CEO Entrepreneurial Characteristics and the Entrepreneurial Orientation of the Firm

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Abstract

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The underlying premise of this study is that the individual-level characteristics of the CEO can influence the overall strategy of the firm. Looking at this premise in the context of entrepreneurship, we argue that CEOs that are high in entrepreneurial self-efficacy and entrepreneurial alertness positively influence the entrepreneurial orientation of the firm. This paper adopts Covin & Wales' (2012) model of entrepreneurial orientation which divides the construct into three dimensions: innovativeness, risk-taking and proactiveness. We further posit that the organizational commitment of the CEO moderates this relationship. Drawing from Meyer and Allen's (1997) model, we contend that each of affective commitment and normative commitment positively moderate the relationship between both entrepreneurial self-efficacy and alertness on one hand, and entrepreneurial orientation on the other hand, while continuance commitment negatively moderates the aforementioned relationships. Using data we gathered from 33 CEOs and top executives mainly from small family firms in various industries in Lebanon, we find evidence that entrepreneurial self-efficacy and entrepreneurial alertness are positively related to entrepreneurial orientation. We further find that normative commitment positively and significantly moderates the relationship between entrepreneurial alertness and entrepreneurial orientation. We also find that affective commitment negatively moderates the aforementioned relationship. Finally, the three organizational commitment types do not significantly moderate the relationship between entrepreneurial self-efficacy and entrepreneurial orientation, neither does continuance commitment on the relationship between entrepreneurial alertness and entrepreneurial orientation. From a practical standpoint, the results of this can provide organizations with valuable insights that could be helpful in the CEO selection and training process. The limitations of the study, as well as future directions are discussed.

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CEO Entrepreneurial Characteristics and the Entrepreneurial Orientation of the Firm

The literature is rampant with studies that investigate how CEOs affect firm performance, however, the specific mechanisms through which this effect is manifested have not been well explored. That being the case, our study will examine the mechanisms that influence the entrepreneurial orientation of the firm. Specifically, we study two CEO entrepreneurial characteristics, entrepreneurial self-efficacy and entrepreneurial alertness.

The influence that CEOs have on the firms they run is fascinating for many reasons. There are several ways in which CEOs can influence the organizational culture, strategic posture, and policies of their firms. This is done, for example, through their traits (Miller & Toulouse, 1986), values (Ling et al., 2008), skills, behaviors, and entrepreneurial characteristics (Katsaros et al., 2014). This influence is even more pronounced in small and medium-sized enterprises. In fact, SMEs afford CEOs more managerial discretion and thus more influence over their firm's overall strategy (Ling et al., 2008). In the context of entrepreneurship, the bulk of studies have focused on how the CEO's entrepreneurial characteristics affect firm performance and growth (Hmieleski & Baron, 2008). This study will specifically look at the entrepreneurial characteristics of the CEO through entrepreneurial self-efficacy as well as entrepreneurial alertness, both measures representing a good combined overview of the extent of entrepreneurship of a CEO. In fact, both entrepreneurial self-efficacy (Baum & Locke, 2004; Baum et al., 2001) and entrepreneurial alertness (Tang et al., 2012) have been shown to positively influence firm performance, and in that logic the presence of CEOs possessing these two constructs would benefit the organization as a whole. Simsek et al. (2010) studied the impact of CEO self-evaluation on the firm's entrepreneurial orientation and found that CEOs with high core self-evaluation have a stronger positive influence on the firm's entrepreneurial orientation.

There exists an abundance of literature linking entrepreneurial orientation to firm performance (Wiklund, 1999; Zahra, 1991; Zahra & Covin, 1995; Wang, 2008). Keeping that in mind, this paper builds on Simsek et al's (2010) research by examining the influence of the CEO's entrepreneurial self-efficacy and alertness on the firm's entrepreneurial orientation and explores the notion that CEOs and top executives in the firm shape the strategy of said firm according to their characteristics (De Vries & Miller, 1986). We propose that CEOs that are entrepreneurial in nature, through their leadership, shape the organization as a whole to be more entrepreneurially oriented. We further argue that this relationship between the entrepreneurial characteristics of the CEO, and entrepreneurial orientation of the firm is moderated by the CEO's commitment to the organization. That being the case, the main premise of this paper is to examine the relationship between CEO entrepreneurial characteristics and firm strategy, through the lens of entrepreneurship.

