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Entrepreneurial orientation and firm performance in SMEs: The case of Jordan

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Summary

While there is an abundance of research that shows a direct and positive relationship between entrepreneurial orientation (EO) and organizational performance the relationship is far from simple and clear. Research suggest that the relationship is complex and is contingent on internal and external variables that affect this relationship. This study examines the effect of EO and its dimensions on organizational performance in SMEs in Jordan. Further, the study examines the mediating effect of internal and external contingency factors such as: market orientation, strategic flexibility and environment hostility on the EO-performance relationship. Using questionnaire survey the study collected 137 usable questionnaires and utilized PLS to analyze the data. The study found that EO significantly affects performance directly and positively. The study also found a mediating effect of environmental hostility on the relationship between EO and organizational performance. No evidence was found to support that MO and strategic flexibility have a mediating effect on the EO-performance relationship. With regards to the effect and mediation effect of EO dimensions; the study found that both innovativeness and proactiveness have a significant positive direct effect on performance. While risk taking has a significant negative direct effect on performance. With regards to the mediation effect of market orientation, strategic flexibility and environmental hostility on the relationships between EO dimensions (innovativeness, proactiveness and risk taking) the study found that only EH has a mediation effect while market orientation and strategic flexibility have no mediation effect.

Specifically, the study also found that EH mediates the relationship between innovativeness and performance. The mediation is a full mediation since there are both direct and indirect effects of innovativeness on performance. The study found a partial mediation effect of EH on the proactiveness-performance relationship since the direct effect becomes insignificant when the mediator is added. The study also found a partial mediation effect of EH on the risk taking-performance relationship since the direct effect becomes insignificant when the mediator is added.

Key words:
Entrepreneurial orientation, market orientation, strategic flexibility, environmental hostility, organizational performance, SMEs.

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Chapter 1

Introduction

Entrepreneurial orientation (EO) is seen as one of the most important determinants of a firm's performance (Shah & Ahmad, 2019) and has been attracting lots of interest by researchers worldwide (Seo, 2020). Extreme competition in world markets has pushed businesses to innovate new strategies to strengthen organizations' positions and give them a distinctive advantage (Davidsson & Wiklund, 2001). Covin and Miller (2014) argued that in order to reach increased performance; organization requires an intentional internal behavior that enhance essential transformation in processes, therefore, creating new ideas, creativity, and commitment in the organization. The internal behavior, called EO, must focus on reaching a superior performance and a distinctive and sustainable advantage (Karacaoglu et al, 2013). In this vein, Davidsson and Wiklund (2001) held that the fundamental objective of EO is to produce a new inner drive that allows for the development of organizational structure and ensures the continued existence of the organization. EO, which refers to the firm's strategic posture to be innovative, proactive, and risk-taking, is considered an important driver of firm growth, competitive advantage, and superior performance (Real et al, 2014).

Extant research reports a positive relationship between EO and performance (Rauch et al, 2009). However, research also shows that the performance implication of EO is not universal but affected by internal and external contingency factors such as firms' resources availability and competencies (Balodi, 2019; García-Villaverde et al, 2013; Wiklund & Shepherd, 2003, 2005; Sciascia et al, 2014), as well as industrial characteristics and environmental factors (Lumpkin & Dess, 2001; Saeed et al, 2014; Wales et al., 2013). Accordingly, several studies found the insignificant or partial impact of EO on performance (e.g., Andersén, 2010; Dimitratos et al, 2004; Slater & Narver, 2000; Walter et al, 2006; Su et al, 2011). Research indicates that to more effectively predict if a relationship exists between an EO and firm performance, contingency perspectives should be considered (Andersen, 2010; Covin & Wales, 2018; Wiklund & Shepherd, 2005). Further, many argued that investigating the individual role of entrepreneurial orientation in affecting organizational performance is not enough.

Researchers proposes that certain organizational and environmental variables such as organizational culture, structure, availability of resources, competitive environments, and top management support, are crucial in identifying the type of relation (Covin & Slevin, 1991; Kuratko et al, 2004; Lumpkin & Dess, 1996; Mohamad, Ramayah, & Puspowarsito, 2011; Rutherford & Holt, 2007; Wang, 2008; Wiklund & Shepherd, 2005). In addition to the previously mentioned arguments, other studies propose that the EO should be merged with other orientations like market orientation, learning orientation, and employee orientation in order to realize the best performance (Grinstein, 2008; Idar & Mahmood, 2011; Kwak, Jaju, Puzakova, & Rocereto, 2013; Wang, 2008). For example, researchers suggest that proper alignment of both MO and EO enables an organization to be not only more market oriented but also develop novel marketable products (Kajalo & Lindblom, 2015; Lee, 2018).

In relation to both developed and developing economies, the manufacturing sectors small and medium-sized enterprises (SMEs) possess a vital role in the present business system. Small

businesses play a key role in creating jobs, contributing to tax, export and import revenues, facilitating the distribution of goods, and in addition adding to human asset improvement. SMEs are the support of advancements and entrepreneurship (Agyapong, 2010). Likewise, SMEs are critical in the battle against destitution. They also employ poor and low-income and are in some cases the main wellspring of work in the rural areas; their contribution cannot be neglected (Ackah & Vuvor, 2011).

In the present literature, investigation of business growth, SMEs, plays a critical role (Casillas & Moreno, 2010). There are different purposes behind this; among them, first, because firms that accomplish more prominent levels of growth generally produce more employments (Littunen & Tohmo, 2003). Secondly, because growth represents one of the most important dimensions of performance and it is ordinarily connected with different factors, for example, benefit (Rumelt, 1991; Porter, 1985). In the literature, there is a lot of enthusiasm by investigators, academics, and experts of entrepreneurism about the significance of EO in organizations, primarily in SMEs (Casillas & Moreno, 2010). Knight (2012) argued that better performing SMEs are relevant to the EO and they have endeavored to enhance their performances which also supported by a study conducted by Zahra and Garvis (2000). Furthermore, most of the literature on EO-performance has been conducted in developed countries. Fewer studies were conducted in developing countries generally and even fewer on Jordan.

Research problem

Empirical research in strategic marketing and entrepreneurship that confirm a positive effect of EO on firm performance is abundant (Pan Wang, Yu, Nguyen, & Chen, 2016; Hakala, 2013; Alegre & Chiva, 2013). But these studies have different results vis-à-vis the relationship. Numerous studies found a positive effect of EO on performance (Mahmood & Ibrahim, 2016; Hussain, Ismail, & Shah, 2015; Eggers, Kraus, Hughes, Laraway, & Snycerski, 2013; Rauch, Wiklund, Lumpkin, & Frese, 2009), while others found a negative effect (Runyan, Droge, & Swinney, 2008; Slater & Narver, 2000) and there still remains a discussion on the issue.

Past studies indicate that an EO is capable to some degree of explaining variations in firm performance (for example, Richard et al, (2009); Keh et al, (2007); Lumpkin & Dess (2001)). In meta-analysis study conducted by Rauch et al, (2009) the researchers concluded that an EO is positively associated with firm performance. These studies are important because they show that high EO produces superior performance. Nevertheless, other studies also suggest that the EO-performance relationship is unlikely to be direct but is expected to be complex (Balodi, 2019; Lumpkin & Dess, 1996). Specifically, the argument is that for EO to better predict performance effectively contingency perspectives should be considered (Covin & Wales, 2018; Andersen, 2010; Wiklund & Shepherd, 2005) and that examining the individual effect of EO on performance might present incomplete image of the full relationship (Hakala, 2013; Altinay, Madanoglu, De Vita, Arasli, & Ekinci, 2015; Wiklund & Shepherd, 2005). Researchers postulate that specific environmental and organizational factors like structure, culture presence of resources, competitive environments, and top management support, can be critical in identifying the kind of relation (Mohamad, Ramayah, & Puspowarsito, 2011; Wang, 2008; Rutherford & Holt, 2007; Wiklund & Shepherd, 2005; Covin & Slevin, 1991; Kuratko et al, 2004; Lumpkin & Dess, 1996).

Further, some studies suggest that EO should work together with strategic orientations such as MO, learning orientation (LO) to reach superior performance (Kwak, Jaju, Puzakova, & Rocereto, 2013; Idar & Mahmood, 2011; Grinstein, 2008; Wang, 2008). For example, researchers indicate that the correct line up of both MO and EO enables a firm to be both market oriented and able to develop novel marketable products (Lee, 2018; Kajalo & Lindblom, 2015; Morgan, Anokhin, Kretinin, & Frishammar, 2015; Boso, Cadogan, & Story, 2012) and may produce a synergistic effect. Considering the importance of MO and EO for attaining superior firm performance and sustainable competitive advantage, Hussain, Rahman, and Wali (2016) called for further investigation on the interplay between MO and EO to further explore this relationship vis-à-vis their relationship with organization performance in developing countries and in Jordan, in particular.

These contingency and environmental factors are set into two broad categories, that is, environmental factors and organizational factors (Lumpkin & Dess, 1996). Lumpkin and Dess (2001) and Zahra (1993) explain that environmental factors comprise: complexity, dynamism, munificence, and characteristics. These dimensions may represent the environmental effect on the EO-performance relationship. On the other hand, organizational factors include inner contingencies like structure and size (Jennings & Lumpkin,1989; Slevin & Covin,1990) strategy (Tang & Tang, 2010, Naman & Slevin, 1993; Gupta & Govindarajan, 1984), strategy-making processes (Jennings & Lumpkin, 1989; Burgelman, 1983; Miller & Friesen, 1982), firm resources utilization (Rodrigues & Raposo, 2011; Ramachandran & Ramnarayan, 1993;) and learning orientation, style and capability (Wang, 2008; Li et al, 2011; Kreiser, 2011; Covin et al, 2009). But all these inner organizational factors seem separated and only partially explain the mechanism of EO effect on firm performance and cannot completely and organically summarize organizational effect on the relationship between EO and firm performance. EO, attitude, and style, belongs to strategy level, and its relation to the firm performance is constrained to inner organizational context. However, strategic flexibility (SF) refers to a firm ability to adapt to environmental changes through continuous changes. As a multidimensional variable, SF focuses on resource flexibility and organization coordination flexibility, which integrate key inner organization factors that influence the relationship between EO and firm performance. Indeed, a recent survey of the literature by Balodi (2019) confirmed that few studies examine the moderating/mediating effect of the environmental factors such as technological turbulence and environmental hostility on the EO-performance relationship.

Zhou et al, (2005) pointed out that because EO has a positive effect on both technology and market-based innovations it becomes even more important in emerging markets with stronger competition and rapid economic development where firms have to innovate to move ahead. Given this consideration, researchers also focused on the impact of strategic flexibility on performance and innovation (Young & Francis, 1993; Hemphill, 1996; Levy, 1993; Finegold & Wagner, 1998). Kraatz and Zajac (2001) suggested that organizational resource flexibility is the buffer that firms utilize to cope with the changing conditions, especially for risky technology innovations. Finally, combining strategic orientations and strategic flexibility together to study their influence on firm performance, Grewal and Tansuhaj (2001) suggest that market orientation and strategic flexibility respectively affect firm financial performance.

In addition there is an interesting observation about EO in hostile and benign environments. In hostile environments, entrepreneurial firms seem to perform better than conservative ones (Lee et al, 2019; Covin & Slevin, 1989). However, Tang and Hull (2012) pointed out that at the same time these conditions (hostility) can force firms to become less entrepreneurial. This means that instead of firms increasing their EO they might actually become conservative. Interestingly, the findings on the relationship between EO and hostility are mixed (Rosenbusch et al, 2013). Kreiser, Anderson, Kuratko, and Marino (2019) commented that the relationship between environmental hostility and EO is complex and that a lack of generally agreed upon findings suggest that more work is needed.

Furthermore, some studies argue that high EO does not necessarily guarantee a sustainable development of performance, particularly for those newly developed economies and developing economies because they due to lack of institutional structure, organizational formalization, or because they may not have well-qualified managers (Yu, 2012; Tang & Tang, 2010; Tang, Tang, Marino, Zhang, & Li, 2008) and thus, the positive relations between EO and firm performance demonstrated in western countries is often not replicated in emerging economies since firms are operating in different contexts (Lee et al, 2011).

In addition to the contingency approach, context is important (Lumpkin & Dess, 1996; Martens et al, 2016; Shu et al, 2019; Tang et al, 2008). More specifically, the majority of studies examining the EO–firm performance have been conducted with samples of firms in the USA (Rauch et al, 2009). Although research has expanded beyond US borders (Saeed et al, 2014), assuming that positive findings for firms in one country (or like countries based in a similar geography, e.g., Western Europe) can be generalized to firms in another country could be misleading. Countries have their own idiosyncrasies, cultures and government dynamics, and the firms operating within a given border do not necessarily behave like firms in other countries. Further research in new contexts is therefore helpful (Martens et al, 2016; Shu et al, 2019).

Based on the premise that different variables must be considered in investigating the nature of relation between the EO and performance, this study fills the gap in the literature by including MO, environmental hostility and strategic flexibility as mediating variables on the relation between entrepreneurial orientation and organizational performance.

Research questions and sub-questions

Based on the discussion presented in the previous section this thesis aims to answer the following question:

What is the relationship between EO and organizational performance and how does organizational and environmental factors such as MO, SF and EH affect the EO-Performance relationship in a SMEs in a hostile developing country context like Jordan?

Specifically, the research answers the following sub-questions:
1. What is the relationship between entrepreneurial orientation on organizational performance?
2. What is the relationship between innovativeness and organizational performance?
3. What is the relationship between proactiveness and organizational performance?

4. What is the relationship between risk taking and organizational performance?
5. Does market orientation mediate the relationship between entrepreneurial orientation and organizational performance?
6. Does strategic flexibility mediate the relationship between entrepreneurial orientation and organizational performance?
7. Does environmental hostility mediate the relationship between entrepreneurial orientation and organizational performance?
8. Do MO, strategic flexibility and environmental hostility mediate the relationship between innovativeness, proactiveness, risk taking and organizational performance?

By addressing the research question, and the associated sub-questions, the thesis aims to examine the mediating effect of environmental hostility, strategic flexibility, and market orientation on the relationship between entrepreneurial orientation and organizational performance in SMEs in Jordan.

Chapter 2

Literature Review

This chapter reviews the literature of the study. It presents previous studies on the subject matter to provide a better understanding of EO, MO, strategic flexibility, and environmental hostility.

Entrepreneurship

To this point in time, there has not been an agreed upon definition of "entrepreneurship". This is due to the fact that there is a great number of perspectives within the research and the real business world on what entrepreneurship is (Abubakar, 2011). Historically the definitions are centered on individual entrepreneurs. The term entrepreneurship has its roots in French from the word "entrepredre" which means "to take into one's own hands" (Bacq and Janssen, 2011). Richard Cantillon see the entrepreneur as the "father of enterprise economies" (Saucier and Thornton, 2010; Thierse, 2019) as the entrepreneurs, establish and exchange at markets and thrive in uncertainty (Gedeon, 2010). From Cantillon's view this entrepreneur is the "undertaker of risk" (Saucier and Thornton, 2010). Schumpeter on the other hand saw the entrepreneur as "innovators who drive the creative-destructive process of capitalism" (Dees, 2008). According to Schumpeter, "the gale of creative destruction" is "the course of industrial transformation which incessantly revolutionizes the economic construct from within, incessantly destroying the old ways or things, incessantly creating new ones."

In the 50s and 60s the focus, however, moved into behavioral sciences where the concentration became on psychological and behavioral aspects of the entrepreneurs as did McClelland. Research focused on traits and personality of the entrepreneur. The 1980s the world started looking at smaller and micro enterprises and a lot of discussion on poverty alleviation and the entrepreneurship started to gain greater importance and attention (Okangi, 2019). Drucker (2014) explained that entrepreneurs constantly search for changes, see the needs and opportunities, responds to them and act accordingly hence, exploiting these opportunities. And this is what entrepreneurs always did, foresaw, anticipated niches, problems, and opportunities before anyone else and created solutions adding value and contributing to the market. In this era entrepreneurship is seen as a discipline as part of the most relevant, dynamic, and significant economic and management studies (Wiklund et al., 2011; Teece, 2012; Thierse, 2019). Despite that researches did not agree on an accepted definition of its field and boundaries (Uchenna et al., 2019).

Entrepreneurship is construed as the pursuit of market opportunities intended to create future innovative products that have been discovered, evaluated, and take advantage of with an intent of obtaining social and economic value from the context of the environment, leading ultimately to new independent business/ venture creation (Lumpkin and Dess, 2001; George, 2018; Ibrahim and Abu (2020). Defining entrepreneurship, Hisrich and Peters (1992, 2) argued that it is a mechanism of "creating something different of value by devoting the necessary time and effort, assuming the accompanying financial, psychological and social risks, and receiving the resulting rewards of monetary and personal satisfaction". It is an economic endeavor conducted by individuals, i.e., entrepreneurs, who undertake their business as part of an organization or by themselves, anticipate new opportunities and niches, weight and reap them by utilizing innovation and bringing creative

ideas as goods, products and services to the market carrying some uncertainty and risk (Covin and Slevin, 1991; Okolie-Osemene, 2019; Ibrahim and Abu, 2020: p. 101). While others think that that entrepreneurship is closely associated with creative and strategic orientation to obtain profit and growth (Carland et al. 1984). The common features McGrath and MacMillan (2000) explain include wanting to find and create new opportunities using risky and dynamic activities (Miller 1983; Covin and Slevin, 1989). For them, it is bringing together innovative and strategic thinking.

Entrepreneurial Orientation (EO)

EO is a business-level planned positioning that brings out the firm's strategy-making practices, the managerial philosophies, and firm behaviors that are entrepreneurial in nature. EO describes the organization's strategy that comprises decision-making behaviors, techniques, and the application of ideas which might be hostile, creative, dynamic, and risky, or seeking to achieve an autonomous dependence (Covin & Lumpkin, 2011; Lumpkin and Dess, 1996). It is further illustrated as the process undertaken by the business to gain entrance into a new market (Lumpkin and Dess, 1996). EO is summed up comprising the organizational phenomenon that showcases a managerial ability with which firms are involved in proactive and aggressive ingenuity to transform the competitive arena to their favor (Carland and Carland, 1991). Entrepreneurship is applicable to all levels of individuals, groups, and organizations (Lumpkin and Dess, 1996). Miller (1983) developed the most widely accepted concept of EO, Miller argued that entrepreneurial orientation is associated with the firm's ability to offer new innovations in product market, takes risks and act proactively.

Miller's (1983) proposed, and most of the literature dealing with EO, have been concentrating on organizational level. Indeed, most researchers in the field adopted this concept which focuses on firm-level mixture of innovativeness, risk taking and proactiveness (e.g., Covin and Slevin 1991; Zahra 1993). This is also in accordance with Hult et al. (2004) and Lumpkin and Dess (1996) who affirmed that entrepreneurial orientation is viewed as the processes, practices and decision-making activities that are used by organization in the market. Knight (1997) also shared the same view by stating that entrepreneurial orientation is a basic requirement for strategic innovation and could be applied to all firms no matter what type or size it is.

Innovativeness

In a very competitive business environment, each organization seeks to have the upper hand to win new clients and customers (Hana, 2013, p. 1). According to Bartes (2009); Hamel and Green (2007); Senge (2006); Barták (2006) and Collinson (2005), knowledge, information and innovative economy are the foundation stones of the 21st century. In addition, it is widely accepted that today's competitive environment is affected by the constant and increased product innovation "The innovativeness dimension of EO indicate a propensity to capture and support novel ideas, newness, trial and error, and original and smart processes (Lumpkin and Dess, 1996: 142)", which means that traditional existing behaviors and activities are of less effect. Also, researchers agree that innovation is the driving force that leads to creating novel and untraditional notions, and consequently to new products (Lindelof and Lofsten, 2006; Kroeger, 2007). This is not to say that innovation is an easy task. However, there are many challenges that firms face such as funding R&D departments and having well-qualified employees. Lumpkin and Dess (1996) suggest that new innovations and ideas should be adopted and considered even if their benefits are not totally

assured or clear. They add that when the new ideas and innovation prove their success, it will be reflected financially on the firm and will also show high levels of performance. Unlike the traditional already existing knowledge, firms should think out of the box and find new approaches and different techniques to do things. Innovation is its abstract form means more than one type. For example, there is technological innovation, product market innovation, and management innovation which are meant to offer low cost, rapid production, fast distribution, and improving customer service (Lumpkin and Dess, 1996). Lumpkin and Covin (1997) emphasize that product-market innovation comprises product design, finding new markets, advertising, and promotion. Concerning technological innovation, Dess et al. (1997) stresses that this type focuses on product and process development, engineering, R&D, technical skills, and industry awareness. Roberts (1999) conducted a study in which he claims that innovative propensity affects the extent to which unusual gain outcomes continue firmly over time, that is to say, the more the innovative ideas the greater the profit. As a result, a firm which spends high rate on R&D and product innovation is best qualified to gain and make new customer and gain a better performance.

Proactiveness

Lumpkin and Dess (1996) defined proactiveness as the firm's tendency to determine new opportunities and seize them. For them, proactiveness is a concept which enables the firm to predict and anticipate the customer's future needs and desires and consequently working on them, this advantage strengthens the firm’s position among other firms and gives it a priority in the competitive environment. Also, Lumpkin and Dess (1996) illustrate the difference between proactiveness and the competitive hostility; they claim that proactiveness is an activity practiced by leader firms which meant to seek opportunities, innovation, and progress. These firms are far-sighted and predict what the future needs might be and how the business environment could be shaped.

Zahra and Covin (1995) state that, a firm which practices proactiveness, is the first to create a competitive advantage due to its first move which targets the market's new desired needs and also charges higher prices. Proactive firms are usually aware of what is going on in the market and usually seeks to find novel ideas to satisfy their customers. In addition to anticipating the new demands, these firms also anticipate what problems might the market face, and they seek new solutions accordingly.

Kocel (1995) viewed proactiveness as the concept of "giving directions", this means that it is a perspective in which a firm directs the events in the business environment based on a previous prediction of the market needs and expectations rather than taking actions ae a response to actions after they emerge. Lumpkin and Dess (2001) strongly believe that proactiveness is the attitude of predicting the market future needs and act upon that creating what is known as "first mover advantage".

As identified by Dess and Lumpkin (2005), “First mover advantage” means the advantage that firms gain due to their initiative attitudes to enter new emerging markets, identify new brands, employing novel technologies or adopting new administrative policies do handle a new industry. To be a first mover, the firm gains many advantages that might not be gained if not initiative, some of the advantages might be obtained include: while it is prevailing that competition among firms

cause prices to get lower, pioneers often reap the highest profit because of lack of competitors; firms which to be the first recognized for creating business brand will keep their image and reputation as the pioneer even if new competitors enter the market, they will also keep a sustainable market share gains until the product enters the maturity stage of its life (Freel, 2005). The competitive aggressive behavior practiced by companies towards each other and the institutional pursuit of utilizing and realizing commercial opportunities are the two main features of proactiveness (Stevenson and Jarillo, 1990).

It was difficult to investigate whether these concepts applied to SMEs (Aloulou and Fayolle, 2005). What makes proactiveness distinctive and effective is its ability to create a competitive advantage because the initiator company is the first to enter the marketplace and other competitors have to respond to its actions rather than being initiator themselves (Lumpkin and Dess, 1996). Knight (1997) describes proactiveness as the means that guarantees the firm's survival and its high performance which consequently lead to its sustainable success. Although first mover advantage is generally recognized in all types of industries, Dess and Lumpkin (2005) state that competitive advantage is not always gained by pioneers or initiators. Some firms, although pioneers and initiators in a certain industry, fail to gain the profit they hope for. In order to achieve the desired hopes and expectations, firms have to conduct a careful and adequate monitoring and scanning of the business environment, and also have to conduct a comprehensive feasibility research. Firms who successfully plan and prepare these requirements usually gain significant growth and development. Therefore, there is a positive relationship that ties proactiveness to performance.

Risk taking

Brockhaus (1980) stated that in entrepreneurship, risk-taking is a concept that indicates to entrepreneurs' inclination to take calculated business-related risks. Risk-taking is also defined as the entrepreneurs' desire to conduct courageous and risky deeds. For example, entering new unfamiliar marketplaces, investing many resources in unguaranteed projects, and/or borrowing big amounts of credits (Lumpkin and Dess, 2001). In general, this is to say that the positive relationship between the firm's risk-taking and its performance is not clear nor evident. Anyway, risky firms are supposed to be innovative because innovation leads to higher performance, assuming that risky policies, strategies, trials, and errors could enable the firm to gain more profit on the long-term (March, 1991; Child and McGrath, 2001).

SMEs usually try to be successful by taking risky projects, sometimes it involves giving up success factor that have already worked well with other businesses and sometimes these SMEs invest in projects where no outcomes are guaranteed (Lumpkin and Dess, 2001). For firms, to advance their performance and to get higher profits, they often take risks such as increased level of debt, investing many of their resources, offering new products in unknown markets and adopting untested technologies (Dess and Lumpkin, 2005). Dess and Lumpkin (2005) propose three types of risks that firms might be exposed to: business risks, financial risks, and personal risks. The business risk means entering new projects where the firm is uncertain of the success probability, while financial risk is identified as borrowing large amount of money and credits hoping to increase profit without any guarantee of that profit and finally, personal risks which refer to risks that the pioneer or entrepreneur takes responsibility of when making a decision on behalf of a certain strategy or activity.

Entrepreneurship literature is heavily loaded with views on risk-taking behavior. What characterizes entrepreneurial firms is their confidence and their ability to tolerate the risky activities that might lead great opportunities (Chow, 2006). Business risks are the result of uncertainty regarding the future effects of the present decisions; decisions and choices made should take into consideration that is it likely to get different outcomes than expected (Vesković, 2014). Bird (1989) identified five types of risks linked to entrepreneurs: (1) economic risk, (2) risk in social relationships, (3) risk in career development, (4) psychological and (5) the health risk, while Harrington and Niehaus (2004) assure that business decision making involves more types of risks which might include price risk, credit, and pure risk. Covin and Slevin (1991) emphasized that companies who do not take risks in an active business environment lose their share and cannot actively compete with other entrepreneurial firms who handle the same industry. Entrepreneurship literature clearly reveals that in order to be a strong entrepreneur, a firm should be able to determine, identify, and seize opportunities. To be successful, firms need to focus on utilizing opportunities rather than on potential risks (Drucker, 1985). Shane and Venkataraman (2000) stated that the already existing managerial strategies and the entrepreneurship literature have extensively investigated and analyzed the significance of adapting to business environment and utilizing opportunities. Naturally, risk-taking involves different dangers. Firms who are conscious and carefully watches theses dangers can achieve the competitive advantage. However, activities and risks taken without an adequate planning or lack of farsighted analysis, evaluation, or mitigation might be costly.

Strategic flexibility

Strategic flexibility is seen as an important contributor to the firms' performance and survival (Wang, Qi, & Zhao, 2019). Indeed, firms' success in the 21st century organization will depend first on building of strategic flexibility (Hitt et al., 1998: 22). Since the business environment is known as competitive and dynamic, firms need to be responsive to this environment and have new strategies if to obtain a competitive advantage. In addition, the continued development and advancement of information technologies, firms' strategies focus on a sustainable competitive advantage, and give importance to short-term advantages of flexibility and fast response (Beraha, Bingol, Ozkan-Canbolat, & Szczygiel, 2018). Strategic flexibility can also be seen as a dynamic managerial capability necessary to be innovative and responsive in the market (Liao, Liu, Fu, & Ye, 2019; Monteiro et al., 2017; Eisenhardt & Martin, 2000).

Hitt et al., (1998) defines SF as the firm's strategy of adjusting and modifying its objectives to be able to respond to the changing competitive environment and consequently gain and obtain a competitive advantage. It is related to environmental uncertainty (Abbott and Banerji, 2003) and focuses on the ability to change and adaption. Its' a firm's ability to precipitate strategic changes (Fernández-Pérez, José Verdú-Jóver & Benitez-Amado, 2013). Sanchez (1995) adopts SF view and a resource-based view of competition to expand the conception of SF into two dimensions: resource flexibility and coordination flexibility. He believes that resource flexibility deals with the available product creation resources, while the firm's coordination flexibility illustrates the application of the existing resources in markets. Similarly, Harrigan (1980) spots that SF is the firm's ability to redistribute its resources without friction and Shimizu and Hitt (2004) view SF as a kind of organizational capability, which comprises understanding changes and uncertainties,

quick investing of resources in new projects responding to changes and choosing the proper time to stop or reverse current resource obligations.

Market orientation

In the strategy literature MO is seen as essential for superior performance (Yu et al., 2016). MO is defined as the capacity to produce customer value using competitor and customer intelligence (Ngo and O'Cass, 2012; Kajalo and Lindblom, 2015). Lekmat, Selvarajah and Hewege (2018) and De Villiers and Coleman (2017) showed how important it is to develop marketing capacities, competencies, and capabilities in order to reach high performance. Others like Gellynck et al. (2012) showed that MO can increase firm's profits. MO is a marketing concept, but it is also a process that obtains market-based knowledge and distribute it organization wide (Kirca et al., 2005; Yu et al., 2016) which results in superior performance compared to competitors (Gruber-Muecke and Hofer, 2015).

The literature presents two ways to perceive MO. One sees it as an organizations wide culture (Kajalo & Lindblom, 2015) and the second sees it as the processes of generating market intelligence. In the first MO is "the organization culture that most effectively and efficiently creates the necessary behavior for the creation superior value for buyers and thus continuous superior performance for the business" (Kohli and Jaworski, 1999: p. 3). In first sees definition Kohli and Jowraski (1990) and Narver and Slater (1990) emphasize three organizational values: components: customer orientation, competitor orientation, and inter-functional coordination.

Thus, MO deals with predicating the needs of existing and future customers, by giving them attention collecting and distributing the information within the organization. Mo also helps companies obtain information about competing firms marketing mix allowing them to develop better products and services. The literature is full of studies that support a positive effect of MO on performance and profitability (Wiklund & Shepard, 2003; Atuahene-Gima, 1995; Zahra & Covin, 1995). MO also a helps companies to predict future and latent needs of customers, build value, develiver value and build a sustainable advantage against competitors continually. MO could also serve as a sensory system against sudden changes of technology or the market itself (Wi & Wang, 2001).

Environmental hostility

Miller and Friesen (1982) describe environmental hostility as the level of danger the environment poses on a firm's survival and existence. It can take many forms such as heightened competition, government regulation, access restriction and labor issues (Shirokova, Bogatyreva, Beliaeva and Puffer, 2015). Alexandrova (2004) suggested that environmental hostility implies some degree of inability to control the environment and an element of threat with regards to players and events in the outer environment. Jifri, Drnevich, and Tribble (2016) explained that common features include: lack of opportunities, worsening economic conditions, and high competition. Hostility also makes it difficult for firms to grow due to shortage of munificence in terms of the products, technology, and output produced and make it difficult also for firms to align with changes in the environment. In this kind of environment small companies may even suffer more than big companies due to their size (Aldrichand & Auster, 1986).

Performance

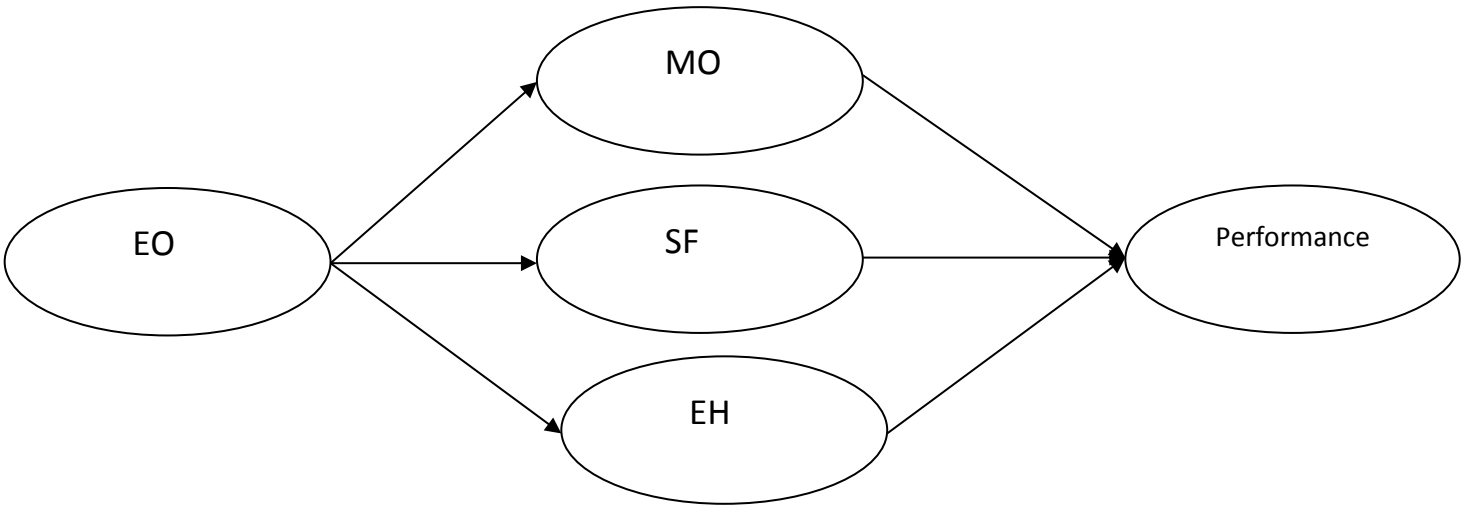
Measuring performance accurately is difficult in entrepreneurship (Murphy, Trailer & Hill, 1996). Laitinen (2002) argued that disciplined measurement system is necessary if the firm wish to enhance the chances of a beneficial strategy implementing. Most studies conceptualized EO as the independent variable and performance as the dependent variable and in most of them it was found that EO results in better performance (Zahra, 1991; Zahra and Covin, 1995; Wicklund and Shepherd, 2005). Due to the fact that performance has many dimensions and is complex it has been challenging to measure in a totally objective and decisive manner. Therefore, researchers suggest different ways to gauge it (Lumpkin and Dess, 1996). Some used financial performance like Slater, Olson and Venkateshwar (1997), others like Steiner (1979) used perception of organizational performance. It was also found that a subjective evaluation of performance highly correlates with objective evaluation. Research confirms for example that managers' evaluation and perception of performance is correctly related to objective ones (Nayyar, 1992; Tan and Litschert, 1994). Good and reliable performance measures come from organization theory and strategy literature. Therefore, both financial and non-financial measures can be used to evaluate performance including: profit before tax and turnover, customers' satisfaction etc.… (Haber and Reichel, 2005). Numerous researchers suggested that subjective measures are suitable when objectives measures are not available or less reliable (Gupta & Govindarajan, 1984; Dess & Robinson, 1984) as objective measures exist more in highly established and usually big companies and less in SMEs.

Chapter three

Conceptual Framework of the Study

This chapter presents the theoretical framework and derives the hypotheses of the study. Figure 1 depicts the study model.

Figure 1: Research model



EO and Firm Performance

There is an abundance of literature on the relationship between EO and firm performance. The topic has attracted numerous researchers during the years. Numerous researchers have hypothesized and proved a positive relationship between EO and growth and EO and profitability of the firm. For example, Shah and Ahmad (2019) found that EO, as a whole, presented a significant positive effect on the performance of Pakistani SMEs. They also found that differentiation strategy partially mediated the relationship between EO and performance of SMEs. Galbreath, Lucianetti, Thomas, and Tisch (2020) found that EO has a direct positive impact on firm performance in SMEs in Italy. They also found that competitive strategy acted as a moderating variable on the relationship between EO and performance. LoongLee, Ching and T (2019) found that EO has a positive and significant effect on performance in Malaysian firms. Torres, Lopez-Torres and Schiuma (2019) also showed that Mexican firms with high EO had higher performance. Isichei, Agbaeze and Odiba (2019) found that EO dimensions of proactiveness and innovativeness both have a positive direct impact SMEs' performance, while risk taking did not. The study found evidence that structural infrastructure mediated the EO–performance relationship. Seo (2020) found a significant curvilinear relationship of EO with technology innovation and product innovation, and linear relationship between EO and sales growth in Korean firms. Wahyuni and Sara (2019) found that EO has an indirect effect on performance in Bali Indonesia. Hussain, Abbas, Khan (2018) found that EO is positively related to organizational performance. The results also indicate the moderating role of MO on the relationship between EO and performance. Fadda (2018) found that of EO, innovativeness, proactiveness and autonomy were significantly

associated with tourism firm performance, whereas risk-taking and competitiveness were not in Italian firms. Hernandez-Perlines (2017) found that EO has a positive effect on international performance of family businesses in Spanish firms. Fadda and Sørensen (2016) found that both EO and destination attractiveness were found to exert independent positive effects on firm performance in Sardinia in Italy. Radipere (2014) found evidence that EO is a good predictor of firms' performance in South Africa.

A study by Wiklund (1999), investigated more than 130 Swedish companies in a longitudinal study for more than two years to examine the EO-performance relationship. He confirmed a positive EO-performance relationship. The results were concurred with Zahra and Covin (1995) found that the strength of the relationship increased over time. Becherer and Maurer (1997) also confirmed the same and Zahra and Covin (1995) proved a significant and positive relationship between EO and performance and argued that the relationship is strengthened with the passage of time. There is a limited number of studies that found no relationship between EO and performance. In addition, a very limited number of studies also found a negative relationship between EO and performance (Covin, Slevin and Schultz, 1994). However, when negative relationship was found it was usually between risk taking and performance where the relationship was not linear but rather curvilinear. Following this logic, Miller (1983) found that the relationship between risk-taking and entrepreneurship was non-linear a result that was also replicated by Begley and Boyd (1987).

Despite the above, empirical results taken from the analysis of the relationship between these variables continue to correlate with the wide majority of studies proving the relationship is a positive one. It has become increasingly clear that an EO and performance relationship will most likely bring in a positive relationship between the two variables. For example, recently Soares and Perin (2019) conducted a major review to analyze the relationship between entrepreneurial orientation (EO) and organizational performance through an updated and extended meta-analytic review that includes EO, mediators, moderators, and performance results. They found that there is a direct and positive impact of EO on organizational performance, and this effect is stronger for multi-item measures of performance and for revenue-based performance measures. In addition, the authors found partial mediation effects of learning orientation and innovativeness on the relationship between EO and firm performance.

The previous discussion leads to the following hypothesis:

H1: EO has a significant positive effect on organizational performance

Innovativeness significantly directs companies' organizational performance focusing on creating new products (Dadzie, Agyapong and Suglo, 2020). RBV theory posits that the degree to which innovative firms can surpass competitors depends on their resource's idiosyncratic nature (innovativeness). Companies that possess these resources can benefit from commercial opportunities in the business environment by creating products and services that satisfy markets beyond local borders. The RBV theory states that companies leverage their resources and strategies to create value and enhance performance in their target market, an action that elicits similar results in international entrepreneurship (Schwens et al., 2018). Dai et al. (2014) and Cassiman and Golovko (2011) argue that innovativeness depicts a business's inclination to identify and develop new products and services that satisfy the needs of customers in new target markets. This shows

the importance of innovativeness in firms' performance. Brüderl and Preisendörfer (2000) argue the criticality of innovativeness in SMEs and that it should be emphasized as it affects growth. Thus, SMEs that engage in innovativeness tend to introduce new product features and develop new markets or skills and perform better.

This leads to the following hypothesis:

H2: Innovativeness has a significant positive effect on organizational performance

Proactiveness refers to the ability of a firm to read, foresee and act upon future wants and needs and capturing the chances in the market better and before competitors. Also, proactiveness is different and distinguishable from reactiveness as reactiveness is only a response to competitors' actions and tactics. Being proactive entails that a company acts opportunistically and therefore create and shape the surrounding environment by establishing new trends and demands. For example, proactiveness will enable the firms to find new customer segments in new markets ahead of the competition (Khalid, 2019).

H3: Proactiveness has significant positive effect on organizational performance

Taking risk shows the degree to which businesses are eager to invest or undertake unknown commitment that could be potentially a loss or a failure (Covin and Slevin, 1989). Baule and Fandel (2016) relate it to the proclivity and tendency to identify and seize opportunities even under uncertain circumstances. Research showed that risk-taking negatively affects SMEs' performance (Kreiser and Davis, 2010).

Schilke (2014) argued that SMEs' business activities have been associated with high risk because of their limited resources that increases risk further. The reason is because in Pratono (2018) view is that SMEs lack pricing capability and the benefits of economies of scale as a result of their size and are, therefore, forced to compete at very low prices in efforts to match competitor offerings, thus leading to low performance and simultaneously increasing their risk (Vorhies et al., 2011). This leads to the following hypothesis:

H4: Risk taking has a significant negative effect of organizational performance

EO and MO

EO describes a disposition of companies to continually look for new opportunities, which is therefore naturally displayed in the company's acceptance of risk, innovation, proactiveness, and autonomy (Matsuno et al., 2002; Lumpkin & Dess, 1996). EO, thus forces the firm to look into the future by choosing opportunities now that maximize future market position (Wiklund & Shepherd, 2011). This process of exploration for the future carries a certain amount of risk but enables firms to become experienced in transforming their structure, culture, and the market for their own good (Baker & Sinkula, 2009). Atuahene-Gima and Ko (2001, p. 56) contend allows firms to questions long held assumptions about the market, customers, competitors and so on resulting in barriers breaking. Keeping in mind the nature of this risky process resulting from an EO, some researchers argued that advantages from an EO are reduced by the high risks and uncertainties resulting from

being entrepreneurial (Hughes et al., 2007; Atuahene-Gima and Ko, 2001), and this is why a growing body of research is suggesting that companies need to counterbalance their entrepreneurial processes with strong MO competencies (Bhuian et al., 2005).

There is a big literature on the consequences of EO and MO on performance especially in the strategic management stream (Rauch et al., 2009; Kirca et al., 2005; Cano et al., 2004; Matsuno et al., 2002), but the literature is not very clear about the effect of their togetherness both orientations and how that affect performance. For example, Cadogan (2012, p. 346) indicated that a gap exists when it comes to understanding how firms should manage multiple strategic orientations especially that these orientations require hefty investments. He added that the main question should have been "should the firm try to be both entrepreneurial and market oriented in all its markets?" is not yet answered. Lekmat, Selvarajah and Hewege (2018) argued that there is evidence that having both EO and MO together indeed creates superior performance. Atuahene-Gima and Ko's (2001) also found that an alignment between EO and MO resulted in better performance in Australian firms. Baker and Sinkula (2009) commented on the benefits of having both EO and MO at the same time and found it to have a positive effect on profitability. Both Baker and Sinkula's (2009) and Matsuno et al. (2002) postulated that MO as a mediator of the EO-performance relationship.

Hill and Rothaermel (2003) indicated that a high level of entrepreneurial activities needs a complementary high MO level turning entrepreneurial ideas into products requires good market sensing and knowledge Webb et al. (2011) contend that MO and EO complement each other in a way that a market intelligence strengthens of entrepreneurial activities and the other way around. Yoon-joo Ma et. al. (2012) studied EO, Mo and social performance. They found that that MO through social enterprise can improve social performance.

Since an entrepreneurial orientation encompasses such as value and behaviors as innovativeness, risk taking, and competitive aggressiveness, entrepreneurial values may enhance the prospects for developing a breakthrough product or identifying an unserved market segment, both of which are fertile ground for developing competitive advantage (Slater and Narver, 2000). Also, EO is prerequisite to MO. More importantly, because EO embodies firms' reaction to future and potential market needs, it produces an MO. This leads to the following hypothesis:

H5: MO significantly and positively mediates the relationship between EO and organizational performance
H6: MO significantly and positively mediates the relationship between EO dimensions (innovativeness, proactiveness, risk taking) and organizational performance

EO and strategic flexibility

As discussed in the previous chapter, SF displays the ability to respond quickly and deploy resources in times and situations of quick change. EO essential characteristics entails a willingness to move independently, innovate, and cultivate opportunities under risky surroundings (Lumpkin & Dess, 1996). From the perspective of the dynamic capability theory, proactiveness is seen as a type of dynamic capability. It allows firms to rearrange inner and outer competencies to continually deal with severely altering environments' (Teece et al., 1997). Achieving of EO tremendously

affects company's' performance and are strongly linked to coordination flexibility and relies heavily on deployment flexibility and resource commitment. Van de Ven et al. (1976) defined organization coordination as connecting and linking dissimilar elements of an organization together. This linkage of separate inner parts of the organization allows managers to communicate top down, create a shared vison and hear differing opinions and important decision information. It allows them to share knowledge among different functions.

Jansen et. al. (2006) argued that internal linkages (inner coordination tools) connecting units can be essential determinants of both exploitative and exploratory innovation. That is a centralization impedes innovation while coordination flexibility enhances innovation and hence performance. In addition, Tsai (2002) noted that informal hierarchal structures have a positive effect on innovation while formal hierarchal structures have a negative effect. In rapidly changing markets with severe competition coordination flexibility allows for redeploying or resynthesizing resources effectively (Sanchez, 1995).

Furthermore, coordination flexibility enhances proactiveness. Being proactive is important because it allows firms to quickly introduce new products and respond quickly to change in the market. Therefore, high organization coordination flexibility helps ease and enhance strategy implementation of strategic orientations and improve sharing knowledge and resources and their integration thus improving performance (Kogut & Zander, 1996). In an empirical study, Grewal and Tansuhaj (2001) and Worren et. al. (2002) found that both MO and strategic flexibility have a positive effect on a firm performance. This leads to the following hypothesis:

H7: Strategic flexibility significantly and positively mediates the relationship between EO and organizational performance
H8: Strategic flexibility significantly and positively mediates the relationship between EO dimensions (innovativeness, proactiveness, risk taking) and organizational performance

EO and environmental hostility

Venkataraman (1997) argued that exploration and utilization of entrepreneurial opportunities comes from previous experience and knowledge from customers and markets. In addition, recent knowledge about technology, in conjunction with the previous information on markets and outside issues and problems, result in the finding of entrepreneurial opportunities (Shane and Venkataraman, 2000). This means that the outer environment is perceived as an essential "contingency" or "contextual" element in the EO-performance relationship. Galbraith (1973) explained that there is not a universal way to organize or a strategy that can be used all the time everywhere. The essence of the contingency approach is that firms vary their strategies and structures based on the context they operate in (Lawrence and Lorsh, 1967; Chandler, 1962). Therefore, the right lining up of essential factors with the organization's outer context results in improved outcomes (Garengo & Bititci, 2007).

In this logic, the EO-performance relationship is usually linked by contemplating environmental variables (e.g., Tang et al., 2008; Wiklund and Shepherd, 2005; Covin and Slevin, 1989; Robertson and Chetty, 2000). Numerous researchers emphasized the critical nature of the alignment between organization and its surrounding. The importance of correct fit between the strategy and the

environment indicates that both conservative and entrepreneurial firms need to evolve features that allow them to exploit their environments (Yeoh & Jeong, 1995). In line with this, Yamada and Eshima (2009) contended that the outer environment such as hostility, uncertainty and risk may have a strong impact on small firms' viability and growth. This line of research is inspired by the work of Khandwallas's contingency perspective (1972), in which he argued that a company's performance must never be evaluated through organizational attribute (structure, management style, etc.), but rather by outcomes of the alignment of these dimensions within a specific environment that is described as hostile and uncertain.

Therefore, the literature differentiates between benign (non-hostile) and hostile environments. Non-hostile or benign environment has little risk, relaxed competition and presents opportunities for investment and has a business environment that is favorable (Covin & Slevin, 1989; Khandwalla, 1977). On the other hand, hostile environments are characterized by Khandwalla (1976/77; 1977) as highly risky, little opportunities and, stressful. This was echoed by Covin and Slevin (1989) who argued that the hostile environment is described as having severe competition and little opportunities for investment.

Indeed, in their examination of the contextual analysis of the EO-performance relationship Covin and Slevin (1989) argued that entrepreneurial strategy changes according to the external environment regardless of being benign or hostile. Entrepreneurial companies favor hostile environments as they reap more benefits (Covin & Slevin 1989). Hence, Robertson and Chetty (2000) argued that in environments that have a high degree of uncertainty companies create more innovations and tend to become more risk taking. Conversely, the relationship between EO and performance may be less significant in benign environments. Entrepreneurial behavior entails more risk than does a conservative behavior.

H9: Environmental hostility significantly and positively mediates the relationship between EO and organizational performance
H10 Environmental hostility significantly and positively mediates the relationship between EO dimensions (innovativeness, proactiveness, risk taking) and organizational performance

Chapter 4

Research Methodology

Introduction

This chapter is dedicated to present the methodology adopted in this study. It comprises the research design, methods of selecting samples, data collection, and results analysis. It also discusses ethical considerations.
Methodology and Research Design

According to Shah et al. (2018), a research methodology is an approach to problem solving and arriving at new knowledge of the subject in question. Everything that contributes to the goal's achievement is part of the research methodology. Polit and Beck (2010) state that the function of the research design is to specify the preliminary approach used to provide answers for the research questions. In order to achieve the intended goals, the research design is applied to ensure the utilization of the most appropriate research method (Palinkas et al., 2015). For an objective investigation, the quantitative approach is used in this study because it is the best to investigate human behavior (Parahoo, 2006). A fixed design is used in quantitative approach to generate research questions in details, data gathering, and methods and analysis (Robson 2007). The study used quantitative survey to collect the data.

SMEs in Jordan

There is a growing evidence that small and medium enterprises (SMEs) play a major role in the national economic development of any country. SMEs provide the majority of new jobs and are a prime source of creativity and innovation that fuels economic development. Worldwide SMEs represent as high as 99% of all employers, 52% of the private workforce, and provide virtually all the net new jobs and provide 51% of private sector output and 96% of all export of goods.

In Jordan, the economy depends almost entirely on small and medium sized companies to drive its economy. Around 98% of all businesses in Jordan are classified as SME's, of which two third have less than 19 employees. Jordan is a small nation that does not have petrol or minerals with an economy that depends entirely on international aid. Further a population of 7.6 million that is growing at 2.2% rate makes it difficult for successive governments to find solutions for a rather increasing unemployment.

Jordanian SMEs are faced by growing competition from imported goods and services and are working rigorously to modernize their technologies and improve their competitiveness.

Population/sample

The population of the study is defined as "the total number of units from which data can potentially be collected" (Parahoo, 2006, p. 258). In Jordan, the Social Security Corporation (2016) declared that the total number of SMEs is 43091 SMEs where 11227 of them located in Amman, Irbid, and Zarqa. However, the total number of SMEs is not sharply decisive either in terms of definition or

as received by the data collector. The total number of SMEs per sector or governorate is not decisive. The most recent survey declared that Amman, the capital city of Jordan has 5888 manufacturing SMEs as per the Central Bank of Jordan (2018). This study surveyed SMEs that are: located in Amman and has been in operation for more than 3 years. This brings down the number of SMEs to an estimated 3,000. According to Proctor et al. (2010), using the probability sample in quantitative approach is significant in reducing errors and biases. Sampling means the process which the researcher uses to select the proportion of the population to stand for the entire unit. The adoption of samples rather than large target population is much more practical and economical as stated by (Polit & Beck 2010). The study used a randomly selected sample to collect the data. According to Krejcie and Morgan (1970) the sample size for a population of 3000 companies should be 341. However, personal experience shows that there is less appreciation for research in developing countries. Therefore, a bigger sample was sought to make up for the lower expected response rate. So, it was decided to go for a sample size of 600.

Data Collection

A list that included the names of the selected SMEs was created, and each name was allotted number. To ensure the randomness of the selection, all names of SMEs were written on small pieces of papers, mixed in a box, and finally, drawn from the box. The sample consisted of 600 SMEs. It took two months to distribute and collect the questionnaires. A personalized introduction letter was developed both in English and Arabic addressing the owner/manager of the business. The letter described the purpose of the study, assured the participant that his personal information and that of his business will remain confidential and that the data collected will only be used for research purposes only. Further, participants were provided with the researcher's email should they require a copy of the results. A questionnaire was developed both in Arabic and English (see the next section). The questionnaire with the introduction letter were sent by mail. Included in the envelope was a prepaid envelope so that the participants could return the questionnaire at no cost. In total 600 questionnaires were mailed to managers and owners of SMEs. Only 137 questionnaires were received for further analysis, indicating a response rate of 23%. Both the introduction letter and the questionnaire survey are in the appendix.

Research instrument

The study used a questionnaire survey. According to Parahoo (2006), the questionnaire is a method assigned to collect data from participants where they are asked to give written or verbal responses to a set of written questions. The advantages of questionnaire include: low cost, efficiency, convenience, and time saving (Jones & Rattray 2010). It is highly recommended to use questionnaire when the required data include attitudes, knowledge, and experience of staff (Parahoo 2006). The study used closed ended questions. The study used a 5 Likert scale questionnaire which consists of 6 sections. Section 1 measured EO. The evaluation of EO was handled by using a modified-eight-items version of Calvin and Slevin (1986) original measure, which was established on the basis of Khandwella's work (1977), and Miller and Friesen (1982) development scale. The adoption of this scale came out of the fact that it has proved its reliability and validity in a wide range of studies (e.g., Kreiser, et al., 2002; Barringer and Bluedorn, 1999; Knight, 1997).

Entrepreneurial orientation is a second order construct consisting of innovativeness, proactiveness, and risk taking measured by the items put forward by Covin and Slevin (1989) and Shirokova and et al. (2016). Innovativeness was measured by three items: 1. In general, the top managers of our organization favor a strong emphasis on Research & Development, technological leadership, and innovations, 2. In the past five years, our organization has marketed a large variety of new lines of products or services, 3. In the past five years, changes in our products or service lines have been mostly of a minor nature (Reverse coded). Proactiveness was measured by three items: 1. In dealing with competitors, our organization often leads the competition, initiating actions to which our competitors have to respond, 2. In dealing with its competitors, my firm is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc., 3. In dealing with competitors, our organization typically adopts a very competitive posture aiming at overtaking the competitors. Risk taking was measured by three items: 1. In general, the top managers of my organization have a strong propensity for high risk projects (with chances of very high return), 2. The top managers believe owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve our organization objectives, 3. When there is uncertainty, our organization typically adopts a "wait and see" posture in order to minimize the probability of making costly decisions (Reverse coded).

The independent and demographic variables were measured in consequent sections. Section three measured MO which was measured by 14 questions. The 14 questions measured customer information, competitor and market information dissemination, and distribution lines of organizations which all offer new ideas to generate conduct a satisfying performance represented by fulfilling the customers' needs and provide the proper services to satisfy them (Kohli and Joworski, 1990; Jaworski and Kohli, 1993; Naver and Slater (1990); and Ferdinand (1999)). Market orientation is a second order construct consisting of: Customer orientation, competitor orientation and inter-functional coordination. Customer orientation is measured by 6 items: 1. Our business objectives are driven by customer satisfaction, 2. We monitor our level of commitment and orientation to serving customers' needs, 3. Our strategy for competitive advantage is based on our understanding of customer needs, 4. Our business strategies are driven by our beliefs about how we can create greater value for customers, 5. We measure customer satisfaction systematically and frequently, 6. We give close attention to after-sales service. Competitor orientation is measured by 4 items: 1. Our salespeople share information within our business concerning competitors' strategies, 2. We respond to competitive actions that threaten us, 3. We target customers and customer groups where we have, or can develop, a competitive advantage, 4. The top management team regularly discusses competitors' strengths and strategies. Inter-functional coordination is measured by 4 items: 1. Our top managers from every function visit our current and prospective customers, 2. We communicate information about our successful and unsuccessful customer experiences across all business functions, 3. All of our business functions (eg. marketing/sales, manufacturing, R&D, insurance/accounting, etc.) are integrated in serving the needs of our target markets, 4. All of our managers understand how everyone in our company can contribute to creating customer value.

Strategic flexibility is measured in section four by a uni-dimensional measure through asking 5 questions, using Sanchez's (1995) theoretical work, which is concerned with flexible distribution and coordination as a response to the unstable market environment. Strategic flexibility is

measured with 6 items: 1. The flexible allocation of marketing resources (including advertising, promotion and distribution resources) to market a diverse line of products, 2. The flexible allocation of production resources to manufacture a broad range of product variations, 3. The flexibility of product design (such as modular product design) to support a broad range of potential product applications, 4. Re-defining product strategies in terms of which products the firm intends to offer and which market segment it will target*, 5. Re-configuring chains of resources the firm can use in developing, manufacturing, and delivering its intended products to targeted markets, 6. Re-deploying organizational resources effectively to support the firm's intended product strategies.

Environmental hostility is measured in section five by a uni-dimensional measure with a three-item scale which was developed by Khandwalla (1977) and was adopted in numerus studies (e.g., Covin and Covin, 1990; Covin and Slevin, 1989; Dimitratos et al., 2004; Robertson and Chetty, 2000). Organizational performance, which the dependent variable for this study, is measured in section six. This is a uni-dimensional construct. Managers are required to rate their SMEs' overall performance, customer retention, development, and success of new products. The last section, section seven, is assigned to questions regarding demographic variables. Environmental hostility is measured by 4 items answering the question: How would you characterize the external environment (domestic and international) in which your firm operates? 1. Very safe/risky, 2. There is an abundance/few marketing opportunities and investment, 3. An environment that my firm can control and manipulate/ dominating environment which my firm's initiatives count for very little against tremendous competition.

Organizational performance was measured by 5 items: 1. Company's overall performance, 2. Customer retention, 3. New product success, 4. New product development, 5. Profitability.

Reliability and validity

Reliability is basically related to 'error in measurement' (McDowell & Newell 1996, p. 37) that is, how consistently or dependably does a measurement scale measure what it is supposed to be measuring (Bannigan & Watson, 2009; Polit & Hungler, 1995). Questionnaire reliability implies its ability to generate the same data when re-administered in the shade of the same conditions although it is difficult to get a replication of information when dealing with people (Robson, 2007). Reliability describes the accuracy of measurement. It basically concentrates on stability and consistency (Polit & Beck, 2010). Questionnaire's stability refers to the degree to which it yields similar results when re-administered. Jones and Rattray (2010) define good reliability as indicated by a coefficient > 0.8. Consistency is tested by Cronbach's alpha as proposed by Polit and Beck (2010). The values of Cronbach's alpha range between 0.00 and 1.00 and a value of > 0.7 is accepted.

Once a measurement scale is shown to be reliable over time it should be assessed to establish whether or not it is reliably measuring what you want it to measure (Bannigan & Watson, 2009; Utwin, 1995). Validity is concerned with the meaning and interpretation of a scale. Polit and Beck (2010) define validity as the degree to which the instrument really measures what is intended to be measure. To exhibit high validity, the questionnaire should sufficiently handle all the issues in

the study. Face validity and content validity are two closely related forms of validity, and they are the minimum requirement of acceptance of a scale. However, Streiner and Norman (1995) recommend that '…this judgement should comprise only one of several used in arriving at an overall judgement of usefulness and should be balanced against the time and cost of developing a replacement.' (p6). Face validity is to check that the questionnaire is suitable to measure the concept intended to be tested (LoBiondo-Wood & Haber 2010) and this will be evaluated by urging researchers and friends to test-run the instrument to check whether the questions are relevant or not, and to make sure they are clear as suggested by Jones and Rattray (2010). A content validity test is assigned to check if the questions are enough and relevant and also cover all the aspects studied and make sure there are no irrelevant questions asked (Parahoo, 2006). Since there is no objective method, the test is based on judgment. The content validity of the questionnaire is evaluated by a panel of experts (Polit & Beck, 2010) or comparing with the literature or both (Bannigan & Watson, 2009). The questionnaire was given to the panel to make sure that the questions asked reflect the concepts under investigation and to ensure the adequacy of the questions as recommended by LoBiondo-Wood and Haber (2010). The judges were a group of researchers in entrepreneurship and business strategy.

Data analysis

Parahoo (2006) describes data analysis as "an integrated part of the research design" (p.375) and is a way of making sense of data prior to make them understandable. This study used a quantitative method that was descriptive and causal. The partial least squares structural equation modeling approach (PLS) was used for its advantages in the study of human behavior (Hair, Ringle & Sarstedt, 2011; Hair, Sarstedt, Pieper & Ringle, 2012), for its optimal predictive and exploratory potential using reflective indicators. It also does not require the data to be normally distributed and because it allows the use of a wide range of sample sizes (Sarstedt, Pieper & Ringle, 2012). The study used Partial Least Squares (PLS) to analyze the measurement and structural models. The mediation effects were examined using the Sobel test. Data analysis is discussed in detail in the next section.

Research ethics

There are important ethical considerations that needed to be looked at closely. The most important one is that of the protection of privacy. According to Anastasi (1990) two main ideas should be considered: relevance and informed consent. Respondents were asked to sign consent forms. The names of the respondents were not registered or collected. Consideration was given to the wishes of the respondents with regards to their participation in the research process. Since the questionnaire survey was sent by mail respondents were given the freedom not to participate if they felt not comfortable or unwilling. All they needed to do is just ignore the mail, not complete the questionnaire and therefore not to send anything back to the researcher. The study also ensured confidentiality in that name were required on the consent forms. Further, the consent forms were mixed so that they were not stored in order of collection. As explained before a cover letter accompanied the questionnaire, explaining the aim of the research and explaining that the data collected was for academic purposes only. The letter assured the anonymity of respondents at all times, and that personal information to identification were not required at any stage. It was stressed

that participation in the study was purely voluntary, and contact numbers were included in the letter.

Chapter Five

Data analysis and results

Analysis procedures

PLS was used to test the study model as PLS analysis is suitable both for exploratory and confirmatory studies. PLS is a data analysis technique of structural equation modelling (SEM), widely used in studies on management (Gonzalez and Melo, 2018; Gonzalez and Melo, 2017). It is a "second generation regression model that combines a factor analysis with linear regressions, making only minimal distribution assumptions" (Gefen et al., 2000, p.71). PLS analysis allows testing of second order constructs and is considered adequate for complex models that have plenty of exogenous and endogenous variables allowing a lower level of restriction when compared to data distribution and normality and is also more adequate when small samples are used (Gefen et al., 2000; Hair et al., 2013). Compared with a maximum likelihood approach, PLS is less strict in its distribution assumptions (multivariate normality) and does not require a large sample for model testing (Chin, 1998). In addition, considering relative the complexity of the research model and its numerous indictors, and the comparatively small sample size of respondents, PLS appears appropriate for model testing (Hair et al., 2011).

Measurement model

First the model's reliability and validity were measured. The model's internal reliability was checked by measuring Cronbach's alpha. The Cronbach's alphas for the constructs are above 0.7 thus, displaying satisfactory levels of reliability. Table 1 shows Cronbach's alphas for all constructs.

Table 1: Reliability of variables

Construct	**Cronbach's Alpha**
EO	0.82
Performance	0.88
Environmental hostility (EH)	0.78
Strategic Flexibility (SF)	0.85
MO	0.88

Afterwards, a confirmatory factor analysis was carried out to evaluate convergent and discriminant validity. First, the factor loadings were examined. No items were removed because most of factor loadings were greater than 0.5 which shows acceptable convergent validity (Hair Jr. et. al., 2014).

Figure 2 shows the full model. It is clear that EO has no significant effect on both MO and strategic flexibility. Also, both MO and strategic flexibility do not have a significant effect on organizational

performance. Therefore, it was decided to remove both variables form the analysis. Figure 3 shows the final model of the study.

Figure 2: Full model

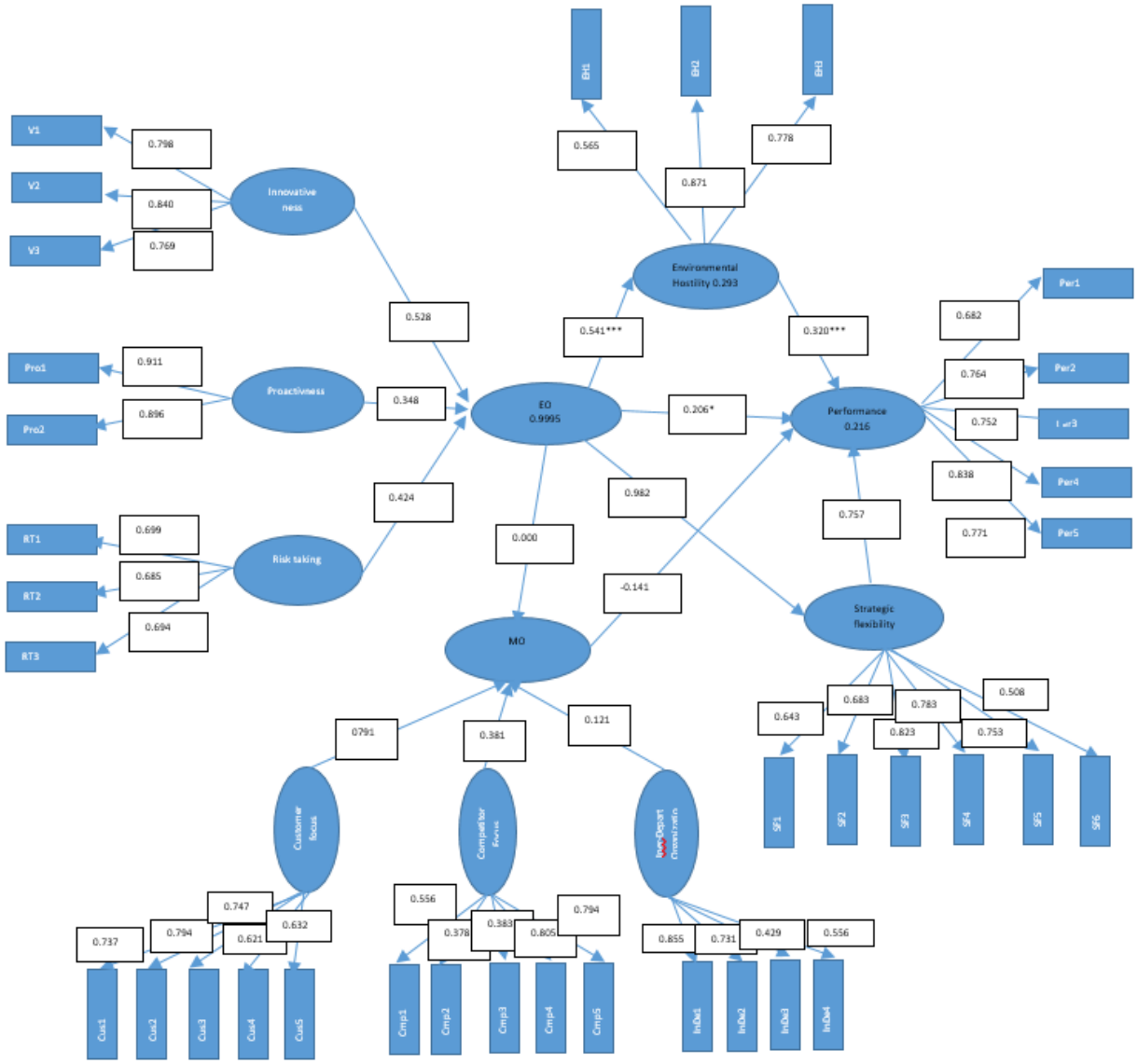
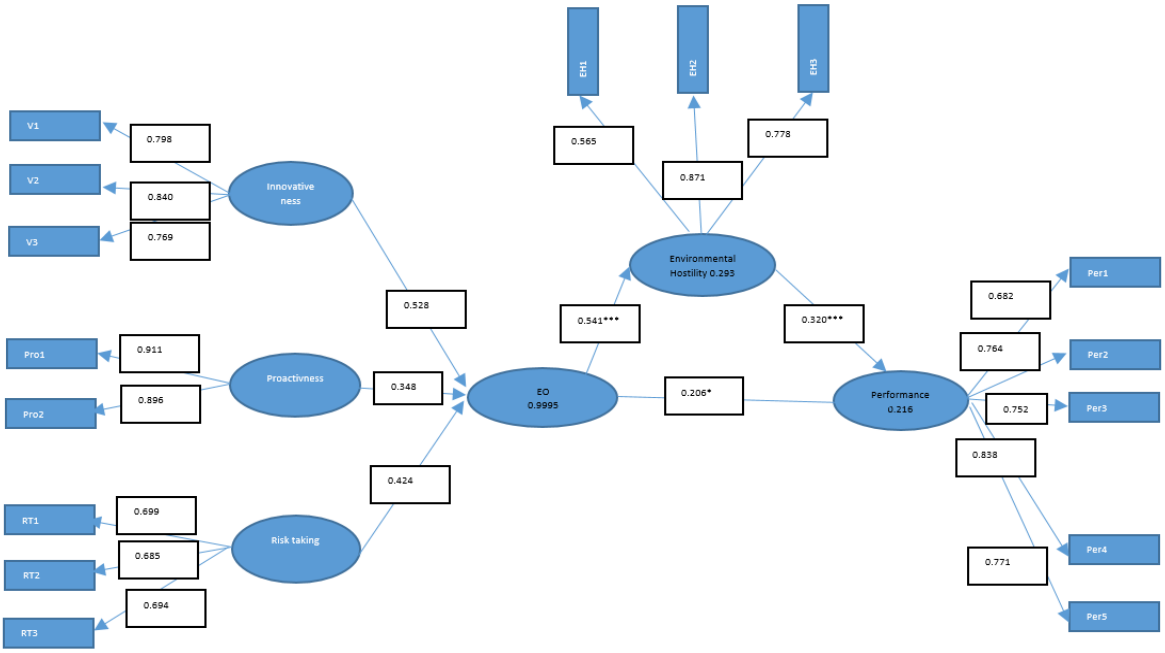


Figure 3: Final model



In addition, to assess convergent validity – average variance extracted was measured. The results are shown in Table 2.

Table 2: Average variance extracted

Construct	**AVE**
EO	0.37
EH	0.56
Performance	0.58

Based on Fornell and Larcker (1981), AVE should be greater than 0.5 to guarantee acceptable convergent validity. Table 3 reveals that both EH and performance are greater than 0.5 whereas EO is less than 0.5.

In the context of discriminant validity, the square root of AVE for every construct is compared to the inter-correlations between the constructs. Accordingly, it is anticipated that the square root of the AVE for the construct should be greater than the correlations between that construct and the other constructs of the model (Fornell and Larcker, 1981). The discriminant validity outcomes are illustrated in Table 3.

Table 3: Discriminant validity

	EO	EH	Performance
EO	**0.608**		
EH	0.541	**0.749**	
Performance	0.379	0.431	**0.736**

Table 4 presents the inter-correlations between the constructs. The diagonal line illustrates the square root of the AVE for comparison. It is clear from the table, that the square root of the AVE is greater than inter-correlations between constructs, hence showing discriminant validity.

Structural model

In order to test the structural model and the hypotheses, path coefficient analysis and bootstrapping procedure with 3000 re-samplings were carried out.

First, as part of the analysis, the coefficient of determination is evaluated (R^2). R^2 for organizational performance is 0.46 indicating that the 46% of the variance in the dependent variables is elucidated by the independent/mediating variables.

Table 4: Hypotheses testing

Hypothesis	**Result**
H1: EO has a significant positive effect on organizational performance H2: Innovativeness has a significant positive effect on organizational performance H3: Proactivness has significant positive effect on organizational performance H4: Risk taking has a significant negative effect of organizational performance	Supported
H5: MO significantly and positively mediates the relationship between EO and organizational performance	Not Supported
H6: MO significantly and positively mediates the relationship between EO dimensions (innovativeness, proactiveness, risk taking) and organizational performance	Not Supported
H7: Strategic flexibility significantly and positively mediates the relationship between EO and organizational performance	Not Supported
H8: Strategic flexibility significantly and positively mediates the relationship between EO dimensions (innovativeness, proactiveness, risk taking) and organizational performance	Not Supported
H9: Environmental hostility significantly and positively mediates the relationship between EO and organizational performance	Supported
H10: Environmental hostility significantly and positively mediates the relationship between EO dimensions (innovativeness, proactiveness, risk taking) and organizational performance	Supported

Mediation effect

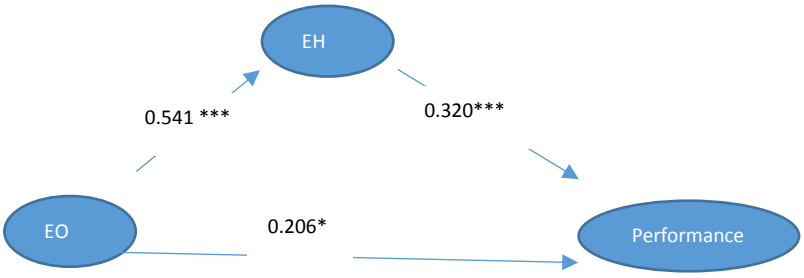
As the above results show, it is evident that both MO and strategic flexibility have no mediation effect on the EO-Performance relationship neither it does on the EO dimensions – Performance relationship. Therefore, to evaluate the mediation effect of environmental hostility on the EO-Performance relationship and on the EO dimensions-Performance relationships the study assessed the models in figures (3). Using the Sobel test, the results show a mediation effect of environmental hostility as the Sobel Test Statistic absolute value is greater than 1.96 the two tailed probability value is less than 0.05. The direct effect without the mediating variable is 0.346 significant at 10% level which is decreased when the mediating variable is included in the analysis showing a full mediation.

With regards to the mediation effect of EH on the relationships between EO dimensions and Performance the analysis showed that EH mediates the relationships between innovativeness and Performance. Using the Sobel test, the results show a mediation effect of environmental hostility as the Sobel Test Statistic absolute value is greater than 1.96 the two tailed probability value is less than 0.05. The direct effect without the mediating variable is 0.346 significant at 10% level which is decreased when the mediating variable is included in the analysis showing a partial mediation. The study, however, found that EH neither has no mediation effect on the Competitive Aggressiveness-Performance relationship nor has a mediation effect on the Risk Taking-Pheromone relationship.

The following mediations models shows the results.

Figure 4: Direct effect model of EO-Performance

Figure 5: Mediation model of EO



Sobel Test Statistic: 2.82 and the Two Tailed Probability: 0.004

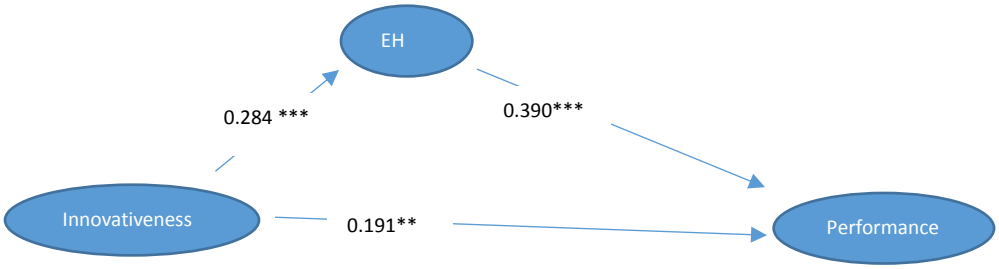
Direct and mediation of EO dimensions

Innovativeness

Using the Sobel test, the results show a mediation effect of environmental hostility as the Sobel Test Statistic absolute value is greater than 1.96 the two tailed probability value is less than 0.05. The direct effect without the mediating variable is 0.312 significant at 5% level which is decreased when the mediating variable is included in the analysis showing a full mediation.

Figure 5: Direct effect model of Innovativeness-Performance

Figure 6: Mediation model of Innovativeness-Performance



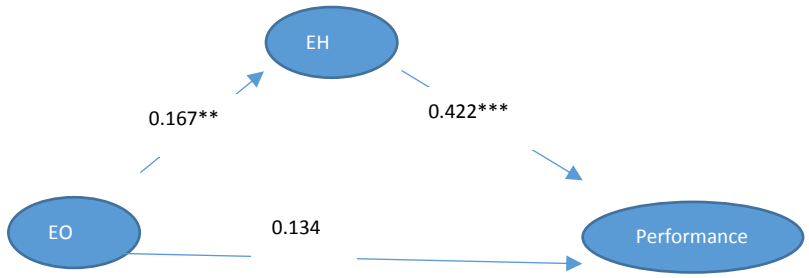
Sobel Test Statistic: 3.48 and the Two Tailed Probability: 0.0005

Proactiveness

Using the Sobel test, the results show no mediation effect of environmental hostility as the Sobel Test Statistic absolute value is less than 1.96 the two tailed probability value is greater than 0.05. The direct effect without the mediating variable is 0.217 significant at 5% level which is decreased when the mediating variable is included in the analysis showing a full mediation.

Figure 7: Direct effect model of Competitive Proactiveness

Figure 8: Mediation model of Competitive Aggressiveness-Performance



Sobel Test Statistic: 1.90 and the Two Tailed Probability: 0.056

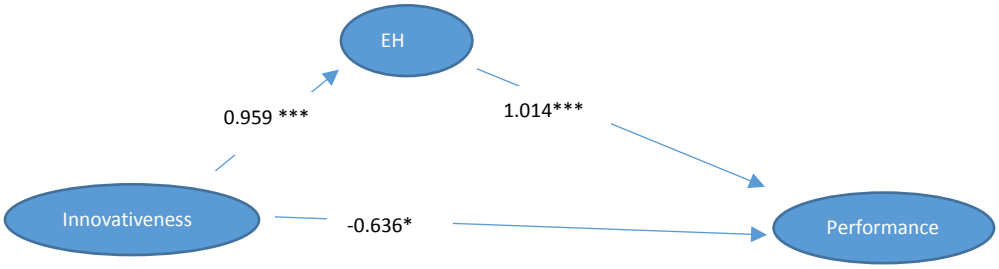
Significant positive direct effect but no meditation.

Risk Taking

Using the Sobel test, the results show no mediation effect of environmental hostility as the Sobel Test Statistic absolute value is less than 1.96 the two tailed probability value is greater than 0.05. The direct effect without the mediating variable is 0.359 significant at 1% level which is decreased when the mediating variable is included in the analysis showing a full mediation.

Figure 9: Direct effect model of Risk Taking -Performance

Figure 10: Mediation model Risk Taking -Performance



Sobel Test Statistic: 3.27 and the Two Tailed Probability: 0.001

Results and conclusions

The current study examined relationship between EO and organizational performance and how organizational and environmental factors such as MO, SF and EH affect the EO-Performance relationship in a SMEs in a developing country context like Jordan. Specifically, the study have investigated the mediating effect of market orientation, strategic flexibility, and environmental hostility on the relationship between EO and its dimensions on organizational performance in these firms.

The study found that EO affects performance significantly, directly, and positively. The results of this study are in accordance with past research that suggested a positive effect of EO on performance such as Morena and Casillas (2008); Tang et al., (2008); and Wiklund and Shepherd (2005), but also confirms that the EO-performance relationship also works in developing country context not only developed countries. This study also found a mediating effect of environmental hostility on the relationship between EO and organizational performance. No evidence was found to support that MO and strategic flexibility have a mediating effect on the relationship.

With regards to the effect and mediation effect of EO dimensions. The study found that both innovativeness and proactiveness have a significant positive direct effect on performance. While risk taking has a significant negative direct effect on performance. With regards to the mediation effect of market orientation, strategic flexibility, and environmental hostility on the relationships between EO dimensions (innovativeness, proactiveness and risk taking) the study found that only EH has a mediation effect while market orientation and strategic flexibility have no mediation effect.

Specifically, the study found that EH mediates the relationship between innovativeness and performance. The mediation is a full mediation since there are both direct and indirect effects of innovativeness on performance. This is in line with Brüderl and Preisendörfer (2000) who argue the criticality of innovativeness in SMEs and that it should be emphasized as it affects growth. Thus, SMEs that engage in innovativeness tend to introduce new product features and develop new markets or skills and perform better.

The study found a partial mediation effect of EH on the competitive aggressiveness-performance relationship since the direct effect become insignificant when the mediator is added. The study also found a partial mediation effect of EH on the risk taking-performance relationship since the direct effect become insignificant when the mediator is added. These are very important findings as it shows that innovation is critical for SMEs in a developing country environment. Jordan is a small country and has little natural resources and the majority of its SMEs are in manufacturing and services that face a very highly hostile environment that is described to be highly risky, little opportunities and stressful. Changing governmental regulations, high taxes, restrictions on foreign investment and more. Innovation is everything is such an environment as it could make or break the success of the companies. Entrepreneurial firms need to evolve features that allow them to exploit their environments. As shown outer environment such as hostility, uncertainty and risk may have a strong impact on small firms' viability and growth. Proactiveness and risk taking also both have an effect but it's a partial one indication less importance than innovativeness. Risk and

competition are important but are less important and affecting than innovativeness which the name of the game. While entrepreneurial companies favor hostile environments as they reap more benefits (Covin & Slevin 1989) Robertson and Chetty (2000) argued that in environments that have a high degree of uncertainty companies create more innovations and tend to become more risk taking. Conversely, the relationship between EO and performance may be less significant in benign environments. Entrepreneurial behavior entails more risk than does a conservative behavior. Moreover, SMEs usually try to be successful by taking risky projects, sometimes it involves giving up success factor that have already worked well with other businesses and sometimes these SMEs invest in projects where no outcomes are guaranteed. SMEs operating in Jordan often assume higher risks like increased level of debt, investing many of their resources, and adopting untested technologies.

With regards to MO and SF it seems that in MO is more critical for big companies in bigger markets as there is a more pressing need to be systematic in collecting data and information on buyers, competitors, and the market. A similar thing can be said about SF as the bigger the company is the more there is a need to be more flexible and able to reorganize resources in a way that will allow a better response to market changes and competition. This might be a conjuncture of why these two factors did not have an effect for SMEs in a small market like that of Jordan.

The results of this study affirm that there is a positive and important relationship between EO and SMEs performance; in addition, this study shows the important effect of the environmental hostility. Overall, the results focused on the existent relationship between strategic features and performance with several contingencies from the firm's operating environment. In general, evidence from this study underlines the significance of a firm's operational environment, as emphasized in another research. The study also proves the positive effect of EO on profitability. This agrees with Chow (2006) who confirmed the connection between EO and financial performance but has not found a significant interaction between environmental variables and EO in regard to business profitability. More importantly, the role of innovativeness is highlighted by the study as innovativeness is very important for SMEs' success. The same can be said about risk taking as SMEs cannot take great amount of risk unlike big companies that have great experience and resources and therefore can assume great risks.

Limitations of the study

This study contributes with knowledge about the complex relationship between EO and performance; however, it has some limitations. First, because this study targeted SMEs in Jordan in the Capital and Middle Region, the results might not be generalizable to other circumstances or activities. It will be appealing to conduct the study in another country and different industry circumstances. Secondly, it will be appealing to measure EO in a different phase of determining if the EO effect changes with time and how it affects organizational performance. That is how does EO change over time with industries maturing and changes in economic circumstances. Finally, EO dimensions may interact differently with different cultures. How cultures deal with risk and proactiveness may differ from one culture to another.

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Appendix – Questionnaire

Questionnaire Letter

Dear Respondent,

Greetings.

As part of a master's degree at Halmstad University, the researcher is conducting a study titled "The mediating effect of environmental hostility, strategic flexibility and market orientation on the relationship between EO and firm performance in SMEs in Jordan". The research aims to investigate relationship between entrepreneurial orientation (EO) and organizational performance and how does organizational and environmental factors such as market orientation, strategic flexibility and environmental hostility affect the EO-Performance relationship in a SMEs in Jordan?

Please kindly complete the questionnaire. It estimated that the questionnaire will take less than 10 minutes. Please make sure that your answers reflect your actions and what you do in your business and not what you wish to do.

The researcher assures you that the data collected will only be used for research purposes only and will not identify you nor your organization. I thank you for your time and effort.

Jomah Saif

Halmstad University

	EO – Innovativeness		Strongly Don't agree 1	Don't agree 2	Neutral 3	Agree 4	Strongly agree 5	Code
1	In general, the top managers of our organization favor a strong emphasis on Research & Development, technological leadership, and innovations.							a
2	In the past five years, our organization has marketed a large variety of new lines of products or services.							b
3	In the past five years, changes in our products or service lines have been mostly of a minor nature. (Reverse coded)							c
	EO – Proactiveness							
4	In dealing with competitors, our organization often leads the competition, initiating actions to which our competitors have to respond.							d
5	In dealing with its competitors, my firm is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc							e
6	In dealing with competitors, our organization typically adopts a very competitive posture aiming at overtaking the competitors.							f
	EO – Firm Risk-Taking							
7	In general, the top managers of my organization have a strong propensity for high risk projects (with chances of very high return).							g
8	The top managers believe owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve our organization objectives.							h
9	When there is uncertainty, our organization typically adopts a "wait and see" posture in order to minimize the probability of making costly decisions. (Reverse coded)							i
	MO – Market Orientation							
10	Our business objectives are driven by customer satisfaction.							j
11	We monitor our level of commitment and orientation to serving customers' needs.							k
12	Our strategy for competitive advantage is based on our understanding of customer needs.							l
13	Our business strategies are driven by our beliefs about how we can create greater value for customers							m
14	We measure customer satisfaction systematically and frequently							
15	We give close attention to after-sales service							n
16	Our salespeople share information within our business concerning competitors' strategies							o
17	We respond to competitive actions that threaten us							p
18	We target customers and customer groups where we have, or can develop, a competitive advantage							q
19	The top management team regularly discusses competitors' strengths and strategies							r
20	Our top managers from every function visit our current and prospective customers.							s
21	We communicate information about our successful and unsuccessful customer experiences across all business functions							t
22	All of our business functions (eg. marketing/sales, manufacturing, R&D, inance/accounting, etc.) are integrated in serving the needs of our target markets							u
23	All of our managers understand how everyone in our company can contribute to creating customer value							v
	Strategic Flexibility							
24	The flexible allocation of marketing resources (including advertising, promotion and distribution resources) to market a diverse line of products.							w

25	The flexible allocation of production resources to manufacture a broad range of product variations.							x
26	The flexibility of product design (such as modular product design) to support a broad range of potential product applications.							y
27	Re-defining product strategies in terms of which products the firm intends to offer and which market segment it will target.*							z
28	Re-configuring chains of resources the firm can use in developing, manufacturing, and delivering its intended products to targeted markets.							aa
29	Re-deploying organizational resources effectively to support the firm's intended product strategies.							ab
	Environmental Hostility: How would you characterize the external environment (domestic and international) in which your firm operates?							ac
30	Very safe/risky							ad
31	There is an abundance/few marketing opportunities and investment							ae
32	An environment that my firm can control and manipulate/ dominating environment which my firm's initiatives count for very little against tremendous competition							af
	Performance: How do you rate the following		1 Lowest				5 Highest	
33	Company's overall performance							ag
34	Company's profitability							ah
35	Customer retention							ai
36	New product success							aj
37	New product development							ak
38	Background information							al
39	Sex		1. Male 2. Female					am
40	Age		_____ years					an
41	Education achievement		1. Bachelor 2. Masters 3. PhD 4. Other _____(specify)					ao
42	Industry							ap
43	How long have you worked in this post?		_____ years					aq