these statistical approaches were employed as part of this research study too.

4.1.4 Data collection methodology

From a quantitative perspective, there are two primary data collection methodologies. One approach makes use of collecting cross-sectional data at a single point in time while another collects data over multiple intervals by employing a longitudinal approach. (Rindfleisch, Malter, Ganesan & Moorman, 2008). This research study chose to make

use of a cross-sectional data collection methodology for three primary reasons. Firstly, it was the same data collection methodology employed by Kump et al. (2019). Secondly, the nature of the micro-foundations that underpin DC are not discrete data points but continuous in nature (Teece, Peteraf & Leih, 2016; Teece, 2007; Teece et al., 1997) and this supports the argument for either methodology. Lastly, a longitudinal approach to data collection is much more onerous in terms of time and financial expenditure than a cross-sectional approach (Rindfleisch et al., 2008).

4.2 RESEARCH POPULATION

4.2.1 Unit of analysis

As the basis for this research study, two distinct enterprises were specified in the conceptual framework. They include SEs that are defined as enterprises who pursue dual social and financial objectives (Rawhouser et al., 2019; Saebi et al., 2019) and CEs where social responsibilities are secondary to their financial goals (Wry & York, 2017). The unit of analysis is at an enterprise level as both dynamic capabilities and firm performance outcomes manifest here (Schilke et al., 2018).

4.2.2 Unit of observation

The scale confirmation study conducted by Kump et al. (2019) formed the primary reference point for this dynamic capability replication study. Their unit of observation was defined as CEOs or middle line managers who oversaw issues of innovation. In another dynamic scale development study, the researchers specified their unit of observation as senior managers in large organisations (Wilden et al., 2013). This classification was made on the basis that senior managers are key informants who are in a position as organisational decision makers (Battisti & Deakins, 2017) and have the ability to observe and realise DC within an organisational context (Ince & Hahn, 2020). Based on these precedents, this study targeted a research population that included founders or owners, CEOs, executives, or senior managers able to both comment on DC within their organisations and respond to questions regarding the business performance within their enterprise.

4.2.3 Sampling technique

This research study made use of a non-probability, purposive sampling approach (Creswell & Creswell, 2018) for both SEs and CEs as it allows for a wider range of applicability and applicant coverage. This included utilising the publicly accessible

database of respondents (n=453) from the Social Enterprises in South Africa report (Myres, Mamabolo, Mugadza & Jankelowitz, 2018).

In terms of reaching out to additional individuals in innovative and highly dynamic industries as targeted by Kump et al. (2019), two sampling techniques were used to ensure that a statistically significant survey response was achieved. Both approaches made extensive use of the researcher's social media platforms and industry contacts. Targeted channels included Linked-In, WhatsApp and Email. The first technique was to make use of snowball sampling. This approach is particularly recommended in reaching SEs as they are typically hard to reach and are widely dispersed (Saunders & Lewis, 2012). Networks play a key role within SEs (Ince & Hahn, 2020) and a snowballing sampling technique represented a potentially effective approach to complement this SE capability. A snowball sampling technique was also part of Kump et al.'s (2019) scale development process to locate innovative CEs in dynamic industries. Convenience sampling (Etikan, Musa, & Alkassim, 2016) is the second approach and this has been used in recent social entrepreneurship research studies (Lovasic & Cooper, 2020) as well as in reaching out to companies that were part of an innovation study (Dömötor, Franke & Hienerth, 2007). It offers an additional survey avenue to achieve a significant sample response.

4.2.4 Sample size

There are several key approaches in determining an appropriate size for a survey. One such approach is to consider a fraction of the total population. This is not a practical approach in reaching heterogenous communities with different levels of communication access that define that targeted social and CEs as part of this research study (Creswell & Creswell, 2018). Another approach is to consider the survey sample size from comparable, historical studies (Creswell & Creswell, 2018). Some of the most relevant studies that were referenced as part of this research report included two dynamic capability scale studies that received 307 (Kump et al., 2019) and 228 full responses (Wilden et al., 2013). Two of the most current SE studies conducted within South Africa had sample sizes of 417 (Lovasic & Cooper, 2020) and 453 (Myres et al., 2018). Both these studies had institutional funding. This increased their resourcing and ability to access institutional networks. These studies therefore represent the upper limit of a comparable sample size. There have been very few comparative studies between SEs and CEs from which to reference sample size benchmarks. One such study that considered the personal trait differences of entrepreneurs and social entrepreneurs

(Smith, Bell & Watts, 2014) had a sample size of 150 respondents. This is a suggested lower limit sample size.

4.3 MEASUREMENT AND DATA INSTRUMENTS

4.3.1 Measurement instrument

The research study's measurement instrument was a self-administered survey that was created and deployed through SurveyMonkey™. There were 33 questions in total. The first five questions related to the particulars of the individual and their organisation, the next 12 questions related to business performance, and the final 14 questions were comprised of the sensing, seizing, and transforming components of the DC scale. In order to maintain the integrity of the replication study, the authors from Kump et al. (2019) were approached to provide the exact scales used as part of the business performance questions. The dynamic capability instrument utilised a 6-point Likert scale that was selected by the authors of the Kump et al. (2019) study. Their expressed intention was to avoid the neutral option contained in a more traditional 5-point Likert scale. Business performance included four categories of equal weighting that referenced relative market performance, customer-related performance, financial performance, and employee-related performance. These survey questions were sourced by Kump et al. (2019) and based on Hult et al. (2004), Ottenbacher (2007) and Wiklund and Shepherd (2005).

4.3.2 Pre-test questionnaire

A pre-test questionnaire was administered to a sample pre-test group of 10 individuals that met the population criteria. The objective of this exercise was to understand the user experience of the SurveyMonkey™ platform, that the wording of the questions was easy to understand (Lewis, Templeton, & Byrd, 2005), to confirm that there was data integrity in the capturing of the data, and finally to determine an average survey completion rate to provide a benchmark for participants of the larger group.

4.3.3 Data gathering process

Online meetings were set up with various institutional bodies in the social entrepreneurship, entrepreneurship, and innovation environment so that appropriate channels could be established to enlist the support of their respective membership base or databases. These organisations were then sent the survey for distribution to their relevant contact lists. This approach supported the proposed, non-probability, purposive sampling technique (Creswell & Creswell, 2018).

4.4 DATA ANALYSIS

4.4.1 Analysis approach

The data analysis was guided by replicating the same statistical techniques that were employed by Kump et al. (2019). Several statistical tests were undertaken as was appropriate to the research question and hypotheses (Table 7). These statistical procedures incorporated both SEs and CEs for Research Questions 1 and 2 to establish the reliability and comparability of the DC scale and then focused on SE outcomes for Research Questions 3 and 4.

Table 7: Statistical procedures to test the research questions and hypotheses

Research Question	Description	Statistical procedure	Statistical test
1	Replication of dynamic capabilities scale (SEs and CEs)	Construct reliability	Cronbach's alpha
		Construct validity	Bivariate correlation
		Factorial validity	Exploratory factor analysis
			Confirmatory factor analysis
2	Comparative dynamic capability response (SEs and CEs)	Test of difference	Independent samples t-test
3	Correlation between dynamic capabilities and business performance (SEs)	Correlation	Multiple regression
4	Impact of organisation size and age on BP (SEs)	Moderation	Moderated regression

4.4.2 Limitations of the research design and methods

The cross-sectional data approach that this research employed decreases data validity by increasing research risks such as those posed by casual inference or common method variance (Rindfleisch et al., 2008). The non-probability, purposive sampling approach is also dependent on the subjectivity of the researcher and as a result, this technique is prone to researcher bias (Sharma, 2017). Another consideration is that the non-random nature of the population group limits any future extension of the research study (Miles & Arnold, 1991). The survey instrument also made use of self-reported measures rather than verified data. This also introduces the potential for systematic

measurement error (Podsakoff, MacKenzie, Lee & Podsakoff, 2003) where organisation-wide data is dependent on the response of a single individual. As with all empirical data, there are also additional limitations to consider such as the accuracy of the data. These include informant bias where the responders are those who are interested in the topic or non-response bias (Creswell & Creswell, 2018) where responders are either unable or not willing to respond to the survey.

CHAPTER 5. RESEARCH RESULTS

5.1 INTRODUCTION

The findings from the research study are presented in this chapter. The first section covers the nature of the respondents and the organisations they represent. This is an important, foundational step to determine the final sample groupings. Having confirmed the final response data to be used in this research study, the second step was to confirm the reliability and validity of the data as well as the research constructs. This step addressed the first research question of replicating the same results from the original study and understanding whether there are noteworthy deviations or differences in the replication study findings. The third stage analysed the two primary respondents, namely the SE and CE groups. In this section, statistical techniques were employed to understand associations, correlations, and differences between the respondent groups. The objective was to answer the second research question as to whether the DC scale showed statistically significant correlations to BP outcomes of the two research groups. The final stage was to consider whether an organisation's age and size had a moderating impact on their responses. In totality, these results formed the basis of evidence to determine whether DCs are a helpful strategic management tool in understanding barriers to growing and scaling their SEs and under what specific conditions.

5.2 SURVEY INSTRUMENT

In addition to the nominal data requested from respondents (Appendix A, Table 44), the research instrument compromised two other sections. These items replicated the DC scale developed by Kump et al. (2019). The first section dealt with 14 DC items that covered the constructs of sensing, seizing, and transforming (Table 8) while the second section included 12 BP items that related to the constructs of market performance, customer-related performance, financial performance, and employee-related performance (Table 9). All the DC and BP items were measured on a 6-point Likert scale.

Table 8: Survey instrument: Independent variable items* (Dynamic capabilities)

Construct	Item code	Survey item
Sensing	SN_1	Our company knows the best practices in the market
Sensing	SN_2	Our company is up to date on the current market situation
Sensing	SN_3	Our company systematically searches for information on the current market situation
Sensing	SN_4	As a company, we know how to access new information
Sensing	SN_5	Our company always has an eye on our competitors' activities
Seizing	SZ_1	Our company can quickly relate to new knowledge from the outside.
Seizing	SZ_2	We recognise what new information can be utilised in our company
Seizing	SZ_3	Our company is capable of turning new technological knowledge into process and product innovation
Seizing	SZ_4	Current information leads to the development of new products or services
Transforming	TR_1	By defining clear responsibilities, we successfully implement plans for changes in our company
Transforming	TR_2	Even when unforeseen interruptions occur, change projects are seen through consistently in our company
Transforming	TR_3	Decisions on planned changes are pursued consistently in our company
Transforming	TR_4	In the past, we have demonstrated our strengths implementing changes
Transforming	TR_5	In our company, change projects can be put into practice alongside the daily business

*Measured on a 6-point Likert scale ranging from (1) "Strongly disagree" to (6) "Strongly agree"

Table 9: Survey instrument: Dependent variable items* (Business performance)

Construct	Item code	Survey item
Market performance	MP_1	Please evaluate your organisation's performance in the last operational year (2019) relative to their primary competitors in terms of attracting new customers
Market performance	MP_2	Please evaluate your organisation's performance in the last operational year (2019) relative to their primary competitors in terms of opening new markets
Market performance	MP_3	Please evaluate your organisation's performance in the last operational year (2019) relative to their primary competitors in terms of the development of market shares
Customer-related performance	CRP_1	Please evaluate your organisation's performance in the last operational year (2019) relative to their primary competitors in terms of your organisational image
Customer-related performance	CRP_2	Please evaluate your organisation's performance in the last operational year (2019) relative to their primary competitors in terms of customer satisfaction

Construct	Item code	Survey item
Customer-related performance	CRP_3	Please evaluate your organisation's performance in the last operational year (2019) relative to their primary competitors in terms of customer loyalty
Financial performance	FP_1	Please evaluate your organisation's performance in the last operational year (2019) relative to their primary competitors in terms of growth in sales
Financial performance	FP_2	Please evaluate your organisation's performance in the last operational year (2019) relative to their primary competitors in terms of growth in profits
Financial performance	FP_3	Please evaluate your organisation's performance in the last operational year (2019) relative to their primary competitors in terms of profitability
Employee-related performance	ERP_1	Please evaluate your organisation's performance in the last operational year (2019) relative to their primary competitors in terms of employee satisfaction
Employee-related performance	ERP_2	Please evaluate your organisation's performance in the last operational year (2019) relative to their primary competitors in terms of your employee commitment
Employee-related performance	ERP_3	Please evaluate your organisation's performance in the last operational year (2019) relative to their primary competitors in terms of long-term staff membership (e.g. low employee fluctuation)

*Measured on a 6-point Likert scale ranging from (1) "Strongly disagree" to (6) "Strongly agree"

5.3 SURVEY RESPONSE ANALYSIS

5.3.1 Target audience

The research instrument was conducted via a SurveyMonkey questionnaire over a three-month period from October to December 2020. A concerted effort was made to target SE and CE networks who represented or had access to these target audiences. Table 10 below represents networks or databases whose respondents participated in this research study.

Table 10: Primary SE and CE respondent sources

Primary SE sources	Primary CE sources
Social Enterprises in South Africa*	Allan Gray Orbis Foundation
Social Enterprise Academy	Entrepreneurial Organisation (EO)
SAB Social Innovation Accelerator	Civitas
E-Squared	SAB Foundation Enterprise Programme

*Myres et al., 2018

5.3.2 Response rate

A total of 307 participants attempted to answer the survey. Ultimately, 217 completed applications were received, representing an overall completion rate of 70.68%. An additional 13 respondents had completed more than 50% of the survey and they were included in the overall respondent list (Hair, Black, Babin & Anderson, 2019). Incomplete answers were assigned the mean value based on completed applicants who had also listed the same organisational description as their incomplete counterparts (Manly & Wells, 2015).

5.3.3 Organisational classification

A key component of this research study was to classify the respondent organisations into either an SE or CE research group. To avoid methodological weaknesses (Smith et al., 2014), a self-classification approach was adopted on the basis of the survey question: *"Which of the following best describes your organisation as it is now?" (Business, Social Enterprise, Non-Profit Company, Entrepreneurial Venture, Other)*. This approach of self-classification has been widely utilised within SE research to overcome some of the definitional challenges associated with the field (Littlewood & Holt, 2018). Respondents who self-classified their organisation as a *"Social Enterprise"* were considered as part of the SE group in alignment with the research scope outlined in Chapter 1. Respondents who selected either *"Business"* or *"Entrepreneurial Venture"* were assigned to the CE group in accordance with the parameters outlined in the research scope. This organisational classification resulted in a final research sample of n = 57 for SEs and n = 100 for CEs (Table 11). An additional n = 73 respondents classified their organisations as a "non-profit company". These respondents fell outside the classification of a social enterprise as defined in the research scope and were disregarded from this research study.

Table 11: Final organisational classification from respondent group

	Social enterprises	Commercial enterprises	Non-profit companies
Research group	57	100	73

5.3.4 Descriptive statistics

The descriptive statistics for the SE and CE group are included in Table 12. This table details response data including number of responses, mean, minimum, maximum, and standard deviation for each of the 12 items that comprise the business performance

survey instrument and the 13 items that form the dynamic capabilities construct. Comparative histograms for the SE and CE groups are included in Appendix 9 (9.2 Histograms).

Table 12: Descriptive statistics for the SE and CE groups

Item	Social enterprises (n = 57)				Commercial enterprises (n = 100)			
	Min.	Max.	Mean	Std. Dev.	Min.	Max.	Mean	Std. Dev.
MP_1	2	6	4.18	1.00	1	6	4.21	1.18
MP_2	2	6	4.25	0.91	1	6	4.30	1.21
MP_3	1	6	3.96	1.03	1	6	4.09	1.09
CRP_1	1	6	4.79	1.21	1	6	4.40	1.11
CRP_2	2	6	4.86	0.81	1	6	4.80	1.02
CRP_3	3	6	4.74	0.77	3	6	4.70	0.94
FP_1	1	6	4.07	1.05	1	6	4.14	1.05
FP_2	1	6	3.82	1.18	1	6	4.12	1.23
FP_3	1	6	3.63	1.13	1	6	3.97	1.30
ERP_1	2	6	4.70	0.91	2	6	4.64	0.93
ERP_2	2	6	4.98	0.95	2	6	4.74	0.93
ERP_3	1	6	4.82	1.02	2	6	4.68	0.93
SN_1	2	6	4.89	0.84	3	6	5.04	0.80
SN_2	2	6	4.94	0.85	4	6	5.13	0.72
SN_3	2	6	4.96	1.00	3	6	5.03	0.90
SN_4	2	6	5.05	0.81	3	6	5.09	0.78
SN_5	1	6	4.41	1.04	1	6	4.73	1.02
SZ_1	4	6	5.13	0.68	2	6	4.86	0.94
SZ_2	4	6	5.21	0.67	3	6	5.02	0.77
SZ_3	2	6	4.93	0.92	3	6	4.95	0.97
SZ_4	2	6	5.00	0.82	2	6	4.98	0.91
TR_1	3	6	4.93	0.88	3	6	4.64	0.90
TR_2	3	6	4.91	0.81	2	6	4.57	0.98
TR_3	2	6	4.65	0.83	2	6	4.47	0.98
TR_4	2	6	4.91	0.87	1	6	4.68	0.98
TR_5	2	6	4.82	0.89	1	6	4.68	0.97

5.3.5 Respondent role

The research study actively engaged respondents who were organisational decision-makers (Battisti & Deakins, 2017; Kump et al., 2019; Wilden et al., 2013) within either SE or CE settings. One hundred percent of the SE respondents occupied a senior management position that allowed them to deliver informed responses regarding the strategic and DCs of their organisations (Ince & Hahn, 2020). This included 43% who were either the owner or founder of their organisation. Similarly, 100% of the CE respondents occupied a senior management position. This included 54% who were either the owner or founder of their business (Figure 3).

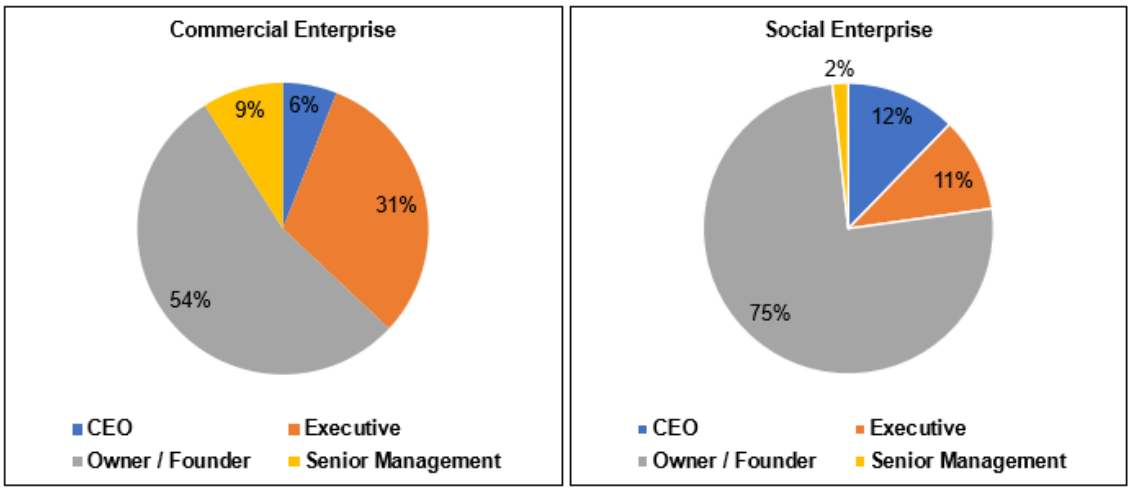

Figure 3: Respondent role by organisation grouping

5.3.6 Organisational age

Organisational age was one of the demographic variables that was included in the Kump et al. (2019) research study. Based on survey instrument data, 67% of the CEs had been in operation for longer than five years, while 54% of the SEs had been operating for longer than five years (Figure 4). Their analysis found that the age of a respondent's organisation had a statistically significant effect on the dependent variable known as business performance. Karlsson (2020) also noted the correlation between firm age and growth. Given the important contribution that the age of an organisation makes regarding potential barriers to organisational growth, this research study chose to analyse this data point as a moderating variable.

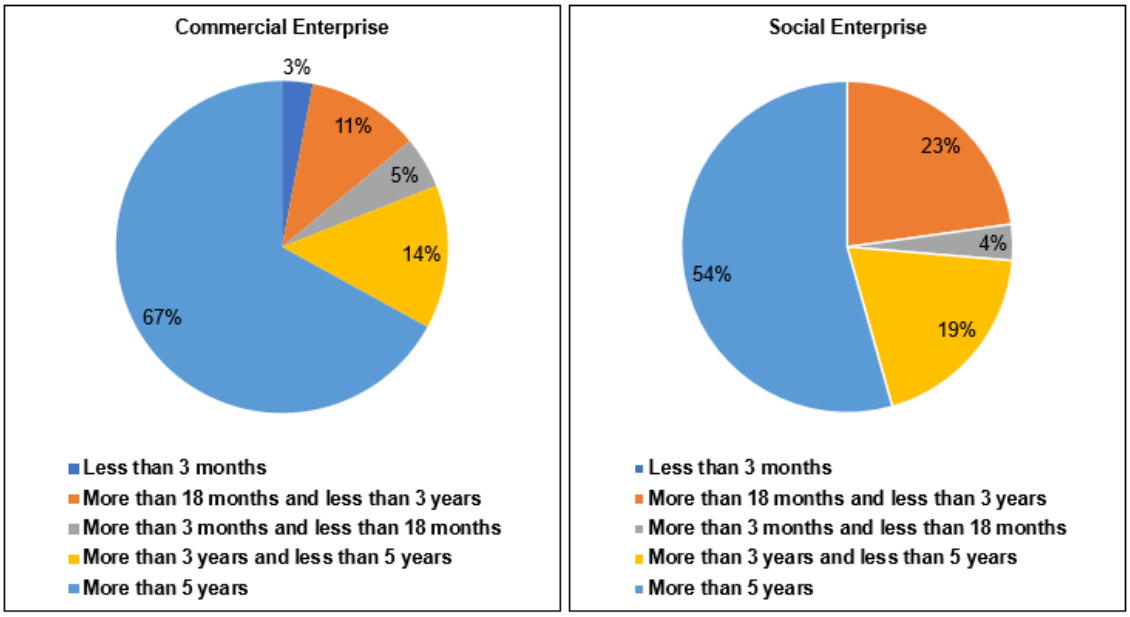

Figure 4: Respondent role by organisation age

5.3.7 Organisational size

Organisational size based on full-time employees was another demographic variable that was included in the Kump et al. (2019) research study. Their analysis concluded that the size of a respondent's organisation had a statistically significant and slightly negative effect on one of the business performance constructs known as customer-related performance. There is also empirical data to support the relationship between firm size and barriers to growth (Karlsson, 2020). Based on survey instrument data (Figure 5), most CEs (65%) and SEs (91%) had less than 50 employees. The size of an organisation therefore also seems to have an effect on organisational growth and for this reason this research study chose to consider organisational size as a second moderating variable.

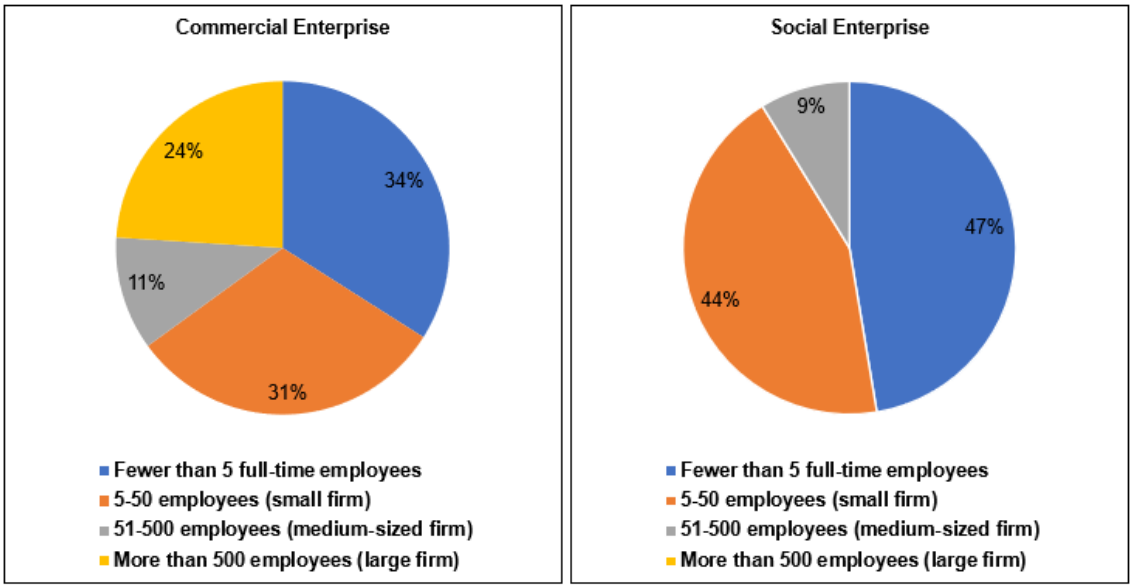

Figure 5: Respondent role by organisation size

5.4 DATA AND CONSTRUCT EFFICACY

Two primary constructs were replicated as part of this research study. They are the independent variable of DCs that includes the micro-foundations of sensing, seizing, and transforming and the dependent variable of BP that includes four sub-scales of market performance, customer-related performance, financial performance, and employee-related performance. The statistical tests to establish data and construct efficacy that are outlined in this section were employed for both SE and CE groups. The statistical tests in this section aim to provide evidence that the replication study, in a different context, can produce the same or similar results to Kump et al.'s (2019) findings. Furthermore, they also provided a common foundation from which to conduct additional SE and CE correlation studies.

5.4.1 Reliability – Dynamic capabilities

Cronbach's alpha (Cronbach, 1951) was calculated to test the internal consistency of how well the dynamic capabilities scale items (Table 13) measured as a group for the sub-scales of sensing, seizing, and transforming. Ranges of 0.60 – 0.70 are considered the lower limit in determining reliability of the sub-scales (Hair et al., 2019). The alpha coefficients for SEs and CEs inferred high internal consistencies between the sub-scales and the constructs. The SE results were 0.77 (sensing), 0.72 (seizing) and 0.84 (transforming), while the CE results were 0.80 (sensing), 0.86 (seizing and 0.86 (transforming). All Cronbach's alpha results for the DC sub-scales met this measure of reliability for both the SE and CE groups.

Table 13: Comparison of alpha coefficients for dynamic capabilities (SE and CE)

Construct	Type	No. of items	SE replication	CE replication
Dynamic capabilities	Scale	3	0.88	0.80
Sensing	Sub-scale	5	0.77	0.80
Seizing	Sub-scale	4	0.72	0.86
Transforming	Sub-scale	5	0.84	0.88

5.4.2 Reliability – Business performance

The alpha coefficients regarding the construct of BP for SEs were 0.78 for market performance, 0.45 for customer-related performance, 0.84 for financial performance, and 0.82 for employee-related performance, while the CE results were 0.84 for market performance, 0.70 for customer-related performance, 0.91 for financial performance, and 0.76 for employee-related performance (Table 14). Based on these results of Cronbach's alpha for business performance sub-scales, only the SE results for customer-related performance of 0.45 fell below the minimum score of 0.60 – 0.70 (Hair et al., 2019). There were three items that comprised this sub-construct. According to the item statistics table for the SE group, by deleting item 1 (customer-related performance, question 1), Cronbach's alpha for the remaining two items would be 0.70 and within an acceptable range (Cho & Kim, 2015). For further comparability of the SE and CE data sets as well as subsequent analysis, this item was also deleted from the CE research instrument. This increased Cronbach's alpha for the CE group regarding customer-related performance from 0.70 to 0.79.

Table 14: Alpha coefficients for BP (SE and CE)

Construct	Type	Items	SE replication	CE replication
Business performance	Scale	3	0.82	0.79
Market performance	Sub-scale	3	0.78	0.84
Customer-related performance	Sub-scale	3	0.45 (0.70*)	0.70 (0.79*)
Financial performance	Sub-scale	3	0.84	0.91
Employee-related performance	Sub-scale	3	0.82	0.76

*Revised result after deleting customer-related performance Q1 and recalculating the alpha coefficient

5.4.3 Validity – Dynamic capabilities

A bivariate correlation was conducted between the sub-scales and their constituent items to determine their linear correlation (Hair et al., 2019). The correlation coefficient range is from +1.00 (perfectly positive relationship) to -1.00 (perfectly negative relationship) according to Quinlan, Babin, Carr, Griffin and Zikmund (2019). Hair et al. (2019) advised that the Pearson correlation also works reasonably well for non-normally distributed data.

Following on the alpha coefficient results (Table 14), the first item from the BP sub-scale was removed from the validity testing process for both the SE and CE groups. Bivariate correlations were performed and results for the DC sub-scales were deemed significant where the 2-tail, $p<0.05$ and Pearson correlation score was ** (Hair et al., 2019). The SE Pearson correlation outputs ranged from 0.49 to 0.83 while the 2-tail significance values were all 0.00. The CE Pearson correlations ranged from 0.70 to 0.88 while the 2-tail significance values were also all 0.00. These correlation results confirmed that the SE and CE sub-scales for dynamic capabilities both showed a high level of validity.

Table 15: Validity testing for dynamic capabilities (SE and CE)

Sensing		SN_1	SN_2	SN_3	SN_4	SN_5
Social enterprise	Pearson correlation	0.72**	0.79**	0.86**	0.78**	0.49**
	Sig. (2-tailed)	0.00	0.00	0.00	0.00	0.00
Commercial enterprise	Pearson correlation	0.70**	0.80**	0.83**	0.74**	0.69**
	Sig. (2-tailed)	0.00	0.00	0.00	0.00	0.00
Seizing			SZ_1	SZ_2	SZ_3	SZ_4
Social enterprise	Pearson correlation		0.67**	0.83**	0.74**	0.75**
	Sig. (2-tailed)		0.00	0.00	0.00	0.00
Commercial enterprise	Pearson correlation		0.88**	0.79**	0.83**	0.88**
	Sig. (2-tailed)		0.00	0.00	0.00	0.00
Transforming		TR_1	TR_2	TR_3	TR_4	TR_5
Social enterprise	Pearson correlation	0.88**	0.78**	0.76**	0.72**	0.77**
	Sig. (2-tailed)	0.00	0.00	0.00	0.00	0.00
Commercial enterprise	Pearson correlation	0.77**	0.81**	0.83**	0.85**	0.83**
	Sig. (2-tailed)	0.00	0.00	0.00	0.00	0.00

** Correlation is significant at the 0.01 level (2-tailed)

5.4.4 Validity – Business performance

Validity testing of the BP sub-scales were also measured (Table 16) using bivariate correlations. These correlations were deemed significant where the 2-tail, $p<0.05$ and Pearson Correlation score was ** (Hair et al., 2019). The SE Pearson correlations ranged from 0.82 to 0.89 while all the 2-tail significance values were all 0.00. The CE Pearson correlations ranged from 0.72 to 0.95 while the 2-tail significance values were also all 0.00. These correlation results for business performance confirmed that the SE and CE sub-scales both showed a high level of validity.

Table 16: Validity testing for dynamic capabilities (SE and CE)

Market performance		MP_1	MP_2	MP_3
Social enterprise	Pearson correlation	0.83**	0.82**	0.86**
	Sig. (2-tailed)	0.00	0.00	0.00
Commercial enterprise	Pearson correlation	0.88**	0.85**	0.87**
	Sig. (2-tailed)	0.00	0.00	0.00
Customer-related performance		CRP_1	CRP_2	CRP_3
Social enterprise	Pearson correlation	0.71**	0.76**	0.63**
	Sig. (2-tailed)	0.00	0.00	0.00
Commercial enterprise	Pearson correlation	0.77**	0.75**	0.87**
	Sig. (2-tailed)	0.00	0.00	0.00
Financial performance		FP_1	FP_2	FP_3
Social enterprise	Pearson correlation	0.86**	0.91**	0.84**
	Sig. (2-tailed)	0.00	0.00	0.00
Commercial enterprise	Pearson correlation	0.88**	0.95**	0.93**
	Sig. (2-tailed)	0.00	0.00	0.00
Employee-related performance		ERP_1	ERP_2	ERP_3
Social enterprise	Pearson correlation	0.87**	0.87**	0.84**
	Sig. (2-tailed)	0.00	0.00	0.00
Commercial enterprise	Pearson correlation	0.87**	0.88**	0.72**
	Sig. (2-tailed)	0.00	0.00	0.00

** Correlation is significant at the 0.01 level (2-tailed)

5.4.5 Kaiser-Meyer-Olkin and Bartlett's test of sphericity

To determine whether factor reduction could be undertaken on the DC sub-scales, Hair et al. (2019) recommended conducting a Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity on the DC (Table 17) and BP (Table 18) sub-scales. The minimum result required for a KMO test is specified at 0.5 and Barlett's test of sphericity is significant where $p<0.05$ (Field, 2018).

The results of this measure of sampling adequacy for the SE and CE studies ranged from 0.69 to 0.82 for the DC sub-constructs and from 0.5 to 0.72 for the BP sub-constructs, meeting the minimum benchmark. The results for Bartlett's test of sphericity were all below a significance level at $p<0.05$. These results both proved that a factor analysis could be undertaken on the DC and BP sub-scales.

Table 17: KMO and Bartlett's test of sphericity (Dynamic capabilities)

Sensing		Social enterprise	Commercial enterprise
KMO measure of sampling adequacy		0.73	0.75
Bartlett's test of sphericity	Approx. chi-square	108.79	179.29
	Df	10	10
	Sig.	0.00	0.00
Seizing		Social enterprise	Commercial enterprise
KMO measure of sampling adequacy		0.69	0.71
Bartlett's test of sphericity	Approx. chi-square	53.25	207.13
	Df	6	6
	Sig.	0.00	0.00
Transforming		Social enterprise	Commercial enterprise
KMO measure of sampling adequacy		0.81	0.82
Bartlett's test of sphericity	Approx. chi-square	107.32	255.32
	Df	10	10
	Sig.	0.00	0.00

Table 18: KMO and Bartlett's test of sphericity (Business performance)

Market performance		Social enterprise	Commercial enterprise
KMO measure of sampling adequacy		0.70	0.72
Bartlett's test of sphericity	Approx. chi-square	45.93	117.66
	Df	3	3
	Sig.	0.00	0.00
Customer-related performance		Social enterprise	Commercial enterprise
KMO measure of sampling adequacy		0.50	0.50
Bartlett's test of sphericity	Approx. chi-square	18.89	35.43
	Df	1	1
	Sig.	0.00	0.00
Financial performance		Social enterprise	Commercial enterprise
KMO measure of sampling adequacy		0.69	0.72
Bartlett's test of sphericity	Approx. chi-square	71.71	215.86
	Df	3	3
	Sig.	0.00	0.00
Employee-related performance		Social enterprise	Commercial enterprise
KMO measure of sampling adequacy		0.71	0.61
Bartlett's test of sphericity	Approx. chi-square	69.50	102.23
	Df	3	3
	Sig.	0.00	0.00

5.4.6 Exploratory factor analysis

Kump et al. (2019) employed an exploratory factor analysis (EFA) to develop the preliminary scale with the aim of understanding whether the items loaded on the sub-constructs of sensing, seizing, and transforming. As part of this process, they conducted a scale purification to delete two items that showed cross-loadings from the other sub-scales. To confirm that the factor structure of the dynamic capabilities could be replicated within the CE and SE survey group of this research study, an EFA with principal component analysis was undertaken. The EFA was conducted at a sub-construct (and not a construct level). The intention was to confirm the validity of the scale items within their respective sub-constructs and maintain the same component items for SE and CE comparability (Hair et al., 2019).

According to Beavers, Lounsbury, Richards, Huck and Skolits (2013), as long as the factor loadings were above 0.60, small samples would still be relevant. Only factors with

an eigenvalue of more than one were considered to ensure that each sub-scale explained more variance than any single item (Beavers et al., 2013). Given that Kump et al. (2019) had already established clarity regarding which variables belong to which factors (Hair et al., 2019), the objective of the EFA was to confirm that the factors loaded a single component under each of the DC and BP sub-scales and that they met the minimum factor loading of 0.60 required for the small sample size.

The results of the EFA are contained in Table 19 and Table 20. Except for a noteworthy exception where the sensing items for SEs loaded on two components, the results proved that each item loaded strongly on the underlying construct and thus proved that the DC scale developed by Kump et al. (2019) had good factorial validity for the SE and CE groups. The minimum factor loadings were also met.

Table 19: Component matrix for SE and CE (Dynamic capabilities sub-scales)

Sensing		
Item	Social enterprise	Commercial enterprise
Sensing 1	0.84	0.80
Sensing 2	0.83	0.86
Sensing 3	0.84	0.78
Sensing 4	0.81	0.78
Seizing		
Item	Social enterprise	Commercial enterprise
Seizing 1	0.71	0.88
Seizing 2	0.87	0.81
Seizing 3	0.67	0.81
Seizing 4	0.74	0.87
Transforming		
Item	Social enterprise	Commercial enterprise
Transforming 1	0.89	0.77
Transforming 2	0.79	0.80
Transforming 3	0.76	0.83
Transforming 4	0.70	0.85
Transforming 5	0.76	0.82

Table 20: Component matrix for SE and CE (BP sub-scales)

Market performance		
Item	Social enterprise	Commercial enterprise
Market performance 1	0.82	0.89
Market performance 2	0.83	0.84
Market performance 3	0.86	0.88
Customer-related performance		
Item	Social enterprise	Commercial enterprise
Customer-related performance 1	0.88	0.88
Customer-related performance 2	0.88	0.88
Financial performance		
Item	Social enterprise	Commercial enterprise
Financial performance 1	0.87	0.89
Financial performance 2	0.91	0.95
Financial performance 3	0.83	0.92
Employee-related performance		
Item	Social enterprise	Commercial enterprise
Employee-related performance 1	0.89	0.89
Employee-related performance 2	0.88	0.90
Employee-related performance 3	0.82	0.67

As noted above, the SE items under the sensing construct loaded on two components. Questions 1–4 from the sensing construct loaded under one component while Q5 ("*Our company always has an eye on our competitors' activities*") loaded on another component (Table 21). These divergent component matrix scores are highlighted in the box loading plot below (Figure 6). This is the first significant divergence in terms of replicating the results of the Kump et al.'s (2019) DC scale. In comparison, the results of the CE study for sensing loaded on a single construct. The results of the EFA necessitated the following actions. Firstly, this research study considered four sub-scales under the DC construct. These included two sensing sub-scales (sensing 1 to 4 and sensing 5) along with seizing and transforming. Secondly, for comparability of the SE and CE research group data, the same four DC constructs were utilised for further comparative analysis going forwards.

Table 21: Rotated component matrix[a] for sensing (Social enterprises)

Item	Component 1	Component 2
DC sensing 1	0.88	-0.21
DC sensing 2	0.84	0.06
DC sensing 3	0.79	0.38
DC sensing 4	0.79	0.21
DC sensing 5	0.07	0.96
Extraction method: Principal component analysis, rotation method: Varimax with Kaiser normalisation		

a. Rotation converged in 3 iterations.

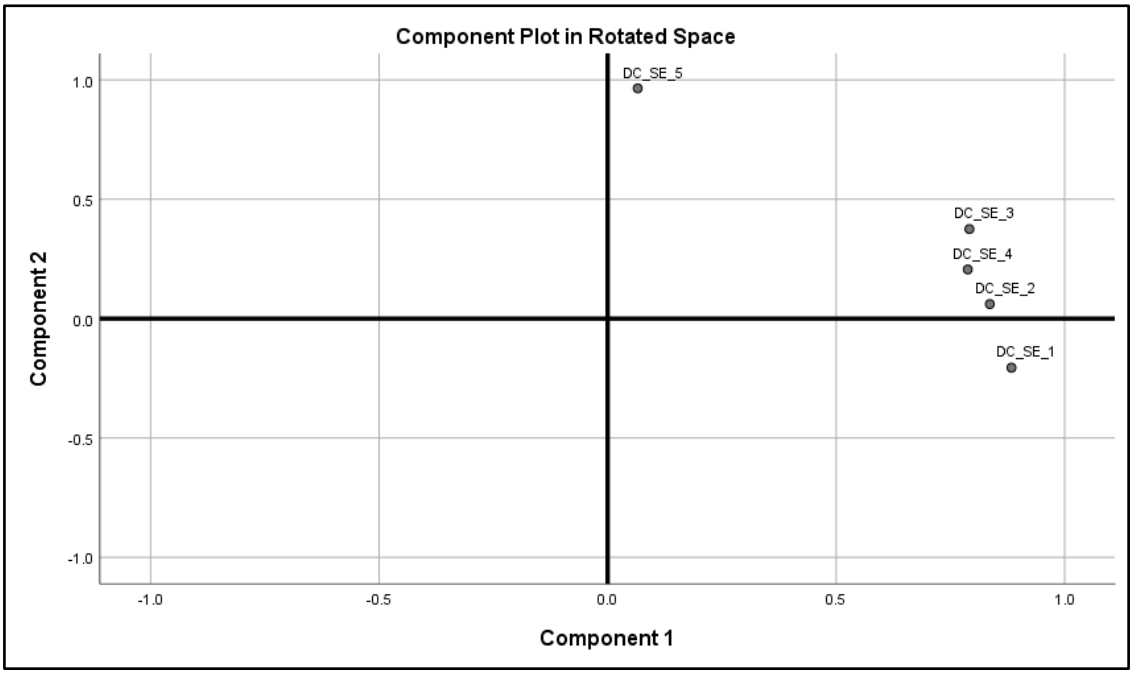

Figure 6: Component plot of the sensing construct for SEs

5.4.7 Confirmatory factor analysis

A second-order confirmatory factor analysis (CFA) was undertaken with AMOS 26 to test that the scale items loaded on the three sub-scales of sensing, seizing, and transforming identified through the EFA. The CFA would also demonstrate that these first order constructs of sensing, seizing, and transforming accurately reflected DCs as second order constructs. Since the EFA was limited to a sub-scale level to maintain construct comparability of the replication study, the objective of the CFA was also to provide another level of construct validity to the DC sub-scales. This is particularly important when scales are employed in a new setting (Hair et al., 2019), or in this case within an SE context. The DC scale employs a reflective measurement approach (Diamantopoulos & Winklhoffer, 2001) and structural equation modelling (SEM) is also considered a

suitable measurement of reliability (Hair et al., 2019) within a reflective measurement environment.

Hair et al. (2019) noted that for the minimum sample size of SEM to be undertaken, consideration needs to be given to both the complexity of the model as well as the average variance extracted results. Hair et al. (2019) suggested that a minimum sample size of 50 could be considered. In this instance the requirements are that there should be fewer than five constructs, that each construct should have at least three observed variables and that the item communalities should be 0.6 or higher.

A test for average variance extracted (AVE) to establish item communality composite reality (CR) to determine internal consistency was conducted prior to assessing construct validity (Hair et al., 2019). The sensing 5 construct was removed from the SE and CE analysis as it did not meet the criteria of having at least three observed variables associated with it (Hair et al., 2019). The AVE exceeded p>0.5 for good convergent validity recommended by Fornell and Larcker (1981). The item communalities of 0.6 suggested by Hair et al. (2019) regarding a smaller sample size (Table 22) were met and CR was >0.7 that Hair et al. (2019) deemed as a general benchmark.

Table 22: Average variance extracted and composite reliability after factor analysis

Study	Construct	Items	Average variance extracted	Composite reliability
Social enterprise	Sensing 1 to 4	4	0.7	0.95
Social enterprise	Seizing	4	0.6	0.92
Social enterprise	Transforming	5	0.6	0.95
Commercial enterprise	Sensing 1 to 4	4	0.6	0.94
Commercial enterprise	Seizing	4	0.7	0.96
Commercial enterprise	Transforming	5	0.7	0.96

In comparison with Kump et al.'s (2019) CFA results, the CE group's inferential statistics for the CFA (Table 23) indicated a reasonably good fit where X^2 = 155.92, degrees of freedom = 64, P < 0.00 and X^2 / df = 2.44 (Byrne, Shavelson & Muthen, 1989). The root mean square error of approximation (RMSEA) was 0.12, while the indicator reliabilities for the sub-scale items surpassed the suggested minimum of 0.4 that was specified by Bagozzi (1994). The normed fit index = 0.78 (Bentler & Bonett, 1980), comparative fit

index = 0.86 (where values close to one indicate a very good fit (Bentler, 1990)); incremental fit index = 0.86 (where values close to one indicate a very good fit (Bollen, 1989)) and the Tucker-Lewis index = 0.83 (where values close to one indicate a good fit (Bentler & Bonett, 1980).

In comparison with Kump et al.'s (2019) CFA results, the CFA inferential statistics for the SE sample (Table 23) were $X^2 = 118.46$, degrees of freedom = 64, $P < 0.00$ and X^2 / df = 1.85. The RMSEA was 0.12, while the indicator reliabilities for the sub-scale items surpassed the suggested minimum of 0.4 that was specified by Bagozzi (1994). The results for the SE group were normed fit index = 0.72 (Bentler & Bonett, 1980), comparative fit index = 0.84 (where values close to one indicate a very good fit (Bentler, 1990)), incremental fit index = 0.85 (where values close to one indicate a very good fit (Bollen, 1989)) and the Tucker-Lewis index = 0.80 (where values close to one indicate a good fit (Bentler & Bonett, 1980).

Table 23: Comparative descriptive and inferential statistics (SE and CE Groups)

Construct	SE replication	CE replication
p-value	0.00	0.00
Chi-square (x^2)	118.46	155.92
Degrees of freedom	64	64
NFI (normed fit index)	0.72	0.78
CFI (comparative fit index)	0.84	0.86
IFI (incremental fit index)	0.85	0.86
TLI (Tucker-Lewis index)	0.80	0.83
RMSEA (root mean square error of approximation)	0.12	0.12

Figures 7 and 8 display the factor loadings of each item for the SE and CE groups. The composite reliabilities are above 0.63 for SEs and above 0.82 for CEs. Together, these results confirm the theoretically assumed EFA results that there is a high factorial validity in the DC scale for both the SE and CE groups (Hair et al., 2019).

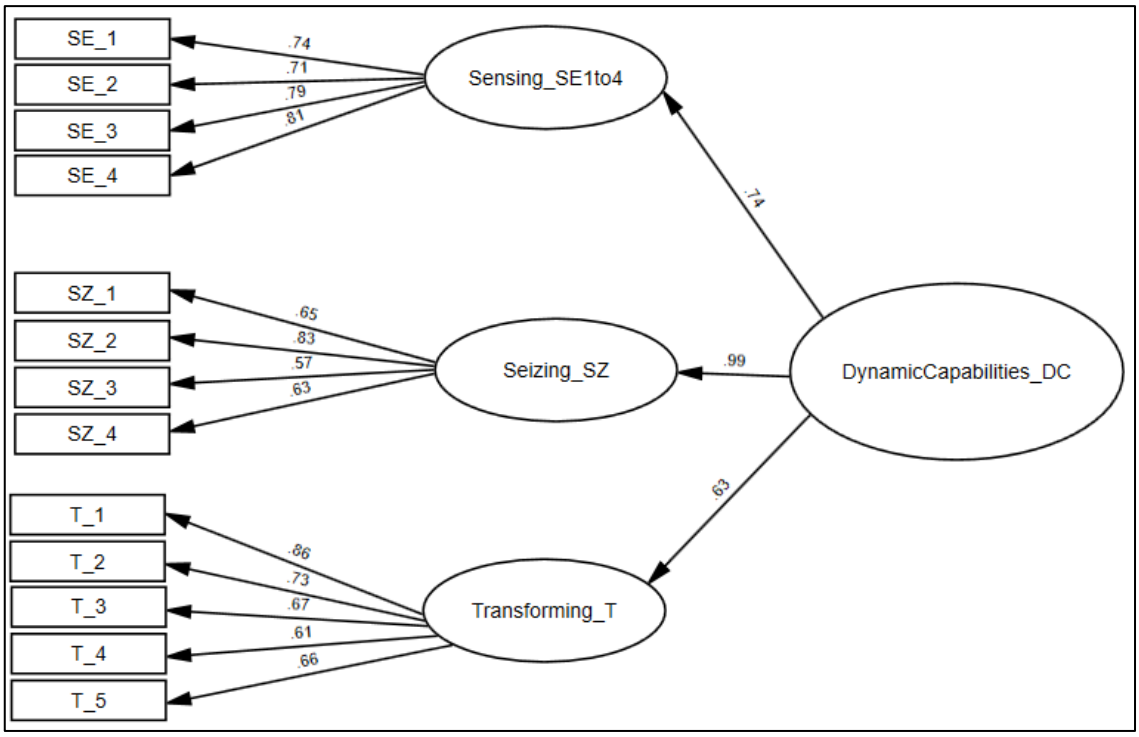

Figure 7: CFA for the SE group with sensing, seizing, and transforming as first order constructs and DC as the second order construct

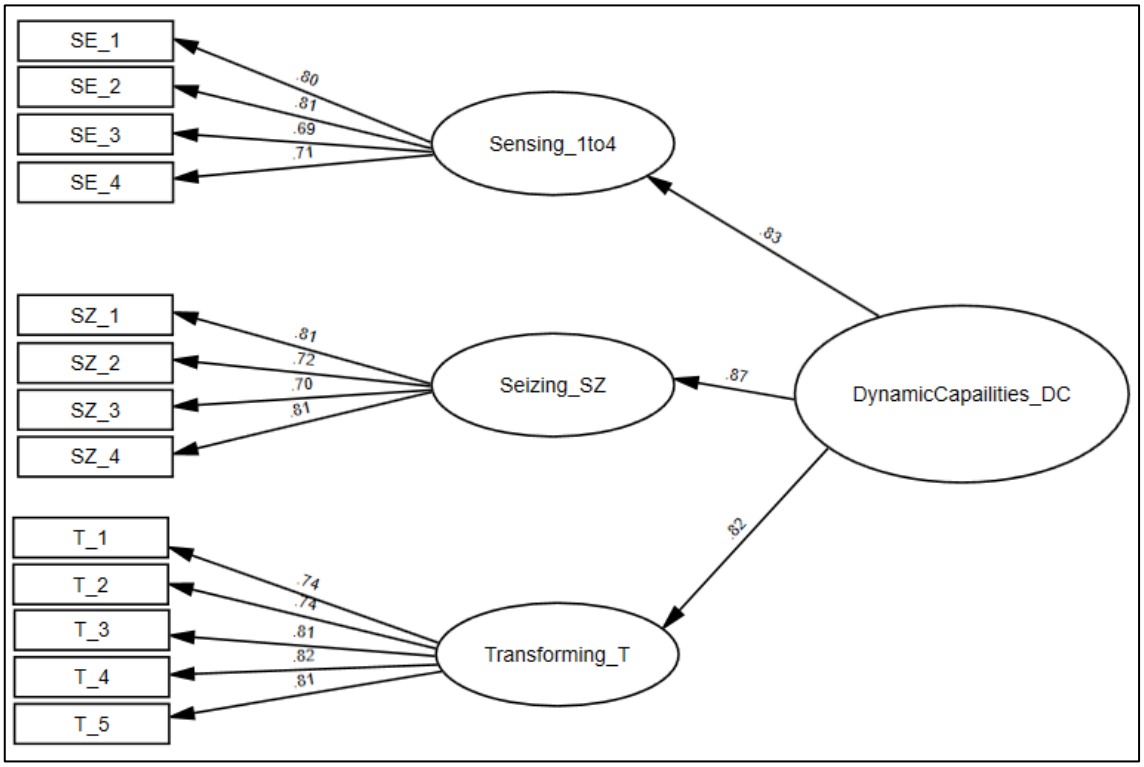

Figure 8: CE - CFA for the CE group with sensing, seizing, and transforming as first order constructs and DC as the second order construct

5.4.8 Normality

Normality of the data distribution was checked for all DC and BP sub-scales; however, Shapiro-Wilk was $p<0.05$, therefore normality was violated (Table 24). The only exception was the SE BP sub-construct of market performance was $p>0,05$, therefore normality for engagement was established for this sub-scale (Hair et al., 2019). However, Quinlan et al. (2019) reported that for robust tests like multiple regressions, when normality is violated, this is not a concern and non-parametric testing is not required. All CE and SE constructs displayed a negatively skewed distribution (Hair et al., 2019).

Table 24: Tests for normality (SE and CE)

Construct	Sub-scale	Social enterprises: Shapiro-Wilk			Commercial enterprises: Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Business performance	Marketing performance	0.96	57	0.06	1.00	100	0.02
Business performance	Customer-related performance	0.94	57	0.01	0.94	100	0.00
Business performance	Financial performance	0.94	57	0.01	0.96	100	0.00
Business performance	Employee-related performance	0.92	57	0.00	0.96	100	0.00
Dynamic capabilities	Sensing 1 to 4	0.90	57	0.00	0.95	100	0.00
Dynamic capabilities	Sensing 5	0.89	57	0.00	0.88	100	0.00
Dynamic capabilities	Seizing	0.94	57	0.01	0.95	100	0.00
Dynamic capabilities	Transforming	0.95	57	0.03	0.96	100	0.00

a. Lilliefors Significance Correction

5.5 DIFFERENCES AND ASSOCIATIONS

5.5.1 Test for differences

An independent samples or t-test for differences was undertaken to see if there was a statistically significant difference between how CEs and SEs viewed the DCs of sensing, seizing, and transforming. Where Levene's test for equality of variances was nonsignificant or $p<0.05$ in each calculation, equal variances were assumed (Hair et al., 2019). In the case of testing the seizing construct for differences, Levene's statistic was significant, and as a result, the 2-tailed significance value for equal variances not

assumed was referenced. The t-test results were all $p<0.05$ and therefore non-significant in terms of how SEs and CEs responded to DCs (Table 25).

Table 25: Test for differences – Results (CE and SE)

Construct	Levene's test	Equal variances	Sig (2-tailed)
Sensing 1 to 4	0.92	Assumed	0.32
Sensing 5	0.96	Assumed	0.07
Seizing	0.02	Not assumed	0.33
Transforming	0.28	Assumed	0.06

5.5.2 Multiple regression

A multiple regression was undertaken to determine how strong the DCs were as levers for the BP constructs. A multiple regression is an analysis of association with the ability of comparing more than one independent variable with a dependent variable while simultaneously investigating the results (Quinlan et al., 2019). This allowed for the influence of the sub-constructs the DC scale to be compared to their effect on the BP sub-scales for the SE and CE groups. As a reflective measurement approach was utilised for this study, a multiple regression also considered the effect that these DC sub-constructs also had on aggregate business performance. This was in alignment with reflective measurement theory (Hair et al., 2019) as well as in maintaining consistency with the research methodology employed by Kump et al. (2019).

5.5.2.1 Adjusted R-squared and Durbin-Watson values

This study referenced adjusted R-squared values (as opposed to R-squared values) since the research drew a sample of the whole population. The adjusted R-squared value represented the proportion of variance explained by these independent variable sub-scales for DCs. Based on the results in Table 26, 22% of all the variance in the dependent variable BP (market performance) is explained by DCs for the SE sample group. The corresponding figure is 12% for the CE group. The Durbin-Watson values (Durbin & Watson, 1971) range between zero and four, where optimal values lie within the 1.5 to 2.5 range. Based on the results in Table 26, all the Durbin-Watson values are within an acceptable range.

Table 26: Model summary of dynamic capability levers on business performance

Business performance – overall (Dependent variable)					
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	Durbin-Watson
Social enterprise	0.46[a]	0.22	0.16	0.52	1.79
Commercial enterprise	0.43[a]	0.19	0.15	0.68	2.05
Market performance (Dependent variable)					
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	Durbin-Watson
Social enterprise	0.39[a]	0.15	0.09	0.78	1.90
Commercial enterprise	0.38[a]	0.15	0.11	0.95	1.83
Customer-related performance (Dependent variable)					
Model	R	R-squared	Adjusted R-square	Std. error of the estimate	Durbin-Watson
Social enterprise	0.52	0.27	0.22	0.61	1.92
Commercial enterprise	0.39[a]	0.15	0.12	0.81	2.26
Financial performance (Dependent variable)					
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	Durbin-Watson
Social enterprise	0.25[a]	0.06	-0.01	0.98	1.61
Commercial enterprise	0.30[a]	0.09	0.05	1.07	2.08
Employee-related performance (Dependent variable)					
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	Durbin-Watson
Social enterprise	0.44[a]	0.193	0.13	0.77	1.88
Commercial enterprise	0.45[a]	0.20	0.16	0.70	2.16

a. Predictors: (Constant), DC_Transform_ALL, DC_SE_5, DC_Sensing_ALL_1to4, DC_Seizing_ALL

Table 27: ANOVA of dynamic capability levers on business performance

Business performance – overall (Dependent variable)						
Model		Sum of squares	df	Mean square	F	Sig.
Social enterprise	Regression	3.90	4	0.97	3.56	0.01[b]
	Residual	14.23	52	0.27		
	Total	18.12	56			
Commercial enterprise	Regression	9.91	4	2.48		0.00[b]
	Residual	43.36	95	0.46	5.43	
	Total	53.27	99			
Market performance (Dependent variable)						
Social enterprise	Regression	5.82	4	1.46	2.37	0.06[b]
	Residual	31.9	52	0.61		
	Total	37.72	56			
Commercial enterprise	Regression	14.79	4	3.70	4.08	0.00[b]
	Residual	86.10	95	0.91		
	Total	100.89	99			
Customer-related performance (Dependent variable)						
Social enterprise	Regression	7.32	4	1.83	4.85	0.00[b]
	Residual	19.61	52	0.38		
	Total	26.93	56			
Commercial enterprise	Regression	11.07	4	2.77	4.23	0.00[b]
	Residual	62.18	95	0.66		
	Total	73.25	99			
Financial performance (Dependent variable)						
Model		Sum of squares	df	Mean square	F	Sig.
Social enterprise	Regression	3.39	4	0.85	0.88	0.48[b]
	Residual	50.18	52	0.97		
	Total	53.57	56			
Commercial enterprise	Regression	10.84	4	2.71	2.35	0.06b
	Residual	109.73	95	1.16		
	Total	120.57	99			
Employee-related performance (Dependent variable)						
Social enterprise	Regression	7.39	4	1.85	3.11	0.02[b]
	Residual	30.86	52	0.59		
	Total	38.25	56			
Commercial enterprise	Regression	11.42	4	2.85	5.86	0.00[b]
	Residual	46.24	95	0.49		
	Total	57.66	99			

b. Predictors: (Constant), DC Transforming, DC Sensing 5, DC Sensing 1 to 4 and DC Seizing

5.5.2.2 ANOVA

If the significance value for an ANOVA is $p<0.05$, then the model is deemed good. This means that dynamic capabilities are good drivers, or they significantly affect for example BP sub-scales. A result of $p<0.05$ implies that DCs are a significant factor in understanding the specific BP sub-scale. If the significance value from the ANOVA is $p>0.05$, then the model is not deemed good as it is not a significant factor in understanding the respective BP sub-scale. Applying this description to the ANOVA results in Table 27, DCs are good drivers for all BP sub-scales, except for financial performance within the SE group. The p-value in this instance was 0.48 and above the significance benchmark of $p<0.05$.

5.5.2.3 Coefficients

There were three specific instances where the ANOVA results pointed to statistically significant construct correlations at a DC sub-scale level (Table 28). These values were all below the significance benchmark of $p<0.05$. For the SE group, this included the sub-construct relationship between the DC transforming and the BP of customer-related performance as well as between the DC of sensing 5 and employee-related performance. For the CE group, there was a statistically significant correlation between DC transforming and the BP of market performance.

Table 28: Coefficients of dynamic capability levers on business performance

Sample	DC Model	Sub-scale	Unstandardised coefficients		Standardised coefficients	T	Sig.
			B	Std. error	Beta		
SE	Transforming	Customer-related performance	0.34	0.16	0.32	2.06	0.04
SE	Sensing 5	Employee-related performance	0.21	0.10	0.27	2.08	0.04
CE	Transforming	Market performance	0.45	0.17	0.35	2.67	0.01

5.6 MODERATED REGRESSION

Both the article of DC scale creation by Kump et al. (2019) and research by Karlsson (2020) identified the impact of both an organisation's age (Table 29) and size (Table 31) on business performance. Given the wide-ranging responses from the survey instrument

to this demographic variable, it was therefore important to analyse the impact of a moderating variable like age or size between the independent and dependent variable. A moderated regression was undertaken to determine if there were statistically significant results in how the age and size of an organisation impacted on the relationship between the independent and dependent variable sub-scales. Issues of multicollinearity typically associated with a reflective measurement approach (Hair et al., 2019) were addressed by centring the independent and moderating variables. As was the case with the multiple regression, the reflective nature of the scale also supported overall business performance analysis at a construct level (Hair et al., 2019).

5.6.1 Age

The DC sub-scales of seizing and transforming both had a statistically significant relationship concerning the effect of age on the aggregate business performance where $p<0.05$ (Table 29). There were three statistically significant sub-scale relationships concerning age and the SE group where $p<0.05$ (Table 30). These involved the moderating influence of age between the DC sub-scale of seizing on both the organisation's market and financial performance. In the case of the influence of seizing on market performance, when age was considered as a moderating variable, the proportion of variance explained (adjusted R-squared) increased from 7% to 13%. Similarly, age increased the proportion of variance explained from -2% to 8%. Age also impacted on the transforming impact on financial performance, increasing the variance explained by the independent variable from 1% to 9%. The impact of age in moderating the influence of transforming on the financial performance of CEs increased from 4% to 7%.

Table 29: Statistically significant results for aggregated business performance (moderating variable = age)

Age (Social enterprise)					
Independent variable	Dependent variable	Adjusted R-squared		Sig F. change	
		Before MV	After MV	Before MV	After MV
Sensing 1 to 4	Business performance (overall	0.12	0.11	0.01	0.49
Sensing 5		0.04	0.07	0.07	0.09
Seizing		0.04	0.11	0.09	0.02*
Transforming		0.12	0.20	0.00	0.01*

*Statistically significant results where $p<0.05$

Table 30: Statistically significant sub-scale results (moderating variable = age)

Moderating variable (MV)	Independent variable	Dependent variable	Adjusted R-squared		Sig F. change	
			Before MV	After MV	Before MV	After MV
Social enterprise						
Age	Seizing	Market performance	0.07	0.13	0.03	0.03
Age	Seizing	Financial performance	-0.02	0.08	0.75	0.01
Age	Transforming	Financial performance	0.01	0.09	0.2	0.02
Commercial enterprise						
Age	Sensing 1 to 4	Financial performance	0.04	0.07	0.02	0.04

5.6.2 Size

The DC sub-scales of sensing 5, seizing and transforming all had statistically significant relationships concerning the effect of size on overall business performance where $p<0.05$ (Table 31). There were three statistically significant sub-scale relationships concerning the size of an organisation and the SE group where $p<0.05$ (Table 32). These all involved the moderating influence of size between the DC sub-scale of sensing 5. The moderating influence of organisational size increased the proportion of variance explained in terms of the organisation's market performance (from 1% to 7%), financial performance (from 0% to 12%) and employee-related performance (from 8% to 12%). In terms of the CE group, two statistically significant moderating relationships were identified. The impact of size had a moderating influence between sensing 1 to 4 and financial performance, increasing the proportion of variance explained from 4% to 7%. The size of an organisation for the CE group also increased the proportion of variance explained between sensing 5 and financial performance from 3% to 8%.

Table 31: Statistically significant results for aggregated business performance (moderating variable = size)

Size (Social enterprise)					
Independent variable	Dependent variable	Adjusted R-squared		Sig F. change	
		Before MV	After MV	Before MV	After MV
Sensing 1 to 4	Business performance (overall	0.12	0.13	0.01	0.23
Sensing 5		0.04	0.21	0.07	0.00*
Seizing		0.04	0.09	0.09	0.04*
Transforming		0.12	0.18	0.00	0.04*

*Statistically significant results where $p<0.05$

Table 32: Statistically significant sub-scale results (moderating variable = size)

Moderating variable (MV)	Independent variable	Dependent variable	Adjusted R-squared		Sig F. change	
			Before MV	After MV	Before MV	After MV
Social enterprise						
Size	Sensing 5	Market performance	0.01	0.07	0.23	0.04
Size	Sensing 5	Financial performance	0	0.12	0.29	0.01
Size	Sensing 5	Employee-related performance	0.08	0.14	0.2	0.03
Commercial enterprise						
Size	Sensing 1 to 4	Financial performance	0.04	0.07	0.24	0.04
Size	Sensing 5	Financial performance	0.03	0.08	0.06	0.01

5.7 SUMMARY OF RESEARCH RESULTS

The findings from Chapter 5 demonstrated that the DC scale developed by Kump et al. (2019) did indeed show internal consistency as determined by Cronbach's alpha (Cronbach, 1951) with both the SE and CE groups. An exception was identified within the SE group where one of the customer-related performance items did not show consistency within the sub-scale. The bivariate correlation confirmed the validity of the DC and BP constructs and their underlying scale items for both the SE and CE groups.

The results from the EFA confirmed that there was sufficient factorial validity in how the sub-scale items loaded on a single component (Hair et al., 2019; Quinlan et al., 2019). The only instance where this was not true was for the SE group where the sensing construct loaded on two components. The results from the CFA served to validate the EFA findings, while also establishing that the scale had a well-defined structure (Hair et al., 2019).

The results of the independent samples t-test showed that there was no statistically significant difference in the responses between these SE and CE groups with regards to the DC constructs of SN_1_to_4, seizing and transforming. There was however a statistically different response regarding SN_5 between the two research groups.

The research findings also indicated that there was not a strong correlation between DCs and BP for the SE group. This meant that DCs did not substantively predict the business performance of SEs. There were however two instances where DCs demonstrated a statistically significant relationship that related to the sub-scales of customer and employee-related performance.

The final area of research results considered the impact of age and size on an SE's BP. The results confirmed that these variables had an important moderating effect on BP. The impact of this moderating effect was more pronounced for the SE group than for the CE group.

CHAPTER 6. DISCUSSION OF RESULTS

6.1 OVERVIEW

There are four sections to this chapter and each section covers one of the research questions and their associated hypotheses. The first research question unpacks whether Kump et al.'s (2019) DC scale can be replicated as part of this study. This is to confirm that the validity and reliability of the DC scale and its constructs lay the foundation from which to tackle the other three research questions. Research question two seeks to understand if there were differences in the way that the SE and CE groups responded to the DC scale. The third research question focuses on the SE group to consider whether DCs are a lever for BP while the last research question interrogates whether an SE's age or size influences the relationship between the DCs and BP (Figure 9).

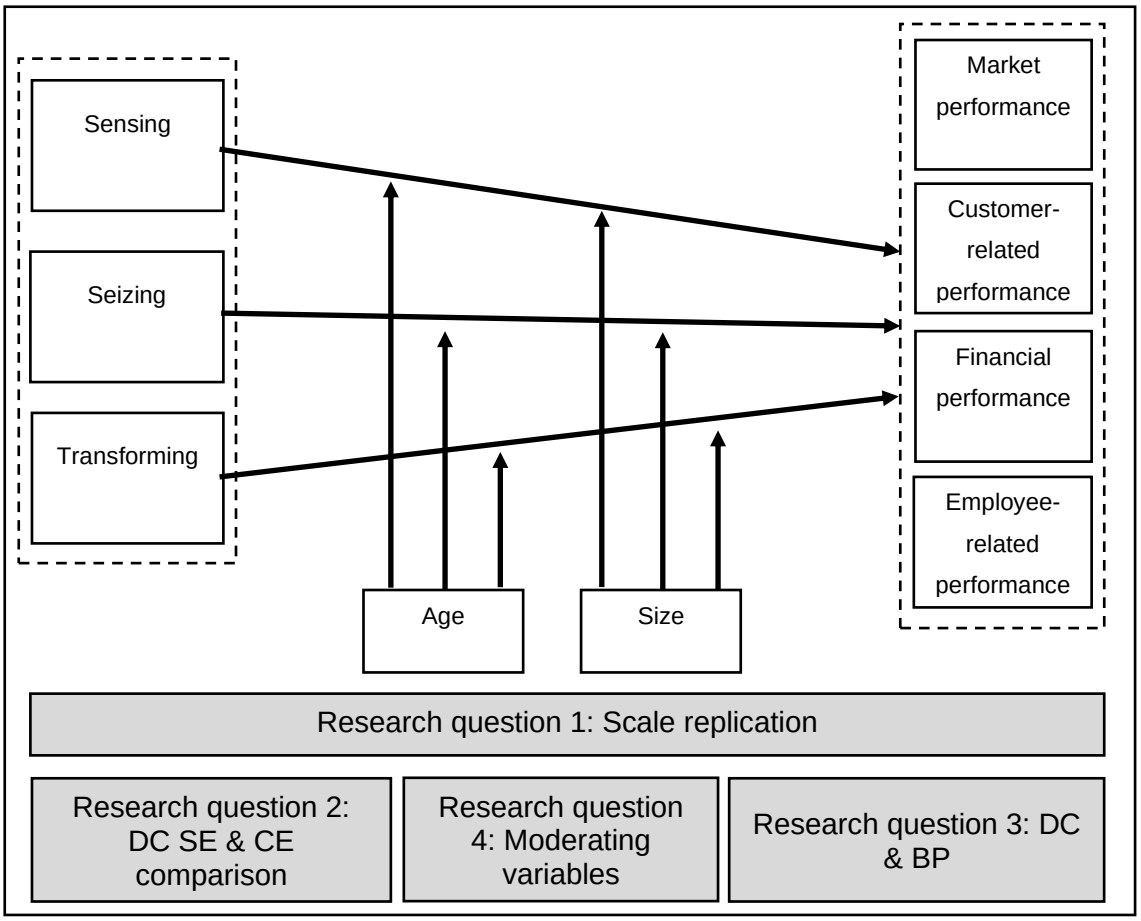

Figure 9: Breakdown to the conceptual model's research questions

6.2 RESEARCH QUESTION 1: REPLICATION OF DYNAMIC CAPABILITIES SCALE

6.2.1 Introduction

The first research question seeks to determine whether the DC and BP constructs that were formulated by Kump et al. (2019) can be replicated in a new geographical location and for a different organisations type, while still displaying high construct validity and reliability. This research question has two hypotheses that consider both the SE and CE groups. The data to interrogate this hypothesis is largely statistical as this makes it possible to compare the SE and CE groups along with the results from Kump et al.'s (2019) findings.

6.2.2 Hypothesis 1: DC scale reliability and validity (SE and CE)

Hypothesis 1: DC scale reliability and validity (SE and CE)

The DC scale developed by Kump et al. (2019) shows high construct reliability and validity when replicated within a new SE and CE environment.

6.2.2.1 Reliability of the dynamic capabilities and business performance constructs (SE)

Cronbach's alpha (Cronbach, 1951) measures internal consistency between constructs and their items or between sub-constructs and their constructs. According to the classification of alpha coefficients by Gliem and Gliem (2003), both the DC sensing and seizing constructs had acceptable levels of internal consistency (≥0.70) while the transforming value was classified as good (≥0.80). The internal consistency between dynamic capabilities and its sub-constructs of sensing, seizing and transformation was also good (≥0.80). The Cronbach's alpha for all the DC constructs was above the minimum benchmark of 0.70 (Hair et al., 2019) for the SE group. This demonstrates the reliability of the DC construct and sub-constructs for the SE group.

Except for one BP sub-construct, the remaining three sub-constructs also showed internal consistency (Hair et al., 2019) between the sub-constructs and their associated items. Financial performance (0.82) and employee-related performance (0.84) had good alpha coefficient values. These alpha coefficient values were also similar to the values reported in the Kump et al.'s (2019) study (Table 33). Market performance had an acceptable value of 0.78. However, customer-related performance had an alpha

coefficient of 0.45 which is deemed as unacceptable (Gliem & Gliem, 2003). This showed that there was a poor interrelatedness between the customer-related performance items.

The customer-related performance sub-construct comprised three items that asked respondents to evaluate their organisation's performance in the 2019 financial year according to organisational image, customer satisfaction and customer loyalty. The item statistics table showed that when organisational image (CRP_1) was deleted from the customer-related performance construct, the resultant Cronbach's alpha increased from 0.45 to an acceptable value of 0.70 (Hair et al., 2019). The inconsistency in the customer-related performance scale is therefore largely attributed to the scale item evaluating organisational image (CRP_1), which is worded as *"Please evaluate your organisation's performance in the last operational year (2019) relative to your primary competitors in terms of your organisational image".*

The second and third questions of the customer-related performance construct both have a specific consumer orientation. CRP_2 refers to customer satisfaction and CRP_3 to customer loyalty. According to entrepreneurship theory, the customer is a key, organisational role player (Lam & Harker, 2015) and therefore developing a consumer-centric approach is a crucial role that new entrepreneurial ventures must pursue (Geiger et al., 2012). The excitement and contribution to social change that consumers feel in connection to an SE lead to high levels of satisfaction (Dacin , Dacin & Matear, 2010; Ince & Hahn, 2020). There is therefore a high level of interconnectedness between two construct items.

The first construct item (CRP_1) relates to organisational image and can include staff, board members, customers or volunteers (Ince & Hahn, 2020). Given that SEs by nature are pursuing both a social and a financial mission, this adds a level of institutional complexity (Morris et al., 2020; Muñoz & Kimmitt, 2019) that makes it challenging for an SE to project a congruent organisational image (Mogapi et al., 2019) to internal and external stakeholders. This can result in ambiguous messaging being communicated to important stakeholders (Ince & Hahn, 2020).

There is thus sufficient academic evidence to support the lack of interconnectedness between CRP_2 and CRP_3 with CRP_1. The remaining BP sub-constructs that included market, financial and employee-related performance showed suitable reliability results.

6.2.2.2 Reliability of the dynamic capabilities and business performance constructs (CE)

Based on the classification of alpha coefficients by Gliem and Gliem (2003), all the DC sub-constructs of sensing, seizing, and transforming had good levels of internal consistency (≥0.80) The internal consistency between DCs and its sub-constructs of sensing, seizing and transformation was also good (≥0.80). The Cronbach's alpha for all the DC constructs was above the minimum benchmark of 0.70 (Hair et al., 2019) for the CE group. They closely matched the values reported by Kump et al. (2019) (Table 33). This proves the reliability of the DC construct and its sub-constructs for the CE group.

The Cronbach alpha values for the BP sub-constructs were acceptable for customer and employee-related performance (≥0.70), good for market performance (≥0.80) and excellent for financial performance. The internal consistency between BP and all its sub-constructs of marketing, customer-related, financial, and employee-related performance was acceptable (≥0.70). In summary, the Cronbach's alpha for all the BP constructs was above the minimum benchmark of 0.70 (Hair et al., 2019) for the CE group. This confirmed the reliability of the BP construct and its sub-constructs for the CE group.

Table 33: Comparison of Cronbach alpha coefficients for dynamic capabilities and business performance (SE and CE)

Construct	Type	No. of items	Kump et al. (2019)	SE replication	CE replication
Dynamic capabilities	Scale	3	0.91	0.88	0.80
Sensing	Sub-scale	5	0.84	0.77	0.80
Seizing	Sub-scale	4	0.84	0.72	0.86
Transforming	Sub-scale	5	0.87	0.84	0.88
BP	Scale	3	0.90	0.82	0.79
Market performance	Sub-scale	3	0.86	0.78	0.84
Customer-related performance	Sub-scale	3	0.91	0.45	0.70
Financial performance	Sub-scale	3	0.83	0.84	0.91
Employee-related performance	Sub-scale	3	0.82	0.82	0.76

6.2.2.3 Validity of the dynamic capability and business performance constructs (SE)

The bivariate correlation was conducted for the SE group between the DC sub-constructs of sensing, seizing, and transforming and their underlying items. Except for correlation results for SN_5 from the sensing construct where the correlation value was 0.49 (a low to moderate positive correlation (Hair et al., 2019)), all the other items had a correlation range from 0.67 to 0.88 that was deemed as moderate to high positive correlations. These correlation results were all significant at the $p<0.01$ level (2-tailed). Together with the correlation values, they demonstrated construct validity for the DC sub-constructs of sensing, seizing, and transforming.

The bivariate correlation was also conducted for the SE group between the BP sub-constructs of marketing, customer-related, financial, and employee-related performance. The customer-related performance values ranged from 0.63 – 0.76 and showed a moderately positive correlation (Hair et al., 2019)). All the other items had a correlation values that ranged from 0.82 to 0.91 (high positive correlations). These correlation results were all significant at the $p<0.01$ level (2-tailed). Together with the correlation values, they also demonstrated construct validity for the BP sub-constructs of marketing, customer-related, financial, and employee-related performance.

6.2.2.4 Validity of the dynamic capability and business performance constructs (CE)

The bivariate correlation was conducted for the CE group between the DC sub-constructs of sensing, seizing, and transforming and their underlying items. The correlation values ranged from 0.69 to 0.88 which reflected moderate to high positive correlations (Quinlan et al., 2019). These correlation results were all significant at the $p<0.01$ level (2-tailed). Together with the correlation values, they demonstrated construct validity for the dynamic capabilities sub-constructs of sensing, seizing, and transforming.

The bivariate correlation was also conducted for the CE group between the BP sub-constructs of marketing, customer-related, financial, and employee-related performance. The other items had correlation values that ranged from 0.77 (moderate to high) to 0.95 (very high positive correlations) (Quinlan et al., 2019). These correlation results were all significant at the $p<0.01$ level (2-tailed). Together with the correlation values, they demonstrated construct validity for the BP sub-constructs of marketing, customer-related, financial, and employee-related performance.

6.2.2.5 Factorial validity of the dynamic capabilities scale

This research question also sought to answer the question of whether the DC scale instrument developed by Kump et al. (2019) could be replicated in a new geographical location and for different organisation types. This research question had two hypotheses to consider both the SE and CE groups. The data to interrogate this hypothesis was largely statistical as this made it possible to compare the SE and CE groups along with the results from Kump et al.'s (2019) findings.

The exploratory factor analysis (EFA) that was conducted at a DC sub-construct level confirmed that all the items loaded a single component (Hair et al., 2019; Quinlan et al., 2019) and had the required factor loadings above 0.60 (Beavers et al., 2013). The exception was that for the SE group, the sensing construct loaded on two components: SN_1_to_4 and SN_5. This result is discussed further under the second research question. In contrast, when an EFA was employed for the CE group regarding the sensing construct, it loaded on a single construct. The comparative results of the EFA are listed in Table 34 and include reference to Kump et al.'s (2019) study. In summary, except for one item within the SE group (SN_5), these EFA results proved that the items loaded high on their expected construct and thus proved that it has good factorial validity within a South African SE and CE environment, as hypothesised.

Table 34: Component matrix for SE and CE (Dynamic capabilities sub-scales)

Construct	Item	Kump et al. (2019)	SE	CE
Sensing	SN_1	0.72	0.81	0.74
Sensing	SN_2	0.82	0.83	0.84
Sensing	SN_3	0.95	0.86	0.82
Sensing	SN_4	0.83	0.81	0.75
Sensing	SN_5	0.70	0.29	0.61
Seizing	SZ_1	0.87	0.71	0.88
Seizing	SZ_2	0.71	0.87	0.81
Seizing	SZ_3	0.84	0.67	0.81
Seizing	SZ_4	0.73	0.74	0.87
Transforming	T_1	0.89	0.89	0.77
Transforming	T_2	0.90	0.79	0.80
Transforming	T_3	0.61	0.76	0.83
Transforming	T_4	0.60	0.70	0.85
Transforming	T_5	0.72	0.76	0.82

6.2.2.6 Factorial validity of the dynamic capabilities scale

The aim of the second order CFA that was conducted in AMOS 26 was to validate the EFA outcomes at a first order level as well as confirm that DCs were accurately reflected as a second order construct. The CFA had high second-order factor loadings within the SE and CE groups (Table 35). These results all exceeded 0.70, denoting that they accounted for over 50% of the variable's variance (Hair et al., 2019). This confirmed that the DC scale had a well-defined structure (Hair et al., 2019) and supported the validity of the replicated DC scale.

Table 35: Comparative CFA second-order factor loadings

CFA factor loadings	Kump et al. (2019)	SE	CE
Sensing	0.79	0.79	0.82
Seizing	0.96	0.99	0.87
Transforming	0.83	0.63	0.82

6.2.3 Summary

Table 36 below summaries the various validity and reliability tests that were performed for both the SE and CE groups. Within the SE group, item CRP_1 did not show high interconnectedness to its construct and was removed from the customer-related performance and subsequent data analysis. Furthermore, sensing loaded on two separate components (SN_1_to_4 and SN_5) for the SE group. Taken in totality though, these results prove that the DC scale (Kump et al., 2019) shows high construct reliability and validity when replicated within a new CE environment. With the noteworthy exceptions outlined above, the DC scale (Kump et al., 2019) also showed high construct reliability and validity when replicated within a new organisational environment for the SE group. This provides evidence to prove Hypothesis 1.

Table 36: Summary of Research Question 1 – Analysis and findings

Hypothesis No	Hypothesis component	Research group	Analysis	Hypothesis conclusion
1	Construct Reliability - DC	SE	Cronbach alpha	Proven
1	Construct reliability - DC	CE	Cronbach alpha	Proven except for customer-related performance
1	Construct reliability – BP	SE	Cronbach alpha	Proven

Hypothesis No	Hypothesis component	Research group	Analysis	Hypothesis conclusion
1	Construct reliability – BP	CE	Cronbach alpha	Proven
1	Construct validity	SE	Bivariate correlation	Proven
1	Construct validity	CE	Bivariate correlation	Proven
1	Scale validity	SE	EFA	Proven except SN_5
1	Scale validity	CE	EFA	Proven
1	Scale validity	SE	CFA	Proven except SN_5
1	Scale validity	CE	CFA	Proven

6.3 RESEARCH QUESTION 2: COMPARATIVE DYNAMIC CAPABILITY RESPONSE BETWEEN SEs AND CEs

6.3.1 Introduction

The second research question sought to determine whether the SE and CE groups responded differently to the DC components of sensing, seizing, and transforming. A key objective of this research study was to understand if DCs can explain some of the barriers to growth that SEs face when growing and scaling their organisations. This research question gives us an insight into comparative DC engagement between the SE group and their CE counterparts, while it provides an opportunity to draw on the literature to interpret these results.

6.3.2 Hypothesis 2: Sensing SE vs CE differences

Hypothesis 2: Sensing

The SE group had a higher response to the DC sensing construct than the CE group

6.3.2.1 Sensing 1 to 4 response

Based on the results of the EFA for the SE group, the sensing construct loaded on two components, namely SN_1_to_4 and SN_5. The mean SN_1_to_4 result was 4.96 for the SE group with a standard deviation of 0.73, while the mean for the CE group was

5.07 with a standard deviation of 0.64 (Table 37). An independent samples t-test was undertaken to see if there was a statistically significant difference between how SEs and CEs view the DC of SN_1 to 4. The results indicated that there was not a statistically different response (p>0.05) between the two groups.

Table 37: Comparative sensing responses (SN_1_to_4 and SN_5)

	SE		CE		Kump et al. (2019)	
DC construct	Mean	Std. deviation	Mean	Std. deviation	Mean	Std. deviation
Sensing 1_to_4	4.96	0.73	5.07	0.64	4.54	0.84
Sensing_5	4.41	1.04	4.73	1.02		

These results have shown that there is not a statistical difference between how SEs and CEs view SN_1_to_4. While these results might appear inconclusive, it is important to consider that competing factors could sit behind SEs' responses to this construct. On the one side, sensing has been referred to as a special ability that SEs have (Moss et al., 2011). SEs display a strong disposition towards environmental scanning (Weerawardena et al., 2019), have a high level of social capital embedded in their networks (Davies et al., 2019) due to the collaborative nature of their relationships (Saebi et al., 2019), which often have a multi-sectoral bearing (Rawhouser et al., 2019).

However, the SN_1_to_4 construct draws on five different items that target a more commercial definition of accessing information to better understand the market situation. This includes what activities their competitors are engaged in (Kump et al., 2019; Teece, 2007). As noted by Bacq and Janssen (2011), social enterprises are firstly driven by a social mandate and this precedes their financial mission. The implication is that while SEs might show strong aptitude for SN_1_to_4 (Moss et al., 2011), this sensing capability is applied within the concept of a social mission. The Kump et al. (2019) construct and its items were developed towards a continuous processing of information disposition (Helfat & Peteraf, 2014), but in a way that favours a commercial outcome. From an SE perspective, there is a strong sensing pre-disposition but not in the commercial sense in which the construct was developed. This is a potential explanation why the SE results for SN_1_to_4 do not differ significantly from their commercial counterparts.

6.3.2.2 Sensing 5 response

The mean SN_5 result for the SE group was 4.41 with a standard deviation of 1.04, while the mean for the CE group was 4.73 with a standard deviation of 1.02 (Table 37). An independent samples t-test was undertaken to see if there was a statistically significant difference between how SEs and CEs view the DC of SN_1_to_4. The results indicated that there was a statistically different response ($p<0.05$) between the two groups.

The item, SN_5, was formulated as "*Our company always has an eye on our competitors' activities*". The results from the validity tests show that how the SE group interpret and respond to this item in relation to other construct questions for sensing differs statistically from the CE group and Kump et al. (2019) study. The independent samples t-test results further supported this conclusion by showing that SEs and CEs responded to this question in a statistically different way.

SEs operate in an increasingly more competitive and resource-restricted environment. This is particularly due to greater competition for government and donation funding (Weerawardena et al., 2019). SEs are also competing on two organisation's fronts in terms of funding and resourcing with both non-profit and for profit entities (Muñoz & Kimmitt, 2019). What the data suggests though, is while the construct of sensing has high reliability and validity within a commercial environment as demonstrated through the Kump et al. (2019) and CE respondent groups, the SE response to this question: "*Our company always has an eye on our competitors' activities"* is inconsistent in its interconnectedness to the other DC sensing constructs. SEs view collaboration, not just competition, as an important driver of growth (Saebi et al., 2019; Stephan et al., 2016).

According to Gupta et al. (2020), however, it is important for SEs to understand their competition before they are in a position to develop effective strategies. Bacq and Janssen (2011) noted a definitional understanding of SEs where social entrepreneurs are firstly driven by pursuing a social mission and then by seeking to create greater social value than their competitors. This would provide an explanation from which to interpret the lack of interconnectedness of SE_5 to the sensing construct as well as why CEs responded to this item in a statistically significant, higher manner. Overall, these statistical results invalidate the hypothesis that for sensing, the SE group would have a higher response than the CE group.

6.3.3 Hypothesis 3: Seizing SE vs CE differences

Hypothesis 3: Seizing

The SE group had a similar response to the DC seizing construct compared to the CE group

The mean seizing score for the SE group was 5.07 with a standard deviation of 0.58, while the mean for the CE group was 5.00 with a standard deviation of 0.76 (Table 38). An independent samples t-test was undertaken to see if there was a statistically significant difference between how SEs and CEs view the DC of sensing. The results indicated that there was not a statistically different response ($p>0.05$) between the two groups.

Table 38: Comparative sensing responses

	SE		CE		Kump et al. (2019)	
DC construct	Mean	Std. deviation	Mean	Std. deviation	Mean	Std. deviation
Seizing	5.07	0.58	5.00	0.76	4.33	0.88

The concept of seizing is a dynamic response that is not only associated with minimising organisation risks, but is also linked to actioning new opportunities that are still aligned to an organisation's environment (Teece, 2007). The hypothesis predicted a similar response to the DC of seizing between both the SE and CE groups. From an SE perspective, there are several factors that both enable and derail the seizing capability. By their nature, SEs are pursuing opportunities to create or catalyst change (Hu et al., 2019) in spaces that are either emergent or display long-standing inefficiencies (Gupta et al., 2020; Saebi et al., 2019). They are therefore well-positioned to act on opportunities (Stephan et al., 2016).

However, there are complexities in seizing these opportunities where SEs are required to consider both financial and social dimensions to ensure the authenticity of their outcomes (Kim et al., 2019). While SEs might have access to vast networks through numerous institutional stakeholders, these networks can also serve as more of a hinderance in needing to manage the multitudinous expectations of these partners (Ince & Hahn, 2020). SEs also struggle more than CEs to raise or acquire the necessary capital to exploit new opportunities (Mogapi et al., 2019; Vickers & Lyon, 2014).

There is a balance of factors at play regarding how an SE is able to identify opportunities and effectively capitalise on them (Teece, 2007). These considerations and the data support the hypothesis that SEs would have a similar response to the CE group about how they view the DC of seizing. This hypothesis is therefore proven.

6.3.4 Hypothesis 4: Transforming SE vs CE differences

Hypothesis 4: Transforming

The SE group had a lower response to the DC transforming construct than the CE group

It was hypothesised that factors such as the internal friction (André et al., 2018), institutional complexity (Morris et al., 2020), and mission drift (Muñoz & Kimmitt, 2019) that are derivatives of an SE's joint pursuit of a social and financial agenda (Doherty et al., 2014; Smith et al., 2013) would hinder their transforming capability. These factors were expected to compromise an SE's ability to renew or reorganise organisational assets in response to new internal or external realities (Teece, 2007). The anticipation was therefore that SEs would have a lower transformational capability response than the CE group.

The mean transforming score for the SE group was 4.84 with a standard deviation of 0.67, while the mean for the CE group was 4.61 with a standard deviation of 0.79 (Table 39). An independent samples t-test was undertaken to see if there was a statistically significant difference between how SEs and CEs view the DC of sensing. The results indicated that there was not a statistically different response ($p>0.05$) between the two groups. These results therefore disproved Hypothesis 2.3.

Table 39: Comparative transforming responses

	SE		CE		Kump et al. (2019)	
DC construct	Mean	Std. deviation	Mean	Std. deviation	Mean	Std. deviation
Transforming	4.84	0.67	4.61	0.79	4.31	0.88

6.3.5 Summary

Table 40 below provides a summary of the hypothesis testing for the second research question. The objective of this section was to consider if there was a statically significant

difference in the way that SEs and CEs viewed DCs. The results for Hypothesis 2 were disproven for SN_1_to_4 and proven SN_5. Hypothesis 3 for seizing was proven, but Hypothesis 4 for transforming was disproven.

Table 40: Summary of Research Question 2 – Analysis and findings

Hypothesis number	DC	Hypothesis	Result	Hypothesis conclusion
2	Sensing 1 to 4	SE lower	No statistical difference	Disproven
2	Sensing 5	SE lower	Statistical difference	Proven
3	Seizing	Same	No statistical difference	Proven
4	Transforming	Same	No statistical difference	Disproven

6.4 RESEARCH QUESTION 3: CORRELATION BETWEEN DCS AND BUSINESS PERFORMANCE

6.4.1 Introduction

While the second research question looked at how DC engagement differed between the SE and CE groups, the third research question focused on proving whether DCs had an actual bearing on BP. This research question sought to determine if DCs were strong predictors of business performance for SEs. The CE group was therefore not included in this analysis discussion, but comparative findings are presented in Table 42.

6.4.2 Hypothesis 5: Business performance correlation

Hypothesis 5: BP (SE)
DCs are strong predictors of BP for SEs

The research study by Kump et al. (2019) demonstrated that DCs and their sub-scales of sensing, seizing, and transforming were strong predictors of BP. In order to calculate how strong the DC levers are for the various dimensions of BP, Hair et al. (2019) recommended a multiple regression. The results from the multiple regression confirmed only two statistically significant results with $p<0.05$ (Table 41). This included the relationship between SN_5 and employee-related performance ($p = 0.04$) as well as between the DC scale transforming and customer-related performance ($p = 0.04$)

Table 41: Dynamic capability levers on BP (SE)

DC Model	Sub-scale	Unstandardised coefficients		Standardised coefficients	T	Sig.
		B	Std. error	Beta		
Transforming	Customer-related performance	0.34	0.16	0.32	2.06	0.04
Sensing 5	Employee-related performance	0.21	0.10	0.27	2.08	0.04

The multiple regression demonstrated the statistically significant relationship between the DC sub-scale of transforming and customer-related performance. One of the key aspects of transforming is that through this renewal process, SEs can prevent organisational stagnation (Kump et al., 2019) by offering new products and services (Suddaby et al., 2020). These new offerings increase the value offered to customers (Verreynne, Hine, Coote & Parker, 2016) and this supports the data results.

The multiple regression also confirmed that there was a statically significant relationship between SN_5 and employee-related performance. This highlighted an important causality that SEs who have a clearer view of their competitors' activities (SN_5) are able to provide more unique products and services (Davies et al., 2019). This greater strategic clarity (Gupta et al., 2020) also reduces institutional complexity (André et al., 2018; Hlady-Rispal & Servantie, 2018) and this provides better employee role-related certainty (Saebi et al., 2019). The regression analysis demonstrated this statistical linkage between transforming and customer-related performance. Stephan et al. (2016) supported this result, citing that highly satisfied and motivated staff have a direct influence on increasing the number of loyal and satisfied customers and this improves business performance.

6.4.3 Summary

The objective of Hypothesis 5 was to understand how significant DCs are predicting business performance. Out of the 16 possibilities (four DCs x four BPs) for obtaining a statistically significant answer to this question, only two impactful correlations were identified. Compared to the results from Kump et al. (2019) study, DCs were not a strong predictor of BP for both the SE and CE groups. Table 42 below shows the comparative findings between these three groups where the areas shaded in grey indicate the sub-scales where DCs are strong predictors of BP.

Table 42: Summary of Research Question 3 - Analysis and findings

DC construct	BP construct or sub-construct	Hypothesis conclusion (SE)	Social enterprises		Commercial enterprises		Kump et al. (2019)	
			Unstandardised. b coefficients*	Sig value	Unstandardised. b coefficients*	Sig value	Unstandardised. b coefficients*	Sig value
Sensing 1 to 4**	Business performance (overall)	Disproven	0.18 (0.12)	0.15	0.07 (0.15)	0.65	0.18 (0.06)	P<0.01
Sensing 5**	Business performance (overall)	Disproven	0.10 (0.07)	0.15	0.06 (0.08)	0.43		
Sensing 1 to 4**	Market performance	Disproven	0.19 (0.18)	0.30	0.18 (0.11)	0.10	0.20 (0.06)	P<0.01
Sensing 5**	Market performance	Disproven	0.08 (0.10)	0.44	0.00 (0.21)	1.00		
Sensing 1 to 4**	Customer-related performance	Disproven	-0.09 (0.14)	0.55	-0.01 (0.09)	0.95	0.15 (0.07)	P<0.05
Sensing 5**	Customer-related performance	Disproven	-0.06 (0.08)	0.46	0.01 (0.18)	0.46		
Sensing 1 to 4**	Financial performance	Disproven	0.17 (0.23)	0.47	0.17 (0.12)	0.18	0.26 (0.08)	P<0.01
Sensing 5**	Financial performance	Disproven	0.11 (0.13)	0.38	0.21 (0.24)	0.38		
Sensing 1 to 4**	Employee-related performance	Disproven	0.36 (0.18)	0.05	-0.12 (0.08)	0.14	0.10 (0.07)	N/A
Sensing 5**	Employee-related performance	Proven	0.21 (0.10)	0.04 p<0.05	0.03 (0.16)	0.83		
Seizing	Business Performance (overall)	Disproven	-0.01 (0.16)	0.56	0.05 (0.14)	0.75	0.19 (0.06)	P<0.01
Seizing	Market Performance	Disproven	0.10 (0.24)	0.70	-0.05 (0.20)	0.82	0.17 (0.07)	P<0.05

DC construct	BP construct or sub-construct	Hypothesis conclusion (SE)	Social enterprises		Commercial enterprises		Kump et al. (2019)	
			Unstandardised. b coefficients*	Sig value	Unstandardised. b coefficients*	Sig value	Unstandardised. b coefficients*	Sig value
Seizing	Customer-related performance	Disproven	0.38 (0.19)	0.05	0.20 (0.17)	0.25	0.18 (0.08)	P<0.05
Seizing	Financial performance	Disproven	-0.26 (0.30)	0.40	-0.17 (0.23)	0.45	0.2 (0.10)	P<0.05
Seizing	Employee-related performance	Disproven	-0.44 (0.24)	0.07	0.25 (0.15)	0.09	0.21 (0.08)	P<0.01
Transforming	Business performance (overall)	Disproven	0.25 (0.14)	0.08	0.32 (0.12)	0.01 p<0.05	0.23 (0.06)	P<0.00
Transforming	Market performance	Disproven	0.24 (0.21)	0.26	0.45 (0.17)	0.01 p<0.05	0.23 (0.06)	P<0.00
Transforming	Customer-related performance	Proven	0.34 (0.16)	0.04 p<0.05	0.27 (0.14)	0.06	0.18 (0.08)	P<0.05
Transforming	Financial performance	Disproven	0.27 (0.26)	0.30	0.33 (0.19)	0.09	0.13 (0.10)	N/A
Transforming	Employee-related performance	Disproven	0.18 (0.20)	0.39	0.21 (0.12)	0.09	0.37 (0.07)	P<0.00

* Unstandardised b coefficients without brackets. Standard errors are given in brackets

** Sensing 1 to 4 and Sensing 5 are separate constructs in the SE and CE study and are the results are not directly comparable to Sensing as analysed by Kump et al. (2019)

N/A: Data not provided by Kump et al. (2019). Assumed nonsignificant

6.5 RESEARCH QUESTION 4: IMPACT OF ORGANISATIONAL SIZE AND AGE ON BP

6.5.1 Introduction

The final research question was to interrogate the impact of an organisation's age (how long the organisation had been operational) and its size (number of full-time employees) on their responses. The specific intention was to understand if these two demographic variables had a positive effect on BP. This research question also only considered the SE group.

Hypothesis 6: Impact of organisation age

The greater an organisation's age, the more positively this affects BP

6.5.2 Hypothesis 6: Impact of organisational age on BP

A moderated regression was undertaken to determine the impact an organisation's age had in amplifying the effect of DCs on BP. For both seizing and transforming, the age of an organisation had the effect of increasing overall business performance. The effect of organisational size increased the influence of seizing on overall business performance from 4% to 11% and of transforming on business performance from 12% to 20%. The results revealed three significant relationships for the SE group compared to one for the CE group (Table 43).

Table 43: Statistically significant results for moderating variable (Age) on overall business performance

Age (Social enterprise)					
Independent variable	Dependent variable	Adjusted R-squared		Sig F. change	
		Before MV	After MV	Before MV	After MV
Seizing	Business performance (overall)	0.04	0.11	0.09	0.02*
Transforming		0.12	0.20	0.00	0.01*

*Statistically significant results where p<0.05

Table 44: Statistically significant results for moderating variable (Age) at a sub-scale level

Moderating variable (MV)	Independent variable	Dependent variable	Adjusted R-squared		Sig F. change
			Before MV	After MV	After MV
Age	Seizing	Market performance	0.07	0.13	0.03*
Age	Seizing	Financial performance	-0.02	0.08	0.01*
Age	Transforming	Financial performance	0.01	0.09	0.02*

*Statistically significant results where $p<0.05$

In the case of the influence of seizing on market performance, when age was considered as a moderating variable, the proportion of variance explained (adjusted R-squared) increased from 7% to 13% (Table 44). The construct of market performance as developed by Kump et al. (2019) consisted of items such as an organisation's performance in relation to primary competitors to attract new customers, establish new markets and increase market share. As a DC, seizing speaks directly to the opportunity identification and creating of new opportunities for organisational growth (Teece, 2007). More established SEs are less reliant on their founders and their personal networks that play a very influential role in shaping the organisation (Bauwens et al., 2020). This increased organisational maturity provides SEs with an opportunity to expand to new markets by drawing on more diverse networks (Coviello et al., 2000).

The age of an organisation was also a statistically significant determinant ($p<0.05$) in its influence of seizing on financial performance, increasing the proportion of variance explained from -2% to 8% (Table 44). An aspect of seizing is also not just to consider opportunities but also to respond to threats or risks (Helfat & Peteraf, 2014). The age of an organisation was seen as an important attribute in financial risk mitigation for funders who are looking into making impact investments. According to Mogapi et al. (2019), organisational age also provides evidence for a proven track record in support of investments.

Finally, age also impacted on the transforming impact on financial performance, increasing the variance explained by the independent variable from 1% to 9%. The data suggests that the older or more established an organisation is, the more positively the capability of transforming impacts on an organisation's financial performance. The literature suggests that more established organisations are better able to reconcile their dual financial and social mission (Wry & York, 2017) and this capability is an important

determinant in leveraging the social mission of SEs as a competitive advantage that has a bearing on overall financial performance (Muñoz & Kimmitt, 2019).

It is noteworthy that as a moderating variable, organisational age amplified the DC impact on three BP outcomes. As a point of comparison, age only impacted one BP construct for the CE group (sensing 1 to 4 on financial performance). This suggests that this disproportional influence of age within the SE group was one of the reasons why the overall transforming and seizing scores remained at a similar level (it was hypothesised to be lower) to the CE group, despite academic research to hypothesise lower respondent scores.

Hypothesis 7: Impact of organisation size

The greater an organisation's size, the more positively this affects BP

6.5.3 Hypothesis 7: Impact of organisational size on BP

The role of organisational size (classified as the number of full-time employees) had a dramatic impact on business performance. As a moderating variable, it had a statistically significant impact where $p<0.05$ on three of the four DC constructs (Table 45). Sensing 5 increased the proportion of variance explained from 4% to 21% for overall business performance, from 1% to 7% for market performance, from 0% to 12% for financial performance and from 8% to 12% for employee-related performance (Table 46). The effect of organisational size increased the influence of seizing on overall business performance from 4% to 9% and of transforming on business performance from 12% to 18%.

Table 45: Statistically significant results for moderating variable (Size) on overall business performance

Independent variable	Dependent variable	Adjusted R-squared		Sig F. change	
		Before MV	After MV	Before MV	After MV
Sensing 5	Business performance (overall)	0.04	0.21	0.07	0.00*
Seizing		0.04	0.09	0.09	0.04*
Transforming		0.12	0.18	0.00	0.04*

*Statistically significant results where $p<0.05$

Table 46: Statistically significant results for moderating variable (Size) at a sub-scale level

Moderating variable (MV)	Independent variable	Dependent variable	Adjusted R squared		Sig F. change
			Before MV	After MV	After MV
Size	Sensing 5	Market performance	0.01	0.07	0.04*
Size	Sensing 5	Financial performance	0.00	0.12	0.01*
Size	Sensing 5	Employee-Related performance	0.08	0.14	0.03*

*Statistically significant results where $p<0.05$

There is very limited research in the SE literature regarding the moderating effect of firm age on BP. We know though that according to Hlady-rispal and Servantie (2018), the performance of an SE is connected to its capacity of effectively communicating its social mission and value proposition to key stakeholders. We also know from the entrepreneurship literature that organisational size increases the ability of a company to engage in transactional marketing (Coviello et al., 2000). An institutional marketing function found in a larger and more resourced organisation, gives SEs the ability to reach new audiences beyond the direct networks of the founders (Coviello et al., 2000). This increased organisational capacity allows an SE to also intensify its marketing efforts in leveraging its social mission as a form of competitive advantage (Muñoz & Kimmitt, 2019). As a company grows in size, improved capacity in marketing and financial functional areas helps to sustain this expansion into new markets (Vickers & Lyon, 2014).

6.5.4 Summary

The objective of Hypotheses 5 and 6 was to understand how organisational age and size moderated how SEs responded to DC and whether this impacted on the relationship between DCs and BP. Out of the 16 possibilities (four DCs x four BPs) for obtaining a statistically significant result, three impactful correlations were identified regarding the impact of age and for the impact of size (Table 47). This would support the hypothesis that age and firm size are an important dimension when considering potential barriers to growth faced by SEs. The data supported the hypothesis that the greater an organisation's age and/or size, the more it positively affects BP of a SE.

Table 47: Summary of Research Question 4 - Analysis and findings

Hypothesis number	DC construct	BP sub-construct	Hypothesis conclusion	
			Age	Size
5 and 6	Sensing 1 to 4	Market performance	Disproven	Disproven
5 and 6	Sensing 1 to 4	Customer-related performance	Disproven	Disproven
5 and 6	Sensing 1 to 4	Financial performance	Disproven	Disproven
5 and 6	Sensing 1 to 4	Employee-related performance	Disproven	Disproven
5 and 6	Sensing 5	Market performance	Disproven	Proven
5 and 6	Sensing 5	Customer-related performance	Disproven	Disproven
5 and 6	Sensing 5	Financial performance	Disproven	Proven
5 and 6	Sensing 5	Employee-related performance	Disproven	Proven
5 and 6	Seizing	Market performance	Proven	Disproven
5 and 6	Seizing	Customer-related performance	Disproven	Disproven
5 and 6	Seizing	Financial performance	Proven	Disproven
5 and 6	Seizing	Employee-related performance	Disproven	Disproven
5 and 6	Transforming	Market performance	Disproven	Disproven
5 and 6	Transforming	Customer-related performance	Disproven	Disproven
5 and 6	Transforming	Financial performance	Proven	Disproven
5 and 6	Transforming	Employee-related performance	Disproven	Disproven

6.6 SUMMARY OF RESULTS

6.6.1 Hypothesis 1: DC scale reliability and validity

The results from the DC scale study conducted by Kump et al. (2019) found that this research instrument was a strong predictor of BP. The literature review also suggested the DC framework and its constructs of sensing, seizing, and transforming had validity within the entrepreneurial field. Furthermore, the literature also supported BP as having validity within the context of entrepreneurial research. The results from this study concur with the academic research that the DC scale has validity and reliability within an entrepreneurial environment.

6.6.2 Hypothesis 2: Sensing capability

The results from the research study demonstrated that for the sensing construct, SEs did not have a higher response than the CE group. This was contrary to what was suggested in the entrepreneurial literature that SEs are particularly adept at this capability due to the environmental scanning ability though their extensive networks (Davies et al., 2019) and collaborations (Saebi et al., 2019). This research study does not necessarily disprove that SEs are not good at sensing. What is suggests though, is that SEs are not as good as CEs at employing sensing to achieve financial outcomes.

6.6.3 Hypothesis 3: Seizing capability

The research study results are aligned with the academic literature. The conclusion is that SEs are as good as CEs in spotting and acting on new opportunities within their environment. What these results demonstrate, is that while still substantive, the organisational (Hlady-Rispal & Servantie, 2018) and decision-making complexity (Estrin et al., 2016) associated with SEs is not as big a hinderance on an SE's agility in responding to new opportunities as the literature suggests.

6.6.4 Hypothesis 4: Transforming capability

The transforming capability of SEs was shown by this study to be on par with CEs. These results demonstrated that there was not a statistically significant difference between how SEs and CEs engaged with this DC. This is not aligned to what the social entrepreneurship literature suggests regarding an SE's ability to renew their organisation. The literature places strong emphasis on the additional resistance that having to constantly consider both social and financial objectives places on SEs (André et al., 2018; Doherty et al., 2014). This extra layer of conflict (Ince & Hahn, 2020) was expected to dimish an SE's transformational abilty as described by Teece (2007).

6.6.5 Hypothesis 5: BP correlation

The DC literature has referenced the strong role that DCs play in correlating with firm performance (Schilke et al., 2018). This research study wanted to test whether DCs were strong drivers of BP for SEs and in doing so replicate the findings from the DC scale developed by Kump et al. (2019). The results of this study demonstrated that for the SE group, DCs as measured by the scale were not significant drivers for SEs, despite what was suggested by the academic literature.

6.6.6 Hypothesis 6: Impact of organisational age

The literature supported the premise that more established organisations demonstrated a greater level of business success than newer SEs. The research results supported this assertion. Social enterprise literature stresses the significant risk SEs have in their initial reliance on founders (Bauwens et al., 2020) and that older organisations have more diversified processes (Doherty et al., 2014) to manage this risk and seize new opportunities (Wry & York, 2017).

6.6.7 Hypothesis 7: Impact of organisational size

The literature supported the premise that larger organisations exhibited better BP than smaller SEs. This was also validated by the research study. The literature points to increased capacity in key marketing and finance functions (Vickers & Lyon, 2014) that allow for a greater capacity to expand to new markets (Coviello et al., 2000), thereby better leveraging their competitive advantage (Hlady-Rispal & Servantie, 2018).

CHAPTER 7. CONCLUSION

7.1 SUMMARY OF KEY FINDINGS

In conclusion, this research study set out to determine why SEs struggle to scale their organisations (Davies et al., 2019) and in doing so decreased the impact (Bacq & Eddleston, 2018) they have in addressing some of the most pervasive of societal challenges (Littlewood & Holt, 2018). To better grasp the nature of these barriers to growth, this study chose to draw on a strategic management framework known as DCs (Teece et al., 1997; Teece, 2007) that focused on how organisations can maintain and sustain competitive advantage (Schilke et al., 2018; Mitrega et al., 2017). The study wanted not only to make an empirical contribution by replicating a DC scale (Kump et al., 2019) but also to replicate this instrument within both a new SE and a CE environment. The objective was to firstly understand whether there was a correlation between DCs and BP within a social entrepreneurship environment and secondly to determine that if significant variations existed with the CE group, whether these differences were indicative of potential barriers to growth. The key findings of the study are summarised below.

7.1.1 The DC scale requires further research

A principal outcome from this research was that DCs are not strong drivers of BP within SEs as measured by the DC scale. However, both the results from the SE and CE groups of this research study did not show DCs as being strong drivers of BP. The empirical contribution of this study is that the DC scale (Kump et al., 2019) needs further research to better substantiate the link between DCs and BPs.

7.1.2 SEs lack clarity on their organisational image and this impacts on BP

The findings from this study revealed that in comparison to their CE counterparts, SEs had a significantly different type of engagement regarding their organisational image. The data suggests that SEs struggle with assessing their organisational branding against their competitors' efforts. The challenge faced by SEs is that in pursuing a dual financial and social mission, their institutional complexity has resulted in them not presenting a clear and consistent organisational message to key stakeholders. This study also found DCs to be highly correlated to the BP sub-scales of employee and customer-related engagement. The findings therefore suggested that there is a strong business imperative for SEs to pay additional attention to their own and their competitors' organisational image.

7.1.3 The lack of visibility on competitor activities is a barrier to growth for SEs

The literature suggests that SEs are good at constantly scanning and processing information relevant to their organisational environment. However, this research study found that in comparison to CEs, SEs are not very good at applying this same capability in understanding what activities their competitors and similar organisations to them have embarked on. The notion of DCs is that they enable competitive advantage in organisations. However, the findings showed that SEs did not have a great sense of clarity regarding what new products or services are being developed by their competitors. This made it is difficult for them to be responsive and was an important barrier to growth.

7.1.4 SEs who are good at organisational change demonstrated better BP

The findings from this research study suggested that SEs who are good at renewing their organisation in response to changes in their environment (internal or external) had better business performance outcomes. The attributes that these organisations demonstrated is that they were able to define clear reposnsibiltiies within their oraganisations when implementing organisational change, that these decisions around planned change were taken consistently and these change initiatives ran alongside their daily operations. In particular, this study concluded that SEs who were good at this transforming capability were are able to establish strong consumer loyalty and better customer support by providing their clients a better product or service offering. This data supported this as a primary driving force behind their superior BP.

7.1.5 Older and larger SEs have better BP

This research study found that the more established and capacitated an SE was, the better its relative BP. The findings point to organisational maturity having a strong bearing on the firm performance of SEs and that this was more pronounced than with the CE group. The findings demonstrated that older SEs had diversified their networks and market opportunities away from the strong initial influence that their founders had in this space. SEs that were larger in terms of full-time staff also had better marketing and financial capacity to exploit new opportunities in their environment relative to smaller entities.

7.2 THEORETICAL IMPLICATIONS

This research study sought to apply a strategic management framework of DCs within a social entrepreneurship domain. Teece (2007) already mentioned that enterprises with strong DCs also display strong entrepreneurial characteristics. The first step in the

literature review was to determine if DCs could in fact be extended into the entrepreneurial literature. The approach was to interrogate whether the four BP constructs developed by Kump et al. (2019) of market performance, customer-related performance, financial performance, and employee-related performance were in fact supported in the entrepreneurial literature as a measure of business success. Specific reference was also made to SEs in each case. The second aspect of the literature review was then to determine whether the DC components of sensing, seizing, and transforming could be extended into the entrepreneurial literature. Each of these DC constructs were then evaluated against extant entrepreneurial and SE literature to support their academic legitimacy. The first theoretical implication of this study was then to determine that there was sufficient overall evidence to support BP within the entrepreneurial literature. The second theoretical implication of this study was to confirm that appropriate academic evidence exists to support the validity of applying the DC scale within an entrepreneurial context. Taken together, these two theoretical outcomes therefore served to confirm that the strategic management framework of DCs could in fact be extended into the entrepreneurial literature and specifically into the social entrepreneurship literature too.

7.3 ACADEMIC CONTRIBUTION

There were several academic contributions that this research study sought to make. Firstly, as an emerging field of literature, most of the research within social entrepreneurship has focused on the describing and defining the phenomenon of social entrepreneurship (Gupta et al., 2020; Sassmannshausen & Volkmann, 2018). This study chose to depart from this descriptive space and consider barriers to SE growth from a strategic management perspective. This knowledge-creating process helps to further legitimise (Morris et al., 2020) the concept of social entrepreneurship as a unique field of study (Saebi et al., 2019)

Secondly, there have been numerous requests for greater focus to be placed on extending management theories and applying management research to the social entrepreneurship domain (Sassmannshausen & Volkmann, 2018; Stephan et al., 2016). This study has therefore made a specific contribution in this area by applying DCs within an SE context. Schilke et al. (2018) referred to DCs as one of the most significant theories in contemporary management research. To date, there has been very limited research into application of DCs within an SE environment to date. What little research exists did suggest that there was a high level of applicability of DCs within SEs (Ince & Hahn, 2018; Moss et al., 2011). By comparison, another management theory such as the resource-based view (Barney, 2001) that is also linked to competitive advantage has

seen greater utilisation within the SE research field (Bacq & Eddleston, 2018; Gupta et al., 2020).

Thirdly, it has been estimated that less than 10% of the accredited journal articles on social entrepreneurship research focused on quantitative studies (Sassmannshausen & Volkmann, 2018). There have been frequent requests to increase the output of journal articles that employ quantitative statistical methods (Rawhouser et al., 2019; Sassmannshausen & Volkmann, 2018). While not a journal article, this research study has taken a quantitative approach in response to this call to action.

Finally, while the concept of DCs was first conceived by Teece in 1997 (Teece et al., 1997), there have only been two DC scales developed according to rigorous, scale construction standards (Kump et al., 2019; Wilden et al., 2013). This research study has replicated the DC scale that was formulated by Kump et al. (2019) in both a new geographical and new organisational context. It is hoped that this has made a small empirical contribution towards supporting the development a unified DC scale with the high validity that the researchers envisaged.

7.4 IMPLICATIONS FOR SES

This research study has shown at a theoretical level that DCs are a relevant and insightful framework for SEs to embrace. The statistical analysis has also demonstrated that the DC scale developed by Kump et al. (2019) has high construct validity and reliability within the social entrepreneurship space. The study did demonstrate though that DCs were not strong predictors of BP for either the SE or CE replication groups. The intention of this research study, however, was to help unlock of the barriers to growth (Davies et al., 2019) that prevent SEs from growing or scaling their impact (Bacq & Eddleston, 2018; Morris et al., 2020). It is for this reason that the framework of DCs was employed. As a management theory, it helps explain competitive advantage in fast changing and unpredictable market environments (Felin & Powell, 2016). By making use of a comparative CE group, the research study has provided some valuable SE practitioner insights.

7.5 LIMITATIONS

There are several limitations that impacted on this research study. The research study largely utilised a non-probability, purposive sampling technique that exposes the study to a higher level of research bias (Sharma, 2017). The non-random nature of the research population precludes any future study extensions or longitudinal study considerations (Miles & Arnold, 1991). Another important observation that was also

noted by Kump et al. (2019) was with regards to the survey instrument making use of self-reported data. This was particularly pertinent to the BP questions and provided the possibility of systematic measurement error (Podsakoff et al., 2003). There was also the challenge of informant bias where only the people most interested in the study responded to the survey and this could skew the overall findings (Creswell & Creswell, 2018). Another consideration was administering a survey in a year of dramatic social change (De la Sablonnière, 2017). However, the business performance questions that would have been most affected by this factor required participants to reference their organisation's performance in 2019. Lastly, the small size of the respondent groups and in particular the SEs (n = 57) potentially impacted on the reliability of the findings. It also created limits on the robustness of some of the statistical tests such as the EFA and CFA (Hair et al., 2019).

7.6 SUGGESTIONS FOR FUTURE RESEARCH

This survey instrument also collected the responses from a non-profit grouping (n=73) but since they were outside of the scope of this study, their answers were not considered. It would have been particularly insightful to compare the spectrum of practitioners (Alter, 2007) found in Table 1 that includes non-profits, SEs and CEs. Such a research study would add value to the social entrepreneurship literature in drawing comparative distinctions in the responses between non-profits and SEs. In a sense, most of the hard work in obtaining a decent non-profit sample group and suitable research study model has already been done.

This study also highlights opportunities for further research into the barriers to growth or enablers to growth that were highlighted in Chapter 7. A potential research extension could involve a qualitative assessment that focuses on these specific barriers or enablers to growth. The envisaged outcome could take the form of a mixed methods research study that draws on the statistical analysis and groundwork presented in this study but then uses a qualitative approach to add greater depth in hopefully substantiating the subject matter further.

7.7 CONCLUDING REMARKS

It is hoped that this research study has provided some small but insightful contributions to the literature. Given the newness of applying a strategic management framework like DC within an SE environment, this range-finding study has shown that more research in this area would add to the body of social entrepreneurship research. I would also like to

take the opportunity to thank the researchers behind the DC scale (Kump et al., 2019) for developing such a well-conceived and relevant instrument.

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APPENDICES

Appendix A: Survey Instrument

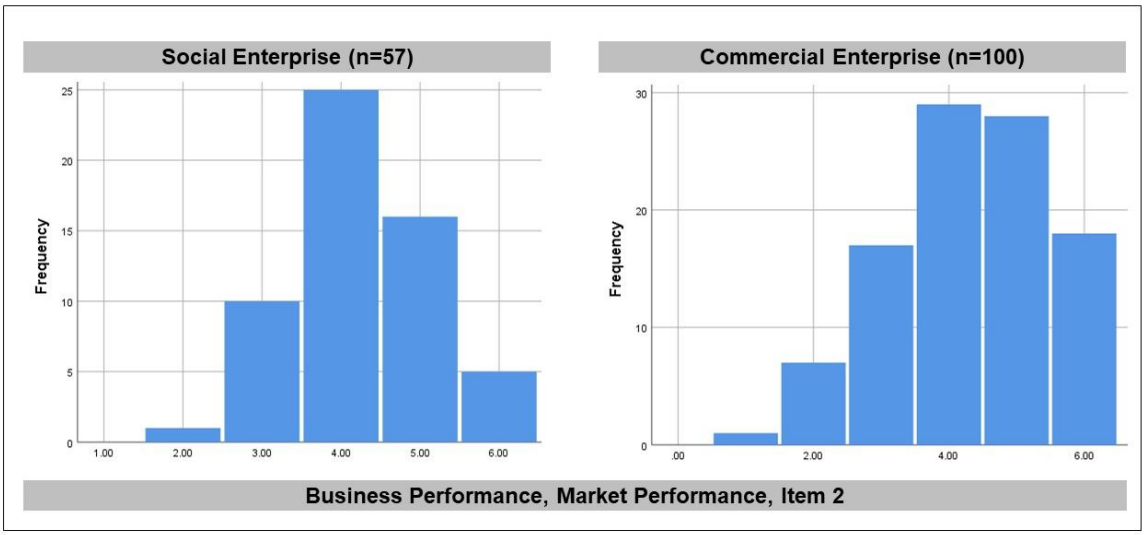
Table 48: Survey instrument: Nominal data

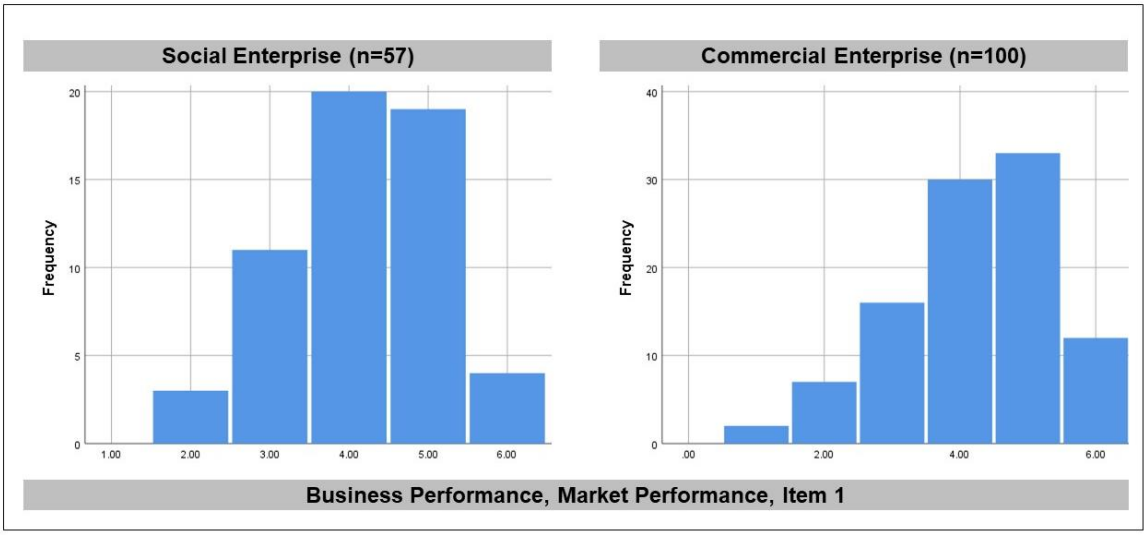
Firm Size	How many full-time employees does your organisation currently employ?	Discrete numerical value
Firm Age	In what year did your organisation begin operating?	Discrete numerical value
Position of Respondent	Which of the following best describes your role in the organisation?	Founder; Owner; CEO; Executive; Senior Management; Middle Management; Other - Please specify
Description of Organisation	Which of the following best describes your business as it is now?	Business; Social Enterprise; Non-Profit Company; Entrepreneurial Venture; Other - Please specify
Legal Status	What is the legal status of your organisation?	Private (Pty) Limited Company; Section 21 Not for Profit Company; Closed Corporation; Sole Proprietor; Non Profit Trust; Other – Please specify
Principal Industry	Which of the following best describes the principal industry of your organization?	Advertising and Marketing; Agriculture and Fisheries; Airlines & Aerospace (including Defence); Architecture; Automotive; Business Support and Logistics; Childcare; Construction, Machinery and Homes; Consultancy; Crafts; Design (e.g. product, graphic or fashion design); Education; Energy and Clean Technology; Film, TV, Video, Radio and Photography; Financial Services; Food and Nutrition; Forestry; Government; Health, Social Care and Pharmaceuticals; Hospitality (e.g. restaurants, catering); Housing; Infrastructure Development and Maintenance; Insurance; IT, Software, Computer Services (e.g. video games, software development); Justice and Rehabilitation; Livelihoods and Employment Creation (including work-related training); Manufacturing; Mining; Museums, Galleries and Libraries; Music, Performing and Visual Arts; Publishing; Real Estate; Retail and Consumer Durables; Tourism; Telecommunications, Technology, Internet & Electronics; Transport, Delivery and Mobility; Water and Sanitation; Workspace Provision; Other – Please specify (Required):

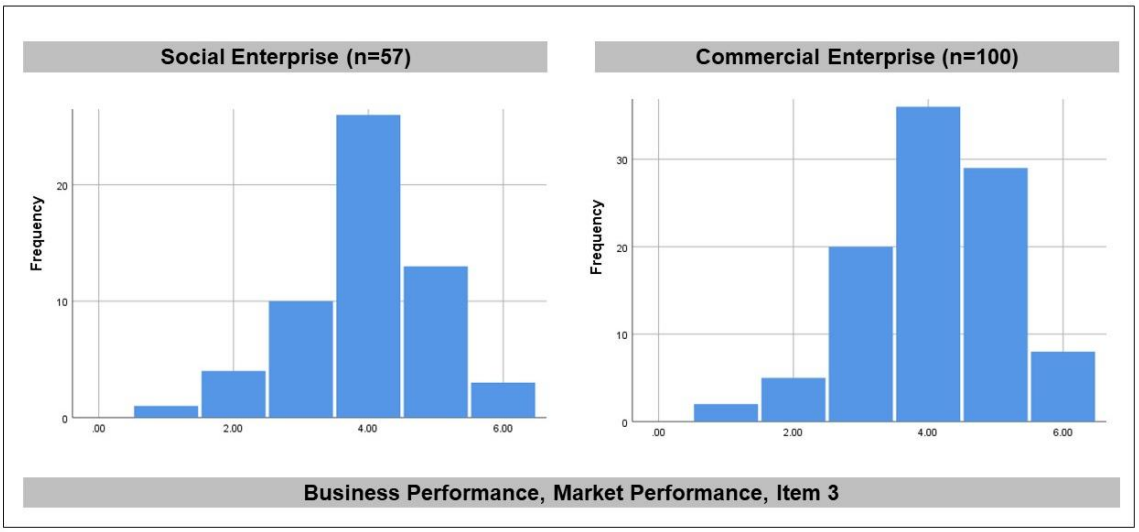
Appendix B: Histograms

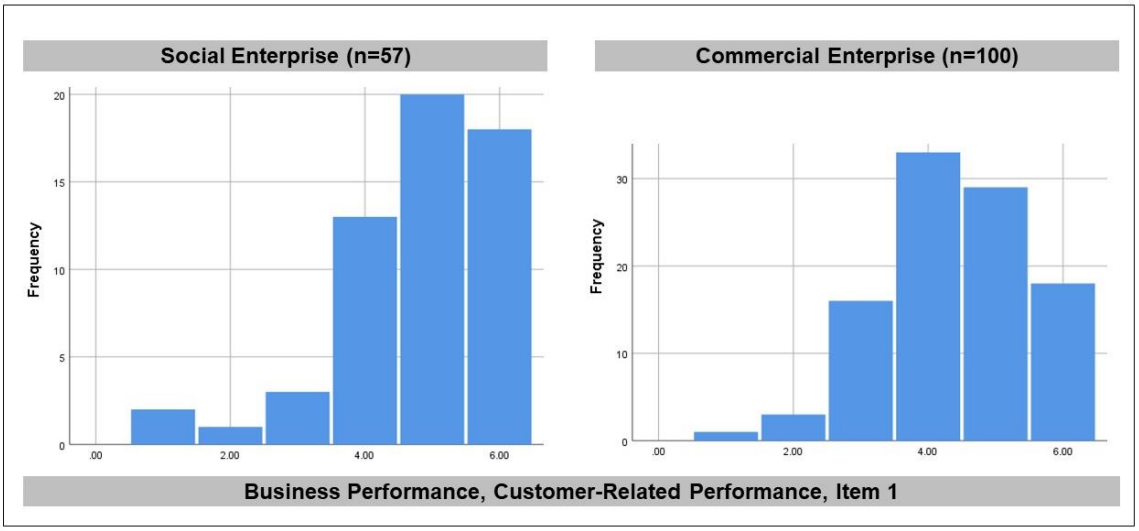
The corresponding SE and CE histograms for the DC and BP survey instruments have been included below (Figure 10). Note that as the SE (n=57) and CE (n=100) research groups have a different number of respondents, the intention of presenting the SE and CE histograms next to each other is to provide insight into the comparative data distribution. The frequency scales are different. Where data values are not discrete, this implies that mean responses were utilised for incomplete entries according to guidelines as stipulated by (Hair et al., 2019).

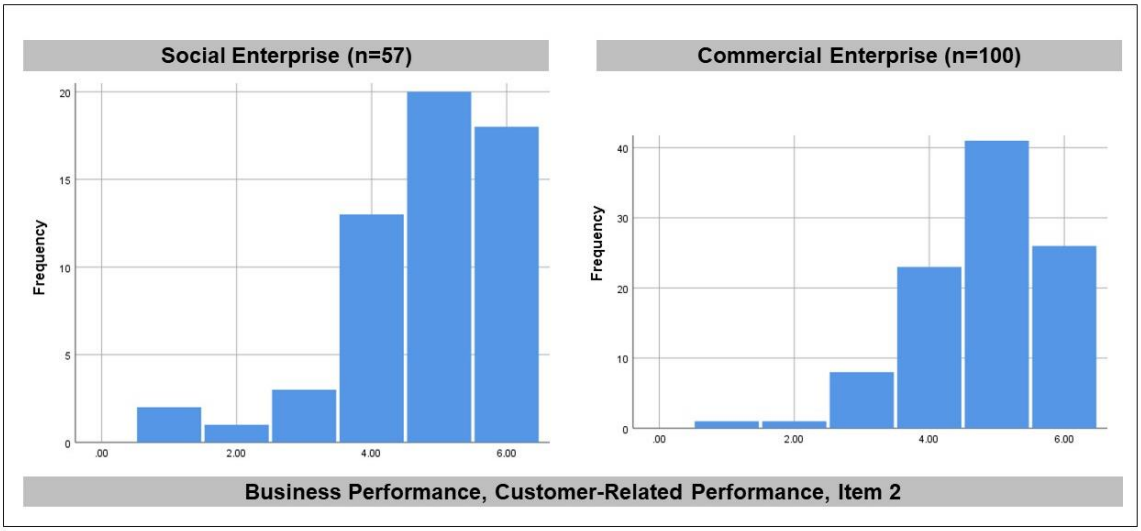
Figure 10: Histogram for the DC and BP survey item (SE vs CE distribution)

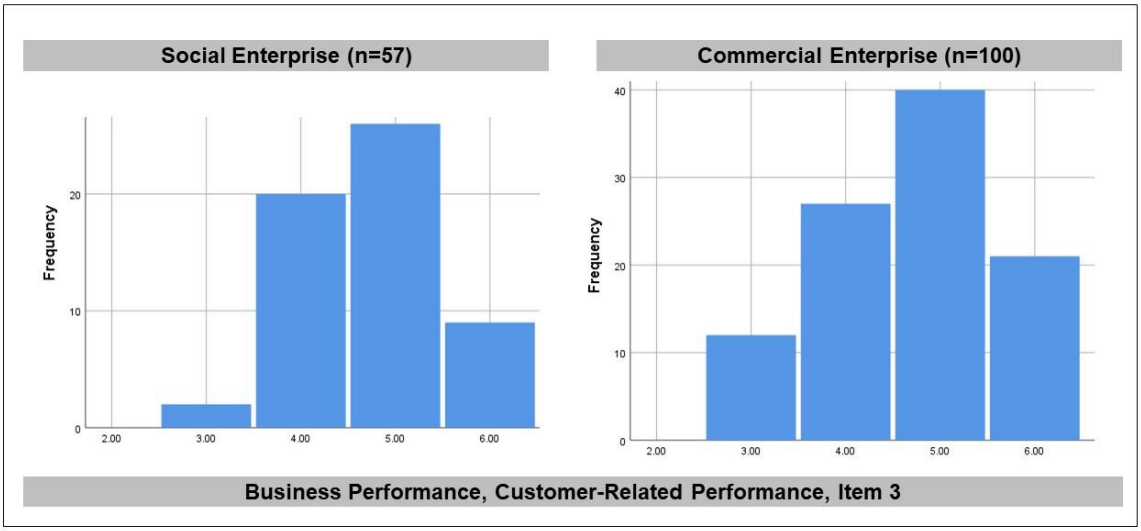


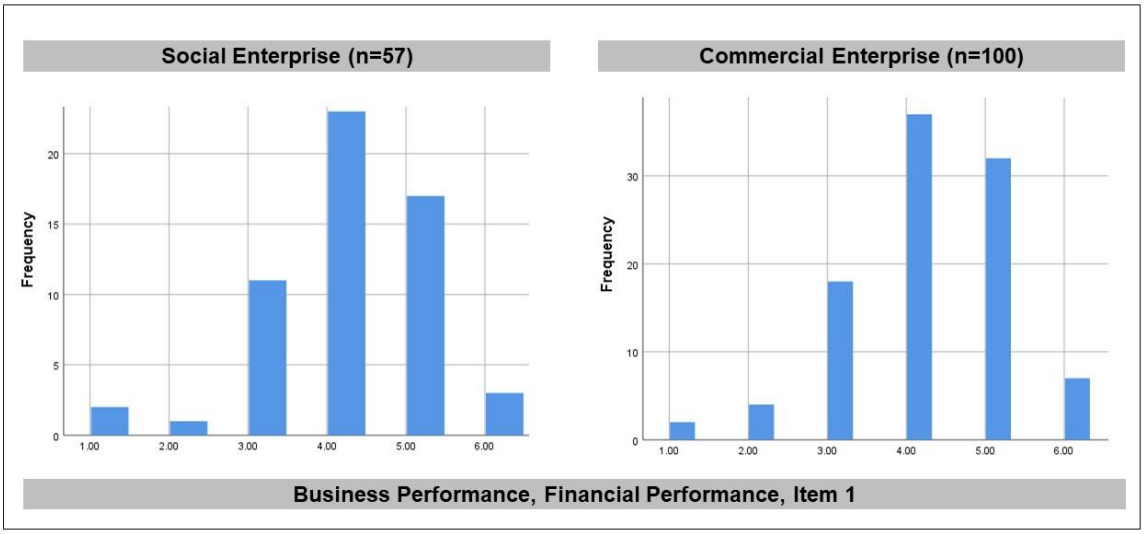


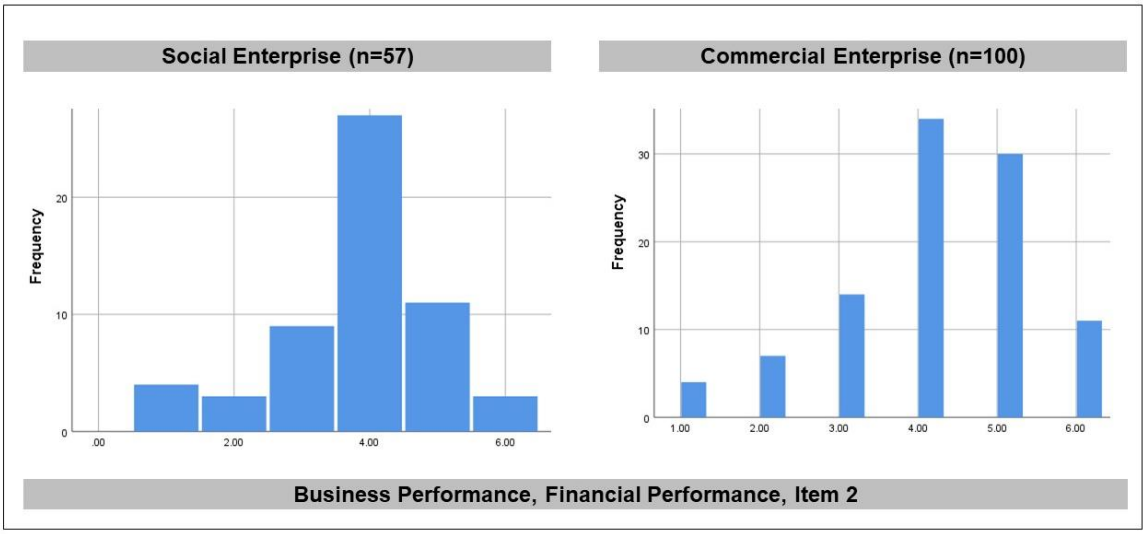

Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Business Performance, Market Performance, Item 3

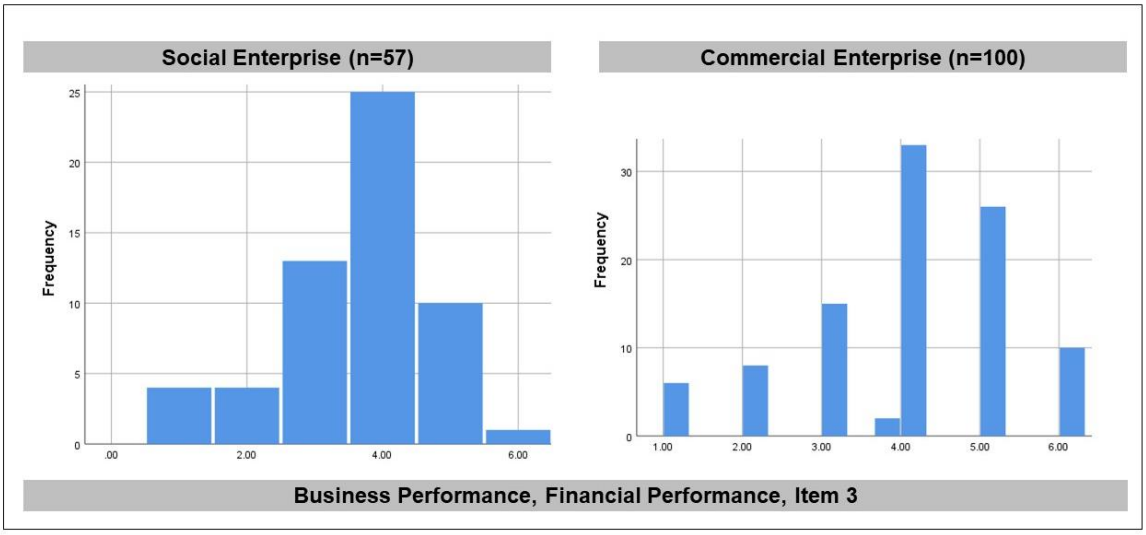

Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Business Performance, Customer-Related Performance, Item 1

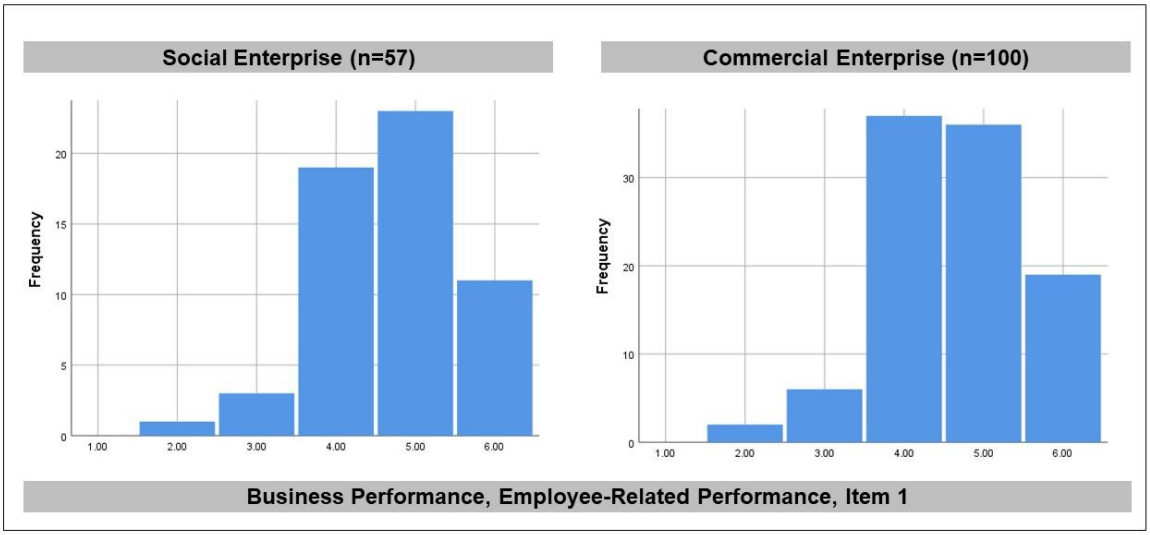

Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Business Performance, Customer-Related Performance, Item 2

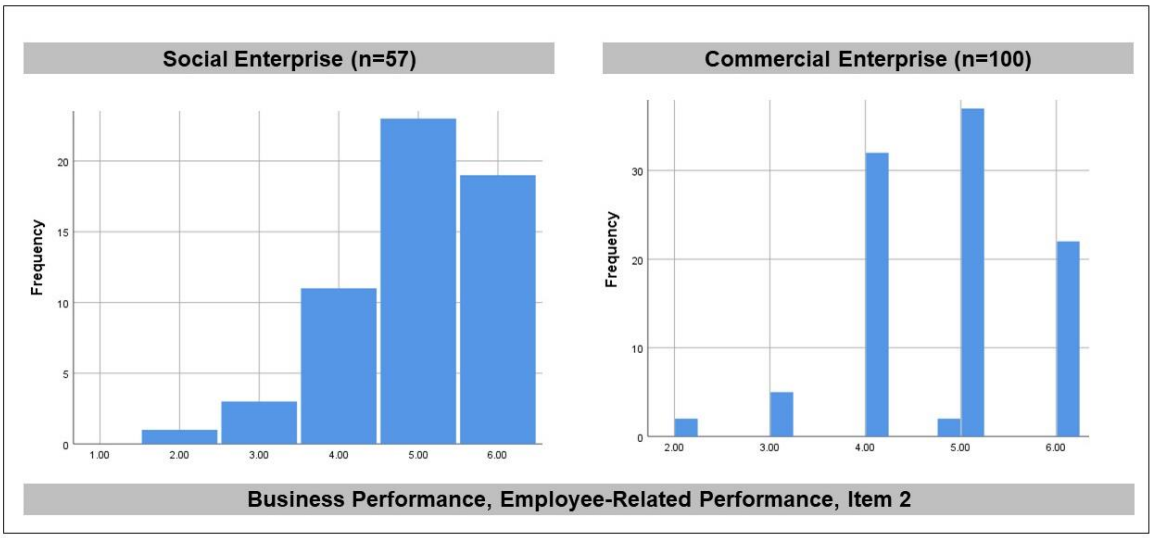

Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Business Performance, Customer-Related Performance, Item 3

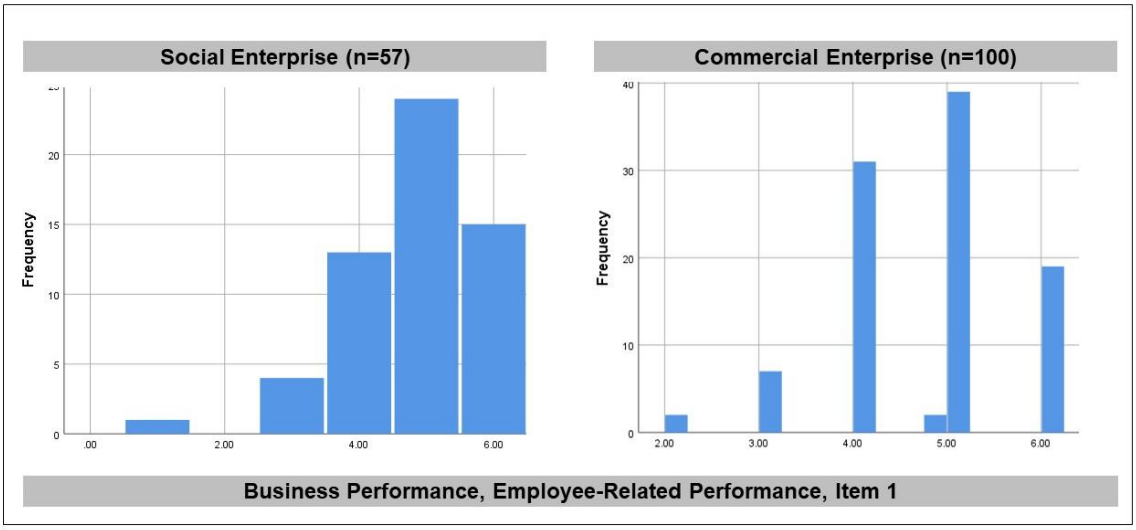

Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Business Performance, Financial Performance, Item 1

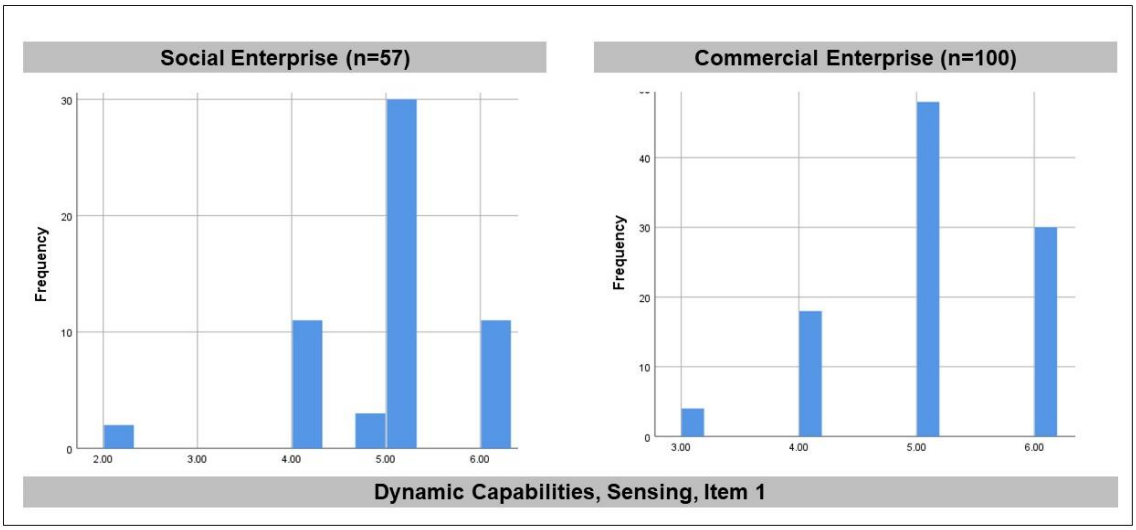

Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Business Performance, Financial Performance, Item 2

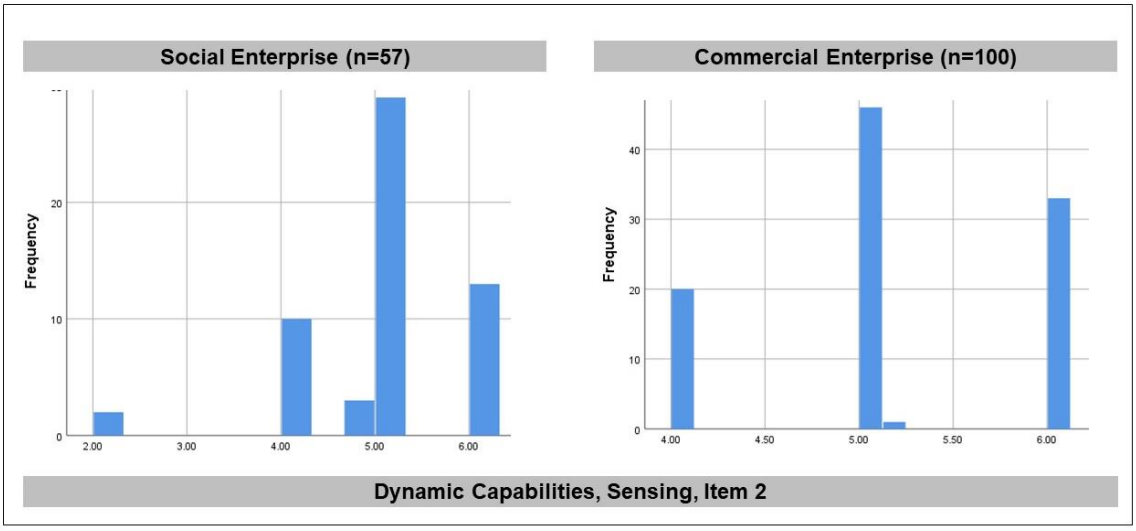

Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Business Performance, Financial Performance, Item 3

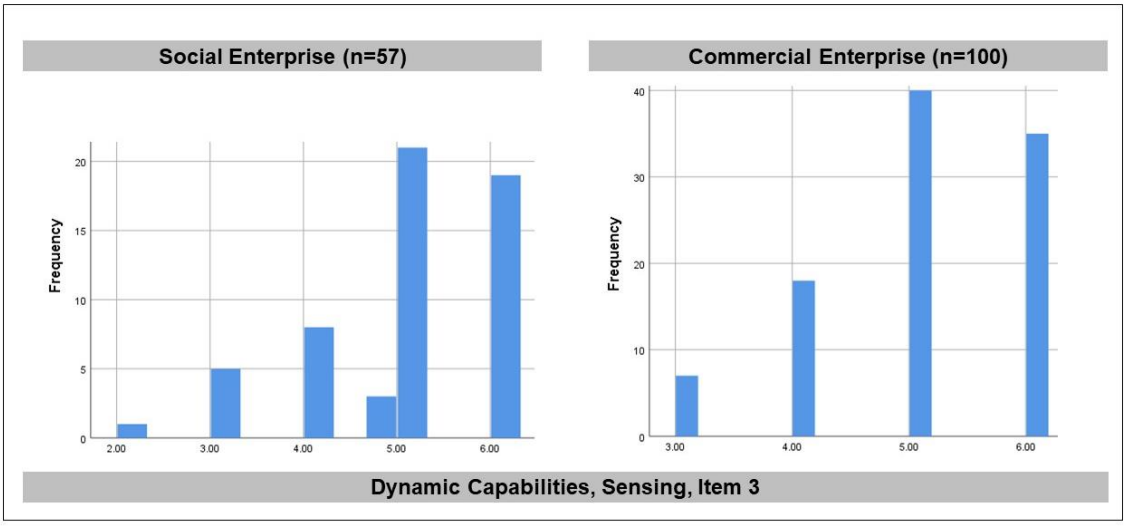

Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Business Performance, Employee-Related Performance, Item 1

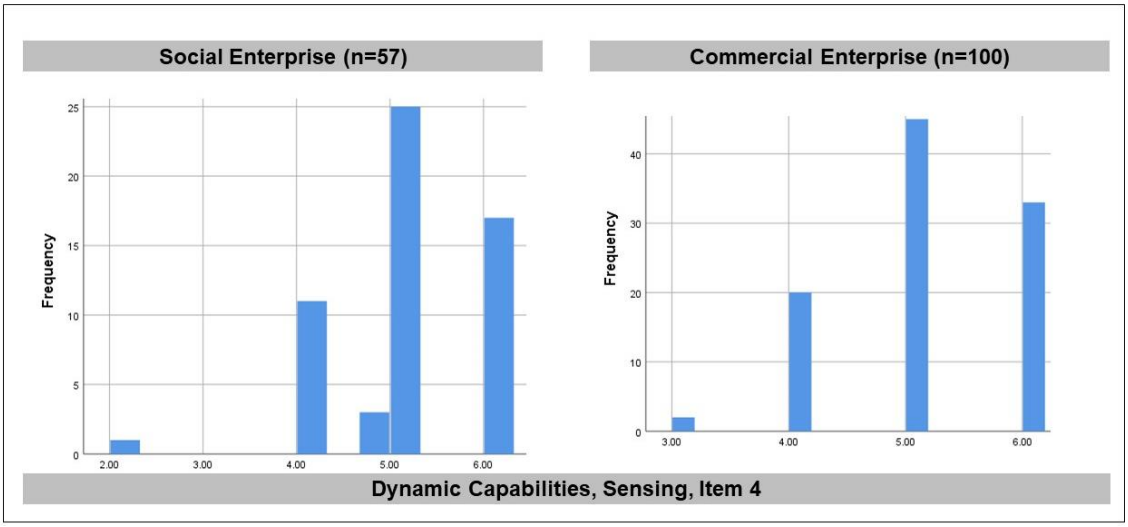

Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Business Performance, Employee-Related Performance, Item 2

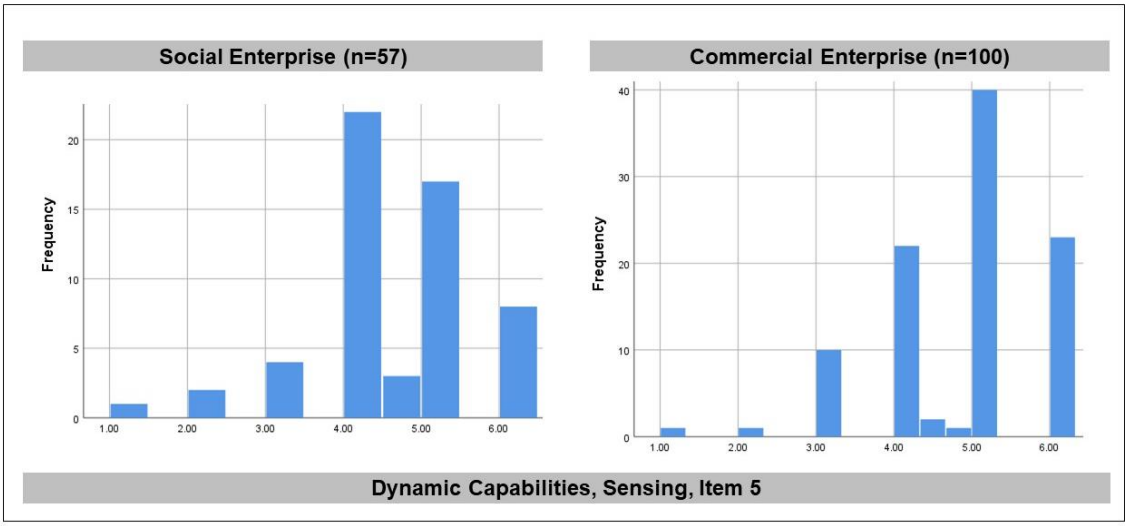

Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Business Performance, Employee-Related Performance, Item 1


Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Dynamic Capabilities, Sensing, Item 1


Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Dynamic Capabilities, Sensing, Item 2


Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Dynamic Capabilities, Sensing, Item 3


Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Dynamic Capabilities, Sensing, Item 4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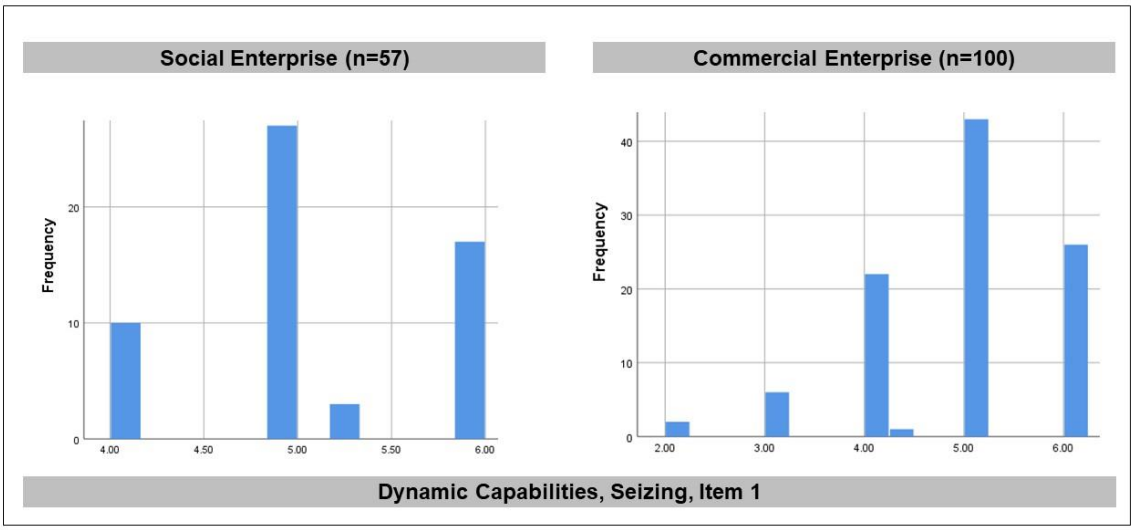
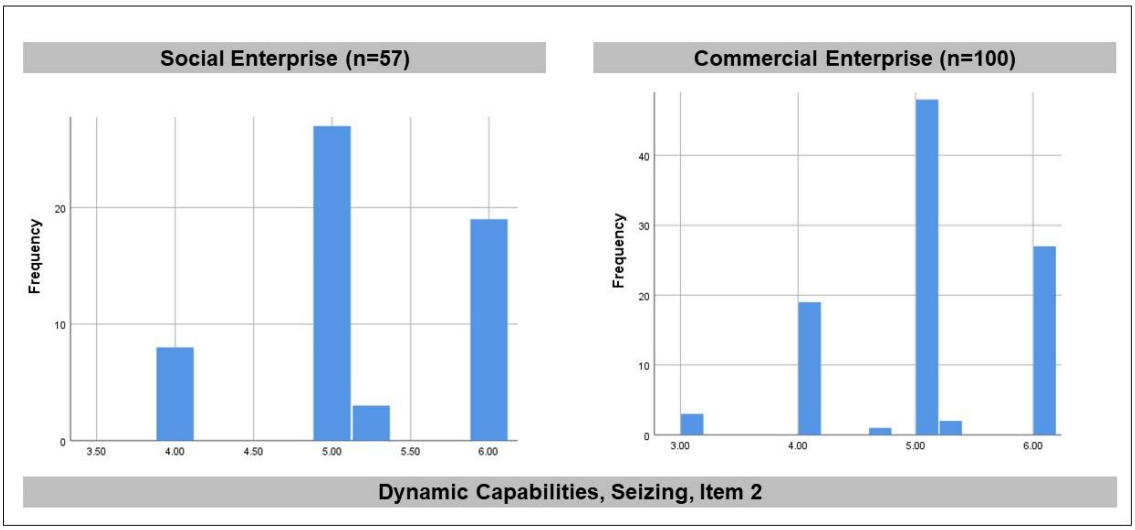
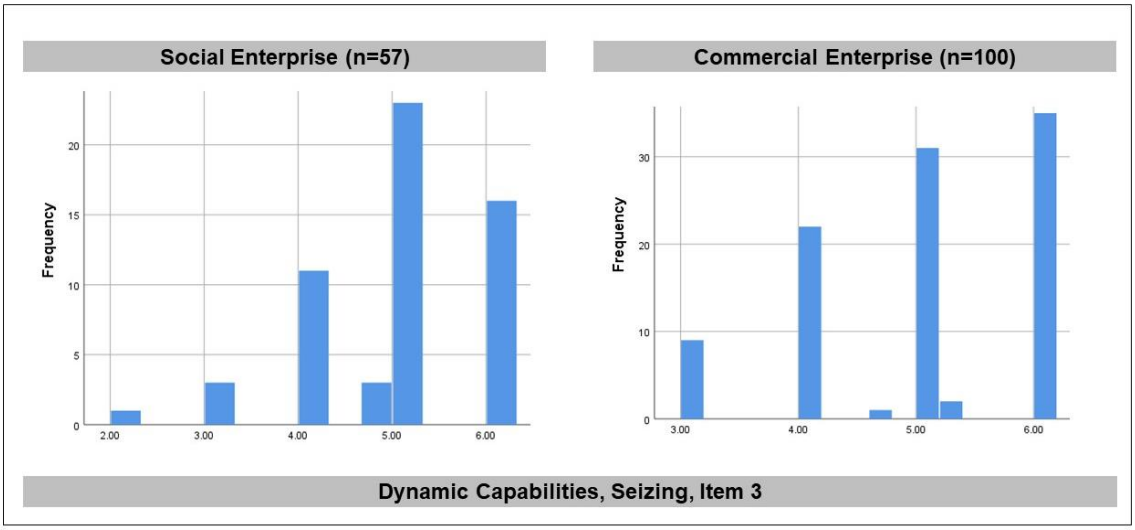
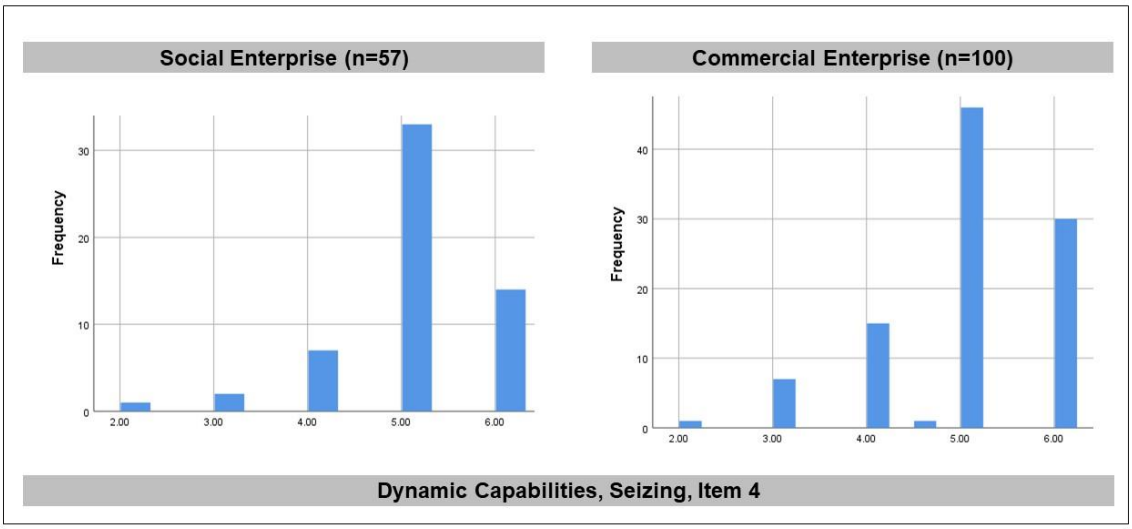
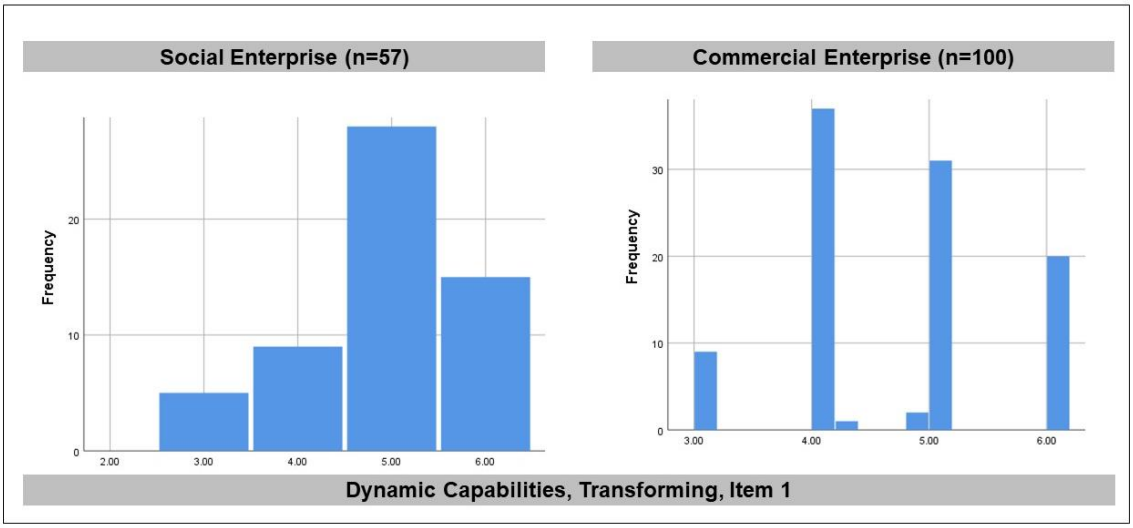
Frequency
Dynamic Capabilities, Sensing, Item 5

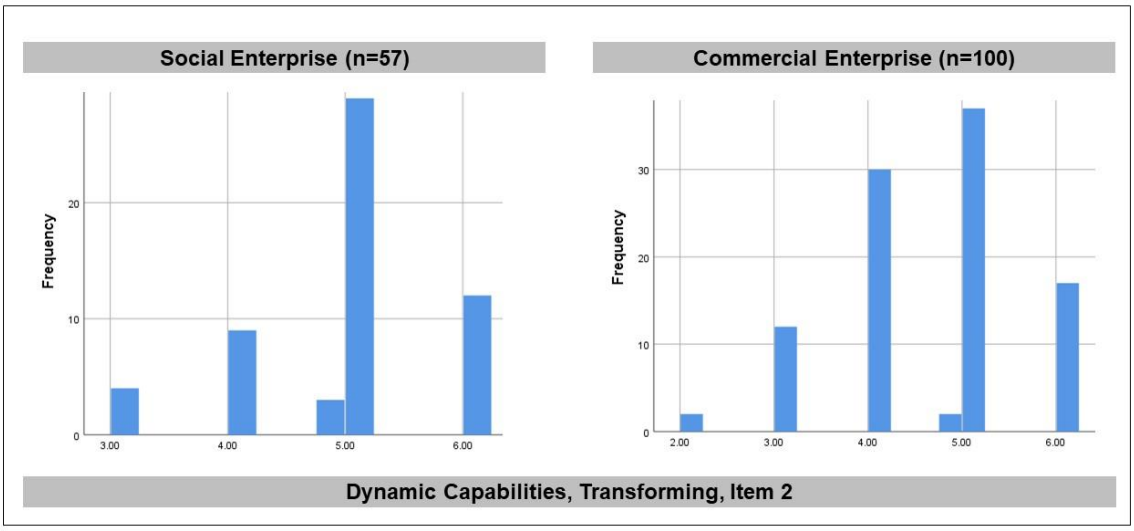

Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Dynamic Capabilities, Seizing, Item 1

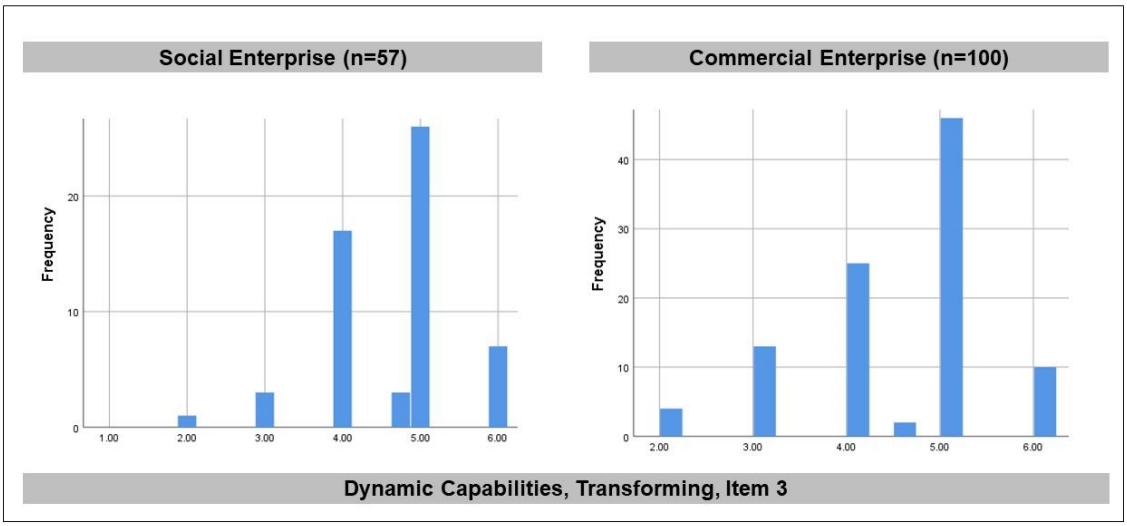

Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Dynamic Capabilities, Seizing, Item 2

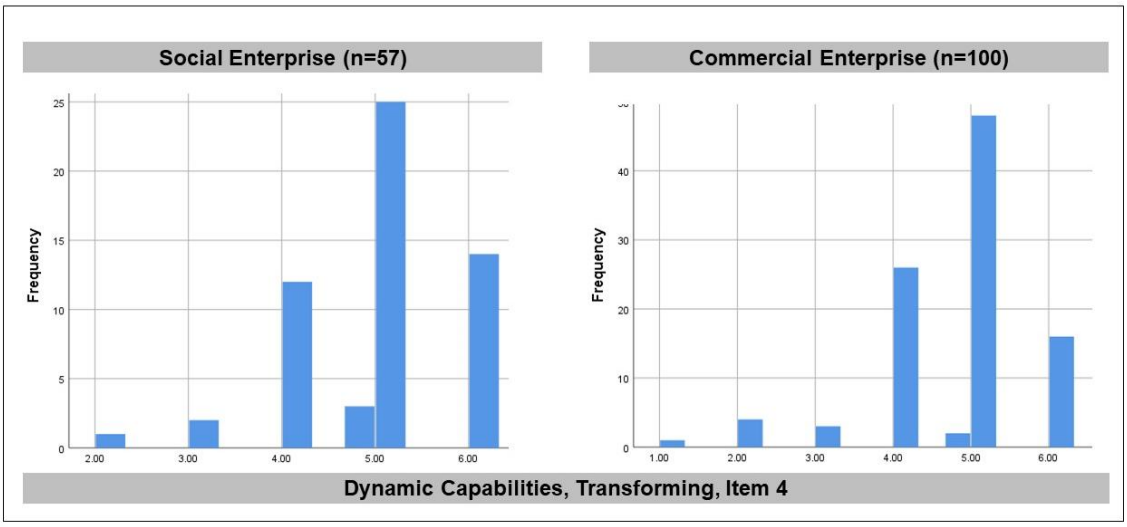

Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Dynamic Capabilities, Seizing, Item 3

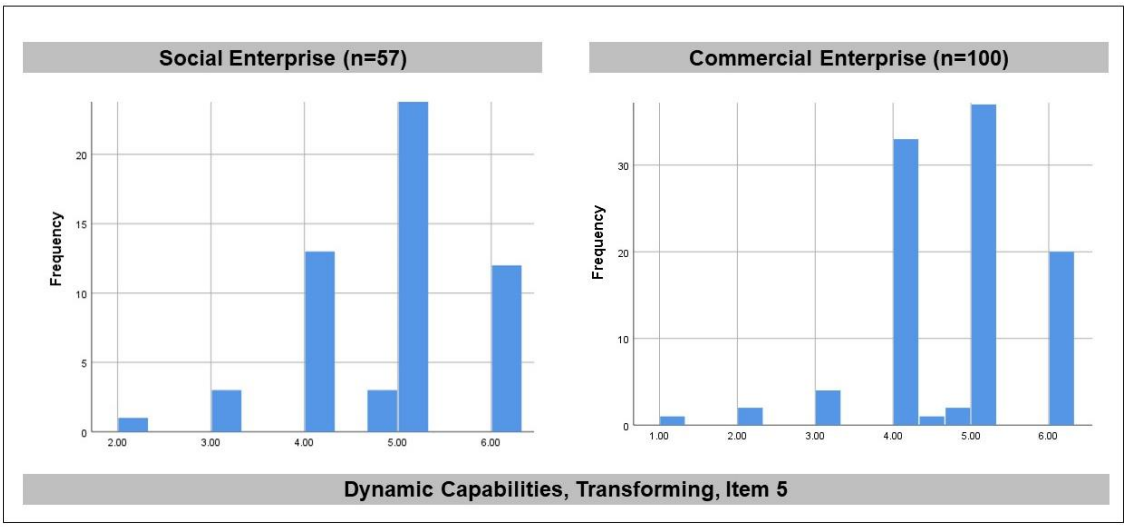

Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Dynamic Capabilities, Seizing, Item 4


Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Dynamic Capabilities, Transforming, Item 1


Social Enterprise (n=57)
Commercial Enterprise (n=100)
Frequency
Dynamic Capabilities, Transforming, Item 2







End of Figure 10: Histogram for the DC and BP survey item (SE vs CE distribution)

Appendix C: Component Loading – Dynamic Capabilities

Table 49: Social enterprise - Total variance explained (Sensing)

Total variance explained									
Component	Initial Eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.82	56.47	56.47	2.82	56.47	56.47	2.73	54.63	54.63
2	1.07	21.34	77.81	1.07	21.34	77.81	1.16	23.18	77.81
3	0.54	10.79	88.60						
4	0.31	6.21	94.82						
5	0.26	5.18	100.00						
Extraction method: Principal component analysis.									

Table 50: Social enterprise – Rotated component view (Sensing)

Rotated component matrix[a]		
	Component	
	1	2
DC_SE_1	0.88	-0.21
DC_SE_2	0.84	0.06
DC_SE_3	0.79	0.38
DC_SE_4	0.79	0.21
DC_SE_5	0.07	0.96
Extraction method: Principal component analysis. Rotation method: Varimax with Kaiser normalisation.		
a. Rotation converged in 3 iterations.		

Table 51: Social enterprise – Component transformation matrix (Sensing)

Component transformation matrix		
Component	1	2
1	0.97	0.23
2	-0.23	0.97
Extraction method: Principal component analysis. Rotation method: Varimax with Kaiser normalisation.		

Table 52: Commercial enterprise - Total variance explained (Sensing)

Total variance explained						
Component	Initial Eigenvalues			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.86	57.22	57.22	2.86	57.22	57.22
2	0.91	18.14	75.36			
3	0.58	11.64	86.99			
4	0.37	7.48	94.48			
5	0.28	5.53	100.00			
Extraction method: Principal component analysis.						

Table 53: Social enterprise - Total variance explained (Seizing)

Total variance explained						
Component	Initial Eigenvalues			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.26	56.59	56.59	2.26	56.59	56.59
2	0.78	19.56	76.15			
3	0.61	15.23	91.38			
4	0.35	8.62	100.00			
Extraction method: Principal component analysis.						

Table 54: Commercial enterprise - Total variance explained (Seizing)

Total variance explained						
Component	Initial Eigenvalues			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.85	71.21	71.21	2.85	71.21	71.21
2	0.59	14.74	85.95			
3	0.38	9.38	95.33			
4	0.19	4.68	100.00			
Extraction method: Principal component analysis.						

Table 55: Social enterprise - Total variance explained (Transforming)

Total variance explained						
Component	Initial Eigenvalues			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.05	61.05	61.05	3.05	61.05	61.05
2	0.68	13.59	74.64			
3	0.57	11.35	85.98			
4	0.44	8.85	94.83			
5	0.26	5.17	100.00			
Extraction method: Principal component analysis.						

Table 56: Commercial enterprise - Total variance explained (Transforming)

Total variance explained						
Component	Initial Eigenvalues			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.34	66.75	66.75	3.34	66.75	66.75
2	0.73	14.55	81.29			
3	0.38	7.51	88.80			
4	0.30	6.05	94.85			
5	0.26	5.15	100.00			
Extraction method: Principal component analysis.						

Appendix D: Component Loading – Business Performance

Table 57: Social enterprise - Total variance explained (Market performance)

Total variance explained						
Component	Initial Eigenvalues			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.09	69.66	69.66	2.09	69.66	69.66
2	0.50	16.74	86.40			
3	0.41	13.60	100.00			
Extraction method: Principal component analysis.						

Table 58: Social enterprise - Total variance explained (Customer-related performance)

Total variance explained						
Component	Initial Eigenvalues			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.54	77.06	77.06	1.54	77.06	77.06
2	0.46	22.94	100.00			
Extraction method: Principal component analysis.						

Table 59: Social enterprise - Total variance explained (Financial performance)

Total variance explained						
Component	Initial Eigenvalues			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.29	76.23	76.23	2.29	76.23	76.23
2	0.46	15.35	91.58			
3	0.25	8.42	100.00			
Extraction method: Principal component analysis.						

Table 60: Social enterprise - Total variance explained (Employee-related performance)

Total variance explained						
Component	Initial Eigenvalues			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.23	74.34	74.34	2.23	74.34	74.34
2	0.47	15.56	89.90			
3	0.30	10.10	100.00			
Extraction method: Principal component analysis.						

Table 61: Commercial enterprise - Total variance explained (Market performance)

Total variance explained						
Component	Initial Eigenvalues			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.27	75.54	75.54	2.27	75.54	75.54
2	0.42	14.09	89.63			
3	0.31	10.37	100.00			
Extraction method: Principal component analysis.						

Table 62: Commercial enterprise - Total variance explained (Customer-related performance)

Total variance explained						
Component	Initial Eigenvalues			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.55	77.60	77.60	1.55	77.60	77.60
2	0.45	22.40	100.00			
Extraction method: Principal component analysis.						

Table 63: Commercial enterprise - Total variance explained (Financial performance)

Total variance explained						
Component	Initial Eigenvalues			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.55	84.96	84.96	2.55	84.96	84.96
2	0.32	10.57	95.53			
3	0.13	4.47	100.00			
Extraction method: Principal component analysis.						

Table 64: Commercial enterprise - Total variance explained (Employee-related performance)

Total variance explained						
Component	Initial Eigenvalues			Extraction sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.05	68.38	68.38	2.05	68.38	68.38
2	0.71	23.61	91.99			
3	0.24	8.01	100.00			
Extraction method: Principal component analysis.						

Appendix E: Confirmatory Factor Analysis – Social Enterprise

Table 65: Social enterprise with unstandardised regression weights

First order	Dir	Second order	Est	S.E.	C.R.	P
Sensing_SE1to4	<---	DynamicCapabilities_DC	1			
Seizing_SZ	<---	DynamicCapabilities_DC	1			
Transforming_T	<---	DynamicCapabilities_DC	1			
DC_SE_1	<---	Sensing_SE1to4	1			
DC_SE_2	<---	Sensing_SE1to4	0.98	0.18	5.36	***
DC_SE_3	<---	Sensing_SE1to4	1.27	0.21	6.05	***
DC_SE_4	<---	Sensing_SE1to4	1.06	0.17	6.21	***
DC_SZ_1	<---	Seizing_SZ	1.00			
DC_SZ_2	<---	Seizing_SZ	1.20	0.22	5.55	***
DC_SZ_3	<---	Seizing_SZ	1.14	0.29	3.90	***
DC_SZ_4	<---	Seizing_SZ	1.12	0.26	4.28	***
DC_TR_1	<---	Transforming_T	1.00			
DC_TR_2	<---	Transforming_T	0.79	0.13	5.93	***
DC_TR_3	<---	Transforming_T	0.75	0.14	5.29	***
DC_TR_4	<---	Transforming_T	0.72	0.15	4.74	***
DC_TR_5	<---	Transforming_T	0.79	0.15	5.20	***

Table 66: Social enterprise with standardised regression weights

First order	Dir	Second order	Estimate
Sensing_SE1to4	<---	DynamicCapabilities_DC	0.74
Seizing_SZ	<---	DynamicCapabilities_DC	0.99
Transforming_T	<---	DynamicCapabilities_DC	0.63
DC_SE_1	<---	Sensing_SE1to4	0.74
DC_SE_2	<---	Sensing_SE1to4	0.71
DC_SE_3	<---	Sensing_SE1to4	0.79
DC_SE_4	<---	Sensing_SE1to4	0.81
DC_SZ_1	<---	Seizing_SZ	0.65
DC_SZ_2	<---	Seizing_SZ	0.83
DC_SZ_3	<---	Seizing_SZ	0.57
DC_SZ_4	<---	Seizing_SZ	0.63
DC_TR_1	<---	Transforming_T	0.86
DC_TR_2	<---	Transforming_T	0.73
DC_TR_3	<---	Transforming_T	0.67
DC_TR_4	<---	Transforming_T	0.61
DC_TR_5	<---	Transforming_T	0.66

Table 67: Social enterprise baseline comparisons

Baseline comparisons					
Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	0.72	0.65	0.85	0.80	0.84
Saturated model	1		1		1
Independence model	0	0	0	0	0

Appendix F: Confirmatory Factor Analysis – Commercial Enterprise

Table 68: Commercial enterprise with unstandardised regression weights

First order	Dir	Second order	Est.	S.E.	C.R.	P
Sensing_1to4	<---	DynamicCapailities_DC	1			
Seizing_SZ	<---	DynamicCapailities_DC	1			
Transforming_T	<---	DynamicCapailities_DC	1			
DC_SE_1	<---	Sensing_1to4	1			
DC_SE_2	<---	Sensing_1to4	0.84	0.09	9.00	***
DC_SE_3	<---	Sensing_1to4	0.89	0.12	7.29	***
DC_SE_4	<---	Sensing_1to4	0.80	0.11	7.66	***
DC_SZ_1	<---	Seizing_SZ	1.00			
DC_SZ_2	<---	Seizing_SZ	0.79	0.10	7.81	***
DC_SZ_3	<---	Seizing_SZ	0.97	0.13	7.56	***
DC_SZ_4	<---	Seizing_SZ	1.05	0.11	9.22	***
DC_TR_1	<---	Transforming_T	1.00			
DC_TR_2	<---	Transforming_T	1.02	0.13	7.96	***
DC_TR_3	<---	Transforming_T	1.12	0.13	8.96	***
DC_TR_4	<---	Transforming_T	1.14	0.13	9.11	***
DC_TR_5	<---	Transforming_T	1.12	0.13	8.96	***

Table 69: Commercial enterprise with standardised regression weights

First order	Dir	Second order	Estimate
Sensing_1to4	<---	DynamicCapailities_DC	0.83
Seizing_SZ	<---	DynamicCapailities_DC	0.87
Transforming_T	<---	DynamicCapailities_DC	0.82
DC_SE_1	<---	Sensing_1to4	0.80
DC_SE_2	<---	Sensing_1to4	0.81
DC_SE_3	<---	Sensing_1to4	0.69
DC_SE_4	<---	Sensing_1to4	0.71
DC_SZ_1	<---	Seizing_SZ	0.81
DC_SZ_2	<---	Seizing_SZ	0.72
DC_SZ_3	<---	Seizing_SZ	0.70
DC_SZ_4	<---	Seizing_SZ	0.81

First order	Dir	Second order	Estimate
DC_TR_1	<---	Transforming_T	0.74
DC_TR_2	<---	Transforming_T	0.74
DC_TR_3	<---	Transforming_T	0.81
DC_TR_4	<---	Transforming_T	0.82
DC_TR_5	<---	Transforming_T	0.81

Table 70: Commercial enterprise baseline comparisons

Baseline comparisons					
Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	0.81	0.76	0.88	0.85	0.87
Saturated model	1		1		1
Independence model	0	0	0	0	0

Appendix G: Test for Differences Tables

Table 71: Dynamic capabilities – Sensing 1 to 4 (SE vs CE)

Test for differences – Sensing 1 to 4									
	Levene's test for equality of variance		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% Confidence interval of the difference	
								Lower	Upper
Equal variances assumed	0.01	0.92	1.01	155	0.32	0.11	0.11	-0.11	0.33
Equal variances not assumed			0.97	104.90	0.33	0.11	0.12	-0.12	0.34

Table 72: Dynamic capabilities – Sensing 5 (SE vs CE)

Test for differences – Sensing 5									
	Levene's test for equality of variance		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% Confidence interval of the difference	
								Lower	Upper
Equal variances assumed	0.00	0.96	1.86	155	0.07	0.32	0.17	-0.02	0.66
Equal variances not assumed			1.85	114.37	0.07	0.32	0.17	-0.02	0.66

Table 73: Dynamic capabilities – Seizing 5 (SE vs CE)

Test for differences - Seizing									
	Levene's test for equality of variance		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% Confidence interval of the difference	
								Lower	Upper
Equal variances assumed	5.74	0.02	-0.98	155	0.32	-0.11	0.12	-0.34	0.12
Equal variances not assumed			-1.06	142.45	0.29	-0.11	0.11	-0.33	0.099

Table 74: Dynamic Capabilities – Transforming (SE vs CE)

Test for Differences - Transforming									
	Levene's test for equality of variance		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% Confidence interval of the difference	
								Lower	Upper
Equal variances assumed	1.17	0.28	-1.91	155	0.06	-0.24	0.12	-0.48	0.01
Equal variances not assumed			-2.00	132.64	0.05	-0.24	.012	-0.47	0.00

Appendix H: Multiple Regression Tables

Table 75: DC Levers on business performance (Market performance)

Model summary[b]					
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	Durbin-Watson
Social enterprise	0.39[a]	0.15	0.09	0.78	1.90
Commercial enterprise	0.38[a]	0.15	0.11	0.95	1.83
a. Predictors: (Constant), Sensing 1 to 4, Sensing 5, Seizing, Transforming					
b. Dependent Variable: Business Performance (Market Performance)					

ANOVA[a]						
Model		Sum of squares	df	Mean square	F	Sig.
Social enterprise	Regression	5.819	4	1.455	2.371	.064[b]
	Residual	31.904	52	.614		
	Total	37.723	56			
Commercial enterprise	Regression	14.793	4	3.698	4.081	.004[b]
	Residual	86.096	95	.906		
	Total	100.889	99			
a. Dependent Variable: Business Performance (Market Performance)						
b. Predictors: (Constant), Sensing 1 to 4, Sensing 5, Seizing, Transforming						

Coefficients[a]						
		Unstandardised coefficients		Standardised coefficients		
Model		B	Std. error	Beta	T	Sig.
Social enterprise	(Constant)	1.21	1.02		1.19	0.24
	Sensing 1 to 4	0.19	0.18	0.17	1.04	0.30
	Sensing 5	0.08	0.10	0.10	0.78	0.44
	Seizing	0.10	0.24	0.07	0.39	0.70
	Transforming	0.24	0.21	0.19	1.14	0.26
Commercial enterprise	(Constant)	1.49	0.81		1.83	0.07
	Sensing 1 to 4	0.18	0.11	0.18	1.68	0.10
	Sensing 5	0.001	0.21	0.00	0.00	1.00
	Seizing	-0.05	0.20	-0.04	-0.23	0.82
	Transforming	0.45	0.17	0.35	2.67	0.01
a. Dependent Variable: Business Performance (Market Performance)						

Table 76: DC levers on business performance (Customer-related performance)

Model summary[b]					
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	Durbin-Watson
Social enterprise	0.52[a]	0.27	0.22	0.61	1.92
Commercial enterprise	0.39a	0.15	0.12	0.81	2.26
a. Predictors: (Constant), Sensing 1 to 4, Sensing 5, Seizing, Transforming					
b. Dependent Variable: Business Performance (Customer-Related Performance)					

ANOVA[a]						
Model		Sum of squares	df	Mean square	F	Sig.
Social enterprise	Regression	7.32	4.00	1.83	4.85	0.00[b]
	Residual	19.61	52.00	0.38		
	Total	26.93	56.00			
Commercial enterprise	Regression	11.07	4.00	2.77	4.23	0.00b
	Residual	62.18	95.00	0.66		
	Total	73.25	99.00			
a. Dependent Variable: Business Performance (Customer-Related Performance)						
b. Predictors: (Constant), Sensing 1 to 4, Sensing 5, Seizing, Transforming						

Coefficients[a]						
		Unstandardised coefficients		Standardised coefficients		
Model		B	Std. error	Beta	T	Sig.
Social enterprise	(Constant)	1.94	0.80		2.42	0.02
	Sensing 1 to 4	-0.09	0.14	-0.09	-0.60	0.55
	Sensing 5	-0.06	0.08	-0.09	-0.74	0.46
	Seizing	0.38	0.19	0.32	2.00	0.05
	Transforming	0.34	0.16	0.32	2.06	0.04
Commercial enterprise	(Constant)	2.52	0.69		3.64	0.00
	Sensing 1 to 4	-0.01	0.09	-0.01	-0.06	0.95
	Sensing 5	0.01	0.18	0.01	0.05	0.96
	Seizing	0.20	0.17	0.17	1.15	0.25
	Transforming	0.27	0.14	0.25	1.87	0.06
a. Dependent Variable: Business Performance (Customer-Related Performance)						

Table 77: DC Levers on business performance (Financial performance)

Model summary[b]					
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	Durbin-Watson
Social enterprise	0.25[a]	0.06	-0.01	0.98	1.61
Commercial enterprise	0.30a	0.09	0.05	1.07	2.08
a. Predictors: (Constant), Sensing 1 to 4, Sensing 5, Seizing, Transforming					
b. Dependent Variable: Business Performance (Financial Performance)					

ANOVA[a]						
Model		Sum of squares	df	Mean square	F	Sig.
Social enterprise	Regression	3.39	4.00	0.85	0.88	0.48[b]
	Residual	50.18	52.00	0.97		
	Total	53.57	56.00			
Commercial enterprise	Regression	10.84	4.00	2.71	2.35	0.06b
	Residual	109.73	95.00	1.16		
	Total	120.57	99.00			
a. Dependent Variable: Business Performance (Financial Performance)						
b. Predictors: (Constant), Sensing 1 to 4, Sensing 5, Seizing, Transforming						

Coefficients[a]						
		Unstandardised coefficients		Standardised coefficients		
Model		B	Std. error	Beta	T	Sig.
Social enterprise	(Constant)	2.50	1.28		1.95	0.06
	Sensing 1 to 4	0.17	0.23	0.13	0.73	0.47
	Sensing 5	0.11	0.13	0.12	0.88	0.38
	Seizing	-0.26	0.30	-0.15	-0.85	0.40
	Transforming	0.27	0.26	0.19	1.05	0.30
Commercial enterprise	(Constant)	1.56	0.92		1.70	0.09
	Sensing 1 to 4	0.17	0.12	0.15	1.36	0.18
	Sensing 5	0.21	0.24	0.12	0.88	0.38
	Seizing	-0.17	0.23	-0.12	-0.76	0.45
	Transforming	0.33	0.19	0.23	1.72	0.09
a. Dependent Variable: Business Performance (Financial Performance)						

Table 78: DC levers on business performance (Employee-related performance)

Model summary[b]					
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	Durbin-Watson
Social enterprise	0.44[a]	0.19	0.13	0.77	1.88
Commercial enterprise	0.45a	0.20	0.16	0.70	2.16
a. Predictors: (Constant), Sensing 1 to 4, Sensing 5, Seizing, Transforming					
b. Dependent Variable: Business Performance (Employee-Related Performance)					

ANOVA[a]						
Model		Sum of squares	df	Mean square	F	Sig.
Social enterprise	Regression	7.39	4.00	1.85	3.11	0.02[b]
	Residual	30.86	52.00	0.59		
	Total	38.25	56.00			
Commercial enterprise	Regression	11.42	4.00	2.85	5.86	0.00b
	Residual	46.24	95.00	0.49		
	Total	57.66	99.00			
a. Dependent Variable: Business Performance (Employee-Related Performance)						
b. Predictors: (Constant), Sensing 1 to 4, Sensing 5, Seizing, Transforming						

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. error	Beta	T	Sig.
Social enterprise	(Constant)	3.50	1.01		3.49	0.00
	Sensing 1 to 4	0.36	0.18	0.32	1.99	0.05
	Sensing 5	0.21	0.10	0.27	2.08	0.04
	Seizing	-0.44	0.24	-0.31	-1.85	0.07
	Transforming	0.18	0.20	0.14	0.87	0.39
Commercial enterprise	(Constant)	2.83	0.60		4.74	0.00
	Sensing 1 to 4	-0.12	0.08	-0.16	-1.49	0.14
	Sensing 5	0.03	0.16	0.03	0.22	0.83
	Seizing	0.25	0.15	0.25	1.73	0.09
	Transforming	0.21	0.12	0.22	1.71	0.09
a. Dependent Variable: Business Performance (Employee-Related Performance)						

Appendix I: Moderated Regression Tables (Size)

Table 79: Organisational size (Sensing 1 to 4 on market performance)

Social enterprise: Model summary									
					Change statistics				
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.33[a]	0.11	0.09	0.78	0.11	6.63	1.00	55.00	0.01
2	0.34[b]	0.11	0.08	0.79	0.01	0.42	1.00	54.00	0.52
a. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW									
b. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW, Interaction1.2_Sensing1to4_Size									

Table 80: Organisational size (Sensing 1 to 4 on customer-related performance)

Social enterprise: Model summary									
					Change statistics				
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.24[a]	0.06	0.04	0.68	0.06	3.34	1.00	55.00	0.07
2	0.24[b]	0.06	0.03	0.68	0.00	0.14	1.00	54.00	0.72
a. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW									
b. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW, Interaction1.2_Sensing1to4_Size									

Table 81: Organisational size (Sensing 1 to 4 on financial performance)

Social enterprise: Model summary									
					Change statistics				
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.16[a]	0.03	0.01	0.97	0.03	1.52	1.00	55.00	0.22
2	0.22[b]	0.05	0.02	0.97	0.02	1.32	1.00	54.00	0.26
a. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW									
b. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW, Interaction1.2_Sensing1to4_Size									

Table 82: Organisational size (Sensing 1 to 4 on employee-related performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.28[a]	0.08	0.06	0.80	0.08	4.50	1.00	55.00	0.04
2	0.29[b]	0.09	0.05	0.81	0.01	0.55	1.00	54.00	0.46
a. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW									
b. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW, Interaction1.2_Sensing1to4_Size									

Table 83: Organisational size (Sensing Q5 on market performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.16[a]	0.03	0.01	0.82	0.03	1.45	1.00	55.00	0.23
2	0.32[b]	0.10	0.07	0.79	0.08	4.58	1.00	54.00	0.04
a. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW									
b. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW, No of Employees									

Table 84: Organisational size (Sensing Q5 on Customer-related performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.04[a]	0.00	-0.02	0.70	0.00	0.08	1.00	55.00	0.78
2	0.19[b]	0.04	0.00	0.69	0.04	2.00	1.00	54.00	0.16
a. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW									
b. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW, No of Employees									

Table 85: Organisational size (Sensing Q5 on financial performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.14[a]	0.02	0.00	0.98	0.02	1.17	1.00	55.00	0.29
2	0.38[b]	0.15	0.12	0.92	0.13	7.94	1.00	54.00	0.01
a. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW									
b. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW, No of Employees									

Table 86: Organisational size (Sensing Q5 on Employee-related performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.30[a]	0.09	0.08	0.79	0.09	5.55	1.00	55.00	0.02
2	0.41[b]	0.17	0.14	0.77	0.07	4.78	1.00	54.00	0.03
a. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW									
b. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW, No of Employees									

Table 87: Organisational size (Seizing on market performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.28[a]	0.08	0.07	0.79	0.08	4.98	1.00	55.00	0.03
2	0.35[b]	0.12	0.09	0.78	0.04	2.36	1.00	54.00	0.13
a. Predictors: (Constant), DC_Seizing_Centrered									
b. Predictors: (Constant), DC_Seizing_Centrered, Interaction5_Seizing_Size									

Table 88: Organisational size (Seizing on customer-related performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.45[a]	0.20	0.19	0.62	0.20	14.05	1.00	55.00	0.00
2	0.45[b]	0.20	0.17	0.63	0.00	0.00	1.00	54.00	0.97
a. Predictors: (Constant), DC_Seizing_Centrered									
b. Predictors: (Constant), DC_Seizing_Centrered, Interaction5_Seizing_Size									

Table 89: Organisational size (Seizing on financial performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.04[a]	0.00	-0.02	0.99	0.00	0.11	1.00	55.00	0.75
2	0.24[b]	0.06	0.02	0.97	0.06	3.21	1.00	54.00	0.08
a. Predictors: (Constant), DC_Seizing_Centrered									
b. Predictors: (Constant), DC_Seizing_Centrered, Interaction5_Seizing_Size									

Table 90: Organisational size (Seizing on employee-related performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.01[a]	0.00	-0.02	0.83	0.00	0.01	1.00	55.00	0.92
2	0.18[b]	0.04	0.00	0.83	0.04	1.96	1.00	54.00	0.17
a. Predictors: (Constant), DC_Seizing_Centrered									
b. Predictors: (Constant), DC_Seizing_Centrered, Interaction5_Seizing_Size									

Table 91: Organisational size (Transforming on market performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.33[a]	0.11	0.09	0.78	0.11	6.80	1.00	55.00	0.01
2	0.41[b]	0.17	0.14	0.76	0.06	3.76	1.00	54.00	0.06

Table 92: Organisational size (Transforming on customer-related performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.46[a]	0.21	0.19	0.62	0.21	14.52	1.00	55.00	0.00
2	0.46[b]	0.21	0.18	0.63	0.00	0.00	1.00	54.00	0.99
a. Predictors: (Constant), DC_Trans_Centrered									
b. Predictors: (Constant), DC_Trans_Centrered, Interaction8_Transform_Size									

Table 93: Organisational size (Transforming on financial performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.17[a]	0.03	0.01	0.97	0.03	1.69	1.00	55.00	0.20
2	0.30[b]	0.09	0.06	0.95	0.06	3.49	1.00	54.00	0.07
a. Predictors: (Constant), DC_Trans_Centrered									
b. Predictors: (Constant), DC_Trans_Centrered, Interaction8_Transform_Size									

Table 94: Organisational size (Transforming on employee-related performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.15[a]	0.02	0.01	0.82	0.02	1.29	1.00	55.00	0.26
2	0.20[b]	0.04	0.00	0.83	0.02	0.87	1.00	54.00	0.36
a. Predictors: (Constant), DC_Trans_Centrered									
b. Predictors: (Constant), DC_Trans_Centrered, Interaction8_Transform_Size									

Appendix J: Moderated Regression Tables (Age)

Table 95: Organisational age (Sensing 1 to 4 on market performance)

Social enterprise: Model summary									
					Change statistics				
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.33[a]	0.11	0.09	0.78	0.11	6.63	1.00	55.00	0.13
2	0.34[b]	0.12	0.09	0.79	0.01	0.63	1.00	54.00	0.04
a. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW									
b. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW, Interaction1.2_Sensing1to4_Age									

Table 96: Organisational age (Sensing 1 to 4 on customer-related performance)

Social enterprise: Model summary									
					Change statistics				
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.24[a]	0.06	0.04	0.68	0.06	3.34	1.00	55.00	0.07
2	0.24[b]	0.06	0.02	0.69	0.00	0.05	1.00	54.00	0.82
a. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW									
b. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW, Interaction1.2_Sensing1to4_Age									

Table 97: Organisational age (Sensing 1 to 4 on financial performance)

Social enterprise: Model summary									
					Change statistics				
Model	R	R-squared	Adjusted R-squared	Std. error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.16[a]	0.03	0.01	0.97	0.03	1.52	1.00	55.00	0.22
2	0.29[b]	0.08	0.05	0.95	0.06	3.32	1.00	54.00	0.07
a. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW									
b. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW, Interaction1.2_Senlsing1to4_Age									

Table 98: Organisational age (Sensing 1 to 4 on employee-related performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.28[a]	0.08	0.06	0.80	0.08	4.50	1.00	55.00	0.04
2	0.33[b]	0.11	0.08	0.80	0.03	1.94	1.00	54.00	0.17
a. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW									
b. Predictors: (Constant), DC_Sensing_1to4_Centered_NEW, Interaction1.2_Sensing1to4_Age									

Table 99: Organisational age (Sensing Q5 on market performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.16[a]	0.03	0.01	0.82	0.03	1.45	1.00	55.00	0.23
2	0.21[b]	0.05	0.01	0.82	0.02	1.13	1.00	54.00	0.29
a. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW									
b. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW, No of Employees									

Table 100: Organisational age (Sensing Q5 on Customer-related performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.04[a]	0.00	-0.02	0.70	0.00	0.08	1.00	55.00	0.78
2	0.09[b]	0.01	-0.03	0.70	0.01	0.40	1.00	54.00	0.53
a. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW									
b. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW, No of Employees									

Table 101: Organisational age (Sensing Q5 on financial performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.14[a]	0.02	0.00	0.98	0.02	1.17	1.00	55.00	0.29
2	0.28[b]	0.08	0.04	0.96	0.06	3.24	1.00	54.00	0.08
a. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW									
b. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW, No of Employees									

Table 102: Organisational age (Sensing Q5 on Employee-related performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.30[a]	0.09	0.08	0.79	0.09	5.55	1.00	55.00	0.02
2	0.32[b]	0.10	0.07	0.80	0.01	0.49	1.00	54.00	0.49
a. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW									
b. Predictors: (Constant), DC_Sensing_Q5_ALL_NEW, No of Employees									

Table 103: Organisational age (Seizing on market performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.29[a]	0.08	0.07	0.79	0.08	4.98	1.00	55.00	0.03
2	0.40[b]	0.16	0.13	0.77	0.08	4.86	1.00	54.00	0.03
a. Predictors: (Constant), DC_Seizing_Centrered									
b. Predictors: (Constant), DC_Seizing_Centrered, Interaction5_Seizing_Age									

Table 104: Organisational age (Seizing on customer-related performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.45[a]	0.20	0.19	0.62	0.20	14.05	1.00	55.00	0.00
2	0.46[b]	0.21	0.18	0.63	0.00	0.30	1.00	54.00	0.59
a. Predictors: (Constant), DC_Seizing_Centrered									
b. Predictors: (Constant), DC_Seizing_Centrered, Interaction5_Seizing_Age									

Table 105: Organisational age (Seizing on financial performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.04[a]	0.00	-0.02	0.99	0.00	0.11	1.00	55.00	0.75
2	0.33[b]	0.11	0.08	0.94	0.11	6.64	1.00	54.00	0.01
a. Predictors: (Constant), DC_Seizing_Centrered									
b. Predictors: (Constant), DC_Seizing_Centrered, Interaction5_Seizing_Age									

Table 106: Organisational age (Seizing on employee-related performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.01[a]	0.00	-0.02	0.83	0.00	0.01	1.00	55.00	0.92
2	0.05[b]	0.00	-0.04	0.84	0.00	0.12	1.00	54.00	0.73
a. Predictors: (Constant), DC_Seizing_Centrered									
b. Predictors: (Constant), DC_Seizing_Centrered, Interaction5_Seizing_Age									

Table 107: Organisational age (Transforming on market performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.33[a]	0.11	0.09	0.78	0.11	6.80	1.00	55.00	0.01
2	0.39[b]	0.15	0.12	0.77	0.04	2.82	1.00	54.00	0.10
a. Predictors: (Constant), DC_Seizing_Centrered									
b. Predictors: (Constant), DC_Seizing_Centrered, Interaction5_Seizing_Age									

Table 108: Organisational age (Transforming on customer-related performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.46[a]	0.21	0.19	0.62	0.21	14.52	1.00	55.00	0.00
2	0.47[b]	0.22	0.19	0.62	0.01	0.94	1.00	54.00	0.34
a. Predictors: (Constant), DC_Trans_Centrered									
b. Predictors: (Constant), DC_Trans_Centrered, Interaction8_Transform_Age									

Table 109: Organisational age (Transforming on financial performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.17[a]	0.03	0.01	0.97	0.03	1.69	1.00	55.00	0.20
2	0.35[b]	0.12	0.09	0.93	0.09	5.69	1.00	54.00	0.02
a. Predictors: (Constant), DC_Trans_Centrered									
b. Predictors: (Constant), DC_Trans_Centrered, Interaction8_Transform_Age									

Table 110: Organisational age (Transforming on employee-related performance)

Social enterprise: Model summary									
				Std.	Change statistics				
Model	R	R-squared	Adjusted R-squared	error of the estimate	R-squared change	F change	df1	df2	Sig. F change
1	0.15[a]	0.02	0.01	0.82	0.02	1.29	1.00	55.00	0.26
2	0.20[b]	0.04	0.00	0.82	0.02	0.92	1.00	54.00	0.34
a. Predictors: (Constant), DC_Trans_Centrered									
b. Predictors: (Constant), DC_Trans_Centrered, Interaction8_Transform_Age									