While each of these variables will be expounded at length in the body of the paper, this introductory passage will provide a brief overview of what these underlie. While self-efficacy is defined as "beliefs in one's capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands" (Wood & Bandura, 1989, p. 364), entrepreneurial self-efficacy refers to one's perception of their ability to perform entrepreneurial task effectively (Hmieleski & Baron, 2008). On the other hand, entrepreneurial alertness is defined as one's "ability to notice, without search, opportunities that are invisible to other people" (Kirzner (1979) as cited in Tang, 2007, p. 129). In other words, it refers to the individual's ability to recognize competitive opportunities in the market. And finally, the proclivity of firms to engage in entrepreneurial behaviors is referred to in the literature as the entrepreneurial orientation (EO) of the firm. Lumpkin and Dess (1996) identified five dimensions of entrepreneurial orientation. These dimensions are (1) Autonomy; (2) Innovativeness; (3) Risk-taking; (4) Proactiveness; and (5) Competitive Aggressiveness. A firm's entrepreneurial orientation is defined as a "firm's strategic orientation, capturing specific entrepreneurial aspects of decision-making styles, methods, and practices" (Lumpkin & Dess (1996), as cited in Wiklund & Shepherd, 2003, p. 1308). "Entrepreneurial orientation (EO) is one of the most important and established concepts within the field of entrepreneurship". However, "how EO manifests itself inside organizations has received little attention" (Wales et al., 2011, p. 895).

In addition to studying the relationship between the CEO's entrepreneurial self-efficacy and alertness, and the entrepreneurial orientation of the firm, this paper contends that this relationship is moderated by the CEO's commitment to the firm. Actually, a study by De Clercq et al. (2009) has found that organizational commitment plays a moderating role in the relationship between the entrepreneurial orientation of the firm and its performance. The logic behind this reasoning is that there should be something pulling the top executive/CEO to instill his/her entrepreneurial views onto the organization as a whole, and we propose his organizational commitment as that moderator. In fact, research has shown that a manager's willingness to be more involved in the company and sharing his knowledge with his peers is reflected by his organizational commitment to the firm, and more specifically his strong identification to it (De Clercq & Sapienza, 2006). We look at commitment as comprising three linked but separate dimensions: affective commitment, normative commitment, continuance commitment. The intricacies of these three dimensions are discussed in greater detail in the paragraphs below. For many decades now, literature has explored multiple aspects of a successor's commitment to organizations (Sharma & Irving, 2005). We come across several studies examining commitment, its types, its nature and its implications on micro and macro levels in the organization (Allen & Meyer, 1990). While the definition of commitment may vary slightly, researchers seem to agree that it describes "an individual's linkage to the organization and a set of behaviors by which individuals manifest that link" (Jernigan et al., 2002, p. 564). Studies have been mainly focused on the influence that commitment has on the firm's performance. In fact, it has been shown time and again that organizational commitment plays a significant role in reducing turnover and absenteeism, as well as increasing productivity (Benkhoff, 1997).

The results of this study provide valuable insights for business owners who intend to maintain or improve the degree to which their business is entrepreneurial, which in turn would allow the business to endure on the long-run. In other words, this study can offer suggestions about the CEO selection and training process, since the entrepreneurial inclinations of the prospective successor, as well as their type and degree of commitment to the firm would likely dictate the future strategies of the firm itself.

In the following sections of this paper, we will define at length each of the constructs that are included in this study. We will start off with examining the mechanisms through which the CEO can influence the overall strategy of the firm. More specifically, we will discuss how specific characteristics such as entrepreneurial self-efficacy and entrepreneurial alertness could influence the entrepreneurial orientation of the firm. Next, we will define what entrepreneurial orientation is, and examine its dimensions, antecedents, and outcomes. Finally, we will discuss the three dimensions of organizational commitment, and examine its possible role as a moderator of the relationship between entrepreneurial self-efficacy and alertness on one hand, and entrepreneurial orientation of the firm on the other hand. After wrapping up the theoretical part of the paper, we will then move on to introduce our sample and the methodology used to test the hypotheses. A subsequent presentation of the results of the study will be given, as well as a discussion of these results followed by concluding remarks.

Literature Review and Hypotheses

As mentioned in the introduction, this paper builds on the previous work of Simsek et al. (2010) that examined the relationship between entrepreneurial self-efficacy and entrepreneurial orientation by introducing entrepreneurial alertness as an additional independent variable. Moreover, we introduce organizational commitment (through the dimensions of affective, continuance and normative commitment) as a possible moderator of the aforementioned relationships. In the following sections, we will introduce each of these constructs, and provide an overview of their antecedents and outcomes as they appear in the relevant literature.

1. The Relationship between the CEO's entrepreneurial characteristics and the Strategic Orientation of the Firm

1.a. Conceptualization

One of the most stimulating meso-level research themes is the one concerned with examining the amount of influence that top management has on the firm, as well as how this influence is manifested. Can the CEO single-handedly shape the firm's strategy? And if so, how and to what extent? De Vries & Miller (1986) argue that the "personality of the top executive" could have an immense impact on the overall strategy of the firm in both centralized and decentralized institutions. According to the authors, the impact of the CEO's personality on the firm's strategy is mediated by the organizational culture, which in turn is greatly influenced by the CEO. In fact, one of the ways that CEOs can shape the overall strategy of the firm is by influencing its organizational culture. In their own words, De Vries & Miller (1986) state that organizational culture is a "useful vehicle for linking personality with strategy. The top executive creates a particular organizational culture and a set of interpersonal relationships which in turn influence strategy and structure" (p. 266). In their article, the authors frequently bring up what they term as individual "neurotic styles". Basically, the authors argue that individuals possess certain styles which are defined as "patterns of dealing with the environment which are deeply embedded, pervasive and likely to continue over long periods of time" (De Vries & Miller, 1986, p. 266). In more modern terminology, the authors are talking about the individual's personality, which is understood as the individual's behavioral pattern that is stable over time. The authors then discuss how these styles can shape the organizational culture which, in turn, influences the strategy of the firm. This line of thinking is in keeping with Kernberg's (1976, as cited in De Vries & Miller, 1986, p. 267) hypothesis which posits that "top executives may create shared fantasies that permeate all levels of functioning, influence organizational culture, and make for a dominant adaptive style". This provides a possible explanation of how a micro-level actor (the CEO) can have macro-level implications, characterized by the firm's overall strategy.

To further demonstrate the impact that CEOs have on the strategy of the firm, some researchers have looked into how companies in the same industry perform at different levels. Zacharias et al. (2015) talk about three competing theories that seek to explain the differences in performance between firms in the same industry. The main question that the proponents of these two theories try to answer is: why is it that the same industry can have so much disparity among its firms when it comes to performance? The advocates of the strategic leadership opinion argue that the success or failure of a particular organization is directly linked to the performance of that company's CEO as the "top executives make decisions and strongly influence a firm's strategic actions" (Hambrick & Mason, 1984, as cited in Zacharias et al., 2015, p. 2338. In fact, Strategic Leadership theories posit that the top executives of the firm develop the firm's agenda, and they do so based on their own subjective ideals and views, which in turn are defined by their personal and unique values and experiences (Hambrick, 2007). Hambrick and Mason (1984) summarize this by succinctly stating that firms are “reflections of their top managers” (p. 2340).

The aim of Zacharias et al.’s (2015) paper was to ascertain the extent of influence that CEO-level effects have on the firm’s strategy, comparing the latter to firm-level effects as well as industry-level effects. Specifically, they divided the strategic actions of the firm into three distinct groups. These groups are: competitive initiative, including acquisitions and divestures, financial choices, including cash holdings and investment rations, and resource allocation, including operational (e.g., R&D) and structural (e.g., asset) allocation. The results of the study (whose sample consisted of a 20-year sample of 110 firms across 10 industries) revealed that, of the three strategic actions that were examined, CEO-level effects are associated with the largest amount of variance in competitive initiative, while firm-level effects were associated with the largest amount of variance in financial choices as well as resource allocation.

A similar hypothesis was previously empirically tested by Miller & Toulouse (1986). The authors conducted an investigation of 97 firms in order to ascertain the influence of the CEO’s personality on the firms’ strategy, structure and performance. Specifically, the authors focused on three main aspects in the CEO’s personality. These aspects are flexibility, need for achievement, as well as locus of control. The results of the study revealed that the three personality traits of the CEO that were examined do in fact have an effect on the corporation both on the micro and macro levels. Specifically, the findings showed, first, that when it came to the strategy, a flexible CEO steered the company in a more niche-focused direction. Moreover, a CEO that had a high need for achievement engaged in broad, aggressive marketing, and a CEO that had an internal locus of control led the company to become more innovative. Second, when it came to decision making, a flexible CEO was associated with making intuitive decisions, and was found to be generally short-term oriented, more risk-taking and reactive. Contrarily, a CEO that had a high need for achievement was found to be more analytical, long-term oriented as well as proactive and risk averse. Finally, the decision making of a CEO that had an internal locus of control was found to be informal, have a long-term orientation, proactive as opposed to reactive and risk neutral. Third, when it came to the structure of the company, a flexible CEO was found to shape the institution to become more informal and unspecialized, with more delegation of authority, few controls, as well as few liaison devices. In contrast, a CEO with a high need for achievement was found to shape the institution to become more formal and specialized, with little delegation of authority, as well as many controls and liaison devices. Finally, the CEOs that have an internal locus of control structured the company to be informal, and delegated much of their authority. Ultimately, when it came to performance, the study found that flexible CEO will be more successful in small organizations with dynamic environments, while CEOs with high need for achievement were successful in large organizations and stable environments, and CEOs with an internal locus of control would be successful in firms with dynamic environments, regardless of the size of the firm. Additionally, these results were replicated in another study by Poon et al. (2006) who found that three CEO self-concept traits were related to both entrepreneurial orientation of the firm as well as firm performance. These three traits are need for achievement, internal locus of control, as well as self-efficacy (Poon et al., 2006).

Another study seeking to examine the link between CEO characteristics and firm innovativeness is one conducted by Lefebvre & Lefebvre (1992). In this study, the authors investigated how firm innovativeness – which was measured by counting the number of process innovations and assessing the value of these innovations using an independent panel of experts – can be influenced by the CEO. The sample for this study consisted of 74 small manufacturing firms in the plastics sector. The results revealed that a "combination of personal characteristics, personality traits and attitudes" of the CEO have an influence of the innovativeness of the firm (Lefebvre & Lefebvre, 1992, p. 243).

Additionally, a study pertaining to the relationship between CEO personality and firm-level outcomes is one conducted by Katsaros et al. (2014). In this study, the authors examine the relationship between certain CEO characteristics such as behavioral attitudes, tolerance of ambiguity, and individual readiness for organizational change and overall organizational performance. They argued that ambiguity tolerance of the CEO, for instance, is positively related to the strategic flexibility of the firm. This is echoed in other research articles that uncover the favorable outcomes of high ambiguity tolerance. These include creativity (Zenasni et al., 2008) and risk-taking (Lauriola & Levin, 2001), both of which are precursors to innovation.

Clark et al. (2014) posit that the firm's ownership and governance structure plays an important role in either inhibiting or facilitating the CEO's impact on the firm. The authors divide the ownership and governance structures of firms into four distinct categories: Public-Direct, Public-Autonomous, Non-Profit, and For-Profit. Briefly, the authors argue that public sector firms that are operated and regulated by the government usually limit the CEO's influence and are dominated by external effects, such as political interests and socioeconomic conditions. Conversely, these external effects are minimal in For-Profit firms that are owned and governed by the shareholders, or by the CEO himself (in case the firm wasn't publicly traded), allowing the latter more discretion. This is especially relevant to the present study given that our sample will consist exclusively of privately-owned for-profit firms.

The present study builds on previous literature, which has addressed issues such as the influence of CEOs on organizational culture (De Vries & Miller, 1986), CEO strategic leadership (Zacharias et al., 2015), CEO personality traits such as flexibility, need for achievement, and locus of control (Miller & Toulouse, 1986) or cognitive, affective and behavioral characteristics (Katsaros et al., 2014), by focusing specifically on two key entrepreneurial characteristics (entrepreneurial self-efficacy and alertness) and how they shape the strategy of the firm. Despite the fact that certain CEO characteristics ultimately improve firm performance, which is the CEO's prime concern, the present study focuses solely on the relationship between entrepreneurial self-efficacy and alertness on one hand, and the firm's entrepreneurial orientation on the other hand, without examining the impact of the latter on performance as this is beyond the scope of this study. It is in fact our belief that examining the relationship between micro-level entrepreneurial characteristics (entrepreneurial self-efficacy and alertness), and macro-level entrepreneurial orientation would provide valuable insight into how entrepreneurship permeates within a firm, and would have important practical implications, specifically on hiring habits.

Having illustrated studies showing that CEOs have a significant influence on the strategy of their firms, we can now focus more closely on the two characteristics that are relevant to the present study – entrepreneurial self-efficacy and entrepreneurial alertness – and attempt to show the extent to which these characteristics influence the entrepreneurial orientation of the firm. We chose to focus specifically on entrepreneurial self-efficacy and entrepreneurial alertness since they are both considered as key characteristics of entrepreneurship. For instance, Simsek et al. (2010) state that CEOs high in entrepreneurial self-efficacy "will be more apt to guide their firms toward entrepreneurially oriented choices and foster a climate of that reinforces this proclivity" (p. 111). Furthermore, Ireland et al. (2003) state that "those with keen entrepreneurial alertness demonstrate a strong entrepreneurial mindset" (p. 969). However, before moving on to the conceptualization and outcomes of these independent variables, it is useful to examine how entrepreneurial self-efficacy and entrepreneurial alertness relate to one another. Entrepreneurial alertness at the basic level is associated with the ability of an individual to recognize market opportunities without engaging in systematic and compelled market research. In fact, Tang (2007) states that individuals high in entrepreneurial alertness "need a cognitive estimate of their capabilities to mobilize the continuous interactions with their environment" (p. 132). This cognitive estimate is also referred to as the individual's self-efficacy (Wood & Bandura, 1989). The following sections will define and discuss each of the first two aforementioned constructs in greater detail.

1.b. Entrepreneurial Self-Efficacy

The construct of entrepreneurial self-efficacy was first developed by Chen et al. in 1998 who built upon existing literature on the individual's self-perception of his or her entrepreneurial abilities (Forbes, 2005). As mentioned in the introduction, entrepreneurial self-efficacy is "the degree to which people perceive themselves as having the ability to successfully perform the various roles and task of entrepreneurship" (Chen et al., 1998; De Noble et al., 1999, as cited by Hmieleski, 2008, p. 57). For the purposes of this paper, entrepreneurial self-efficacy (along with entrepreneurial alertness) is being used as an indicative measure of individual entrepreneurship. We found evidence in the literature that supports this claim. In fact, the relationship between an individual's entrepreneurial self-efficacy and that individual's intention to engage in entrepreneurial behaviors (such as starting new business ventures) has been well documented in the literature. For instance, researchers such as Chen et al. (1998) and De Noble et al. (1999) found that there is a positive and significant relationship between an individual's confidence in their ability to perform tasks related to innovation, such as identifying market opportunities, engaging in risk-taking behaviors, fostering an innovative culture on the one hand, and their intention to start new businesses on the other hand. Moreover, studies have shown that entrepreneurs have higher self-efficacy than non-entrepreneurs. Markman et al. (2005) studied the level of entrepreneurial self-efficacy in entrepreneurs and non-entrepreneurs in a sample of patent inventors in the medical industry. The results of that study showed that entrepreneurial patent inventors (measured by their active involvement in starting new businesses) had a substantially higher self-efficacy score than the patent inventors who were not entrepreneurial (were not involved in starting new businesses). Finally, Simsek et al. (2010) argued that the CEO's core self-evaluation is positively related to the firm's entrepreneurial orientation, and suggested that environmental dynamism positively moderates that relationship. They state that CEOs with high core self-evaluation are individuals who "believe that they can master their environment and that the application of their abilities will result in positive outcomes" (Simsek et al., 2010, p. 112). The authors found that CEOs high in core self-evaluation "have a stronger positive influence on their firm's entrepreneurial orientation" (Simsek et al., 2010, p. 110).

That being the case, it appears that entrepreneurial self-efficacy is a good predictor of individual entrepreneurship. Having established that, it is useful to discuss the characteristics of individual who are high in entrepreneurial self-efficacy in terms of their behavioral patterns, as well as the outcomes they tend to achieve. Bandura (1997) argues that individuals with high self-efficacy are more resilient in the face of adversity when compared with individuals with low self-efficacy, in that they set more challenging goals, and persist in pursuing those goals despite harsh conditions. Moreover, individuals high in entrepreneurial self-efficacy tend to be associated with positive outcomes such as work satisfaction (Bradley & Roberts, 2004), and business growth (Baum & Locke, 2004).

As previously mentioned, this study will look at how both entrepreneurial self-efficacy and entrepreneurial alertness of the CEO influence the entrepreneurial orientation of the firm. We argue that both of these micro-level constructs are components of entrepreneurship, and characteristic of entrepreneurial individuals. While the present paragraph focused on defining and examining the outcomes of entrepreneurial self-efficacy, the following section will revolve around the construct of entrepreneurial alertness (which is the ability to effortlessly identify opportunities in the market) and how it relates to the concept of entrepreneurship.

1.c. Entrepreneurial Alertness

The origins of the concept of entrepreneurial alertness can be found in the writings of the American economist Israel Kirzner. Kirzner, who is a proponent of the Austrian School of economics defines entrepreneurial alertness as "the ability to notice without search opportunities that have hitherto been overlooked" (Kirzner, 1979, p. 48). Gaglio & Katz (2001) state entrepreneurial alertness "has been advanced as the cognitive engine driving the opportunity identification process" (p. 95). To ascertain the mechanisms that allow individuals high in entrepreneurial alertness to seamlessly identify opportunities in the market, Kaish & Gilad (1991) argue that there are three behavioral patterns that differentiate entrepreneurs from non-entrepreneurs (referred to by authors as the corporate managers) vis-à-vis the seeking of information. These three behavioral patterns are "differences in the manner in which entrepreneurs and corporate managers expose themselves to information", "differences in the sources of information used", and finally, "differences in evaluating information cues" (Kaish & Gilad, 1991, p. 45). To test these hypotheses, the authors surveyed a sample consisting of 51 entrepreneurial individuals (business founders), and 36 non-entrepreneurial individuals (business executives in a large financial firm). The results revealed that entrepreneurs and non-entrepreneurs varied significantly in how and when they seek out information. In fact, the authors found that "entrepreneurs spent significantly more time searching for information in their off hours and through nonverbal scanning. They employed different sources than executives and paid special attention to risk cues about new opportunities" (Kaish & Gilad, 1991, p. 45). Their findings supported previous results in similar studies, reaffirming that entrepreneurs are particularly selective in the information they seek out and internalize (opportunistic learners) as well as being eager and persistent "information-gatherers" (Kaish & Gilad, 1991, p. 46). Entrepreneurs were found to spend more time seeking out relevant information on the market than non-entrepreneurs, and the sources that they use are unconventional (Gaglio & Katz, 2001).

Given that the previous sections of this paper have clearly defined and elucidated the constructs of entrepreneurial self-efficacy and alertness as they appear in the literature, we will now move our discussion to the entrepreneurial orientation of the firm. We posit that CEO's entrepreneurial self-efficacy (the CEO's perception of how well they can achieve entrepreneurial tasks) and entrepreneurial alertness (the CEO's ability to deftly identify opportunities in the market) are positively related to the entrepreneurial orientation of the firm. Entrepreneurial orientation is a strategic posture of the firm that is best characterized by "frequent and extensive technological innovation, an aggressive competitive orientation, and a strong risk-taking propensity by top management" (Covin & Slevin, 1989, p. 79). While the construct of entrepreneurial orientation will be discussed at length in the following section, we will suggest that a CEO that is high in entrepreneurial self-efficacy (possessing risk-taking tendencies), and high in entrepreneurial alertness (having a competitive mindset) will strive to shape the firm in his image, and steer it into a more entrepreneurially oriented route.

2. Entrepreneurial Orientation

This section will introduce the construct of entrepreneurial orientation. We will define the construct, and present its dimensions as they appear in the literature. We will also discuss its antecedents and outcomes, the most important of which is firm performance, the ultimate goal for any CEO. Given that the nature of our study seeks to establish a link between micro-level constructs and entrepreneurial orientation, we thus focus on the latter's individual-level approach, and internal variables.

2.a. Conceptualization:

Lumpkin & Dess (2001) define entrepreneurial orientation as the "strategy-making processes and styles of firms that engage in entrepreneurial activities" (p. 429). In other words, entrepreneurial orientation refers to the strategic processes and decision-making styles that a firm adopts vis-à-vis entrepreneurial activities (Wilkund & Shepherd, 2003). In their earlier work on this very topic, Lumpkin & Dess (1996) identified five dimensions that characterize entrepreneurial orientation. These dimensions are: autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness. It is worthy to note, however, that other researchers studying entrepreneurial orientation omit autonomy and competitive aggressiveness from the model (Stam & Elfring, 2008) and chose to adopt "the three most cited entrepreneurial orientation dimensions"; Richard et al., 2004, p. 257). Despite this study only using the latter three dimensions of EO, we will nonetheless introduce below all five dimensions discussed in the literature.

Autonomy

The first dimension of entrepreneurial orientation is autonomy. Lumpkin and Dess (1996) define autonomy as "the independent action of an individual or a team in bringing forth an idea or a vision and carrying it through to completion" (p. 140). That being the case, entrepreneurs are by definition autonomous because they willingly choose to venture into uncharted territories of the market as opposed to remaining restricted by the confines of a secure job. The authors further argue that autonomy in the context of a business firm depends on several factors, the most important of which is centralization, which in turn is contingent on firm ownership and firm size. In other words, firms that are highly centralized and whose managers are "autocratic" are more likely to engage in entrepreneurial activities due to the fact that the decision-making structure is rigid and follows a strict chain of command. On the other hand, firms that are less centralized, and that delegate responsibilities through a more elastic echelon of command are less likely to engage in entrepreneurial behaviors. Moreover, the level of centralization of a firm is directly related to firm size, in the sense that bigger firms are less centralized than small firms. The relationship between autonomy and entrepreneurship is evidenced in the literature. In fact, a study conducted by Miller (1983) found that companies that have autonomous leaders are more entrepreneurial that companies who do not.

Innovativeness:

Innovativeness is the tendency to support new ideas, experimentation, and new creative processes. More specifically, Lumpkin & Dess (2001) state that innovativeness refers to a "willingness to support creativity and experimentation in introducing new products/services, and novelty, technological leadership and R&D in developing new processes" (p. 431). In fact, innovation and innovativeness are essential pillars in any entrepreneurial activity. Schumpeter (1942) highlighted the role of innovation in entrepreneurship while introducing the process of creative destruction. Creative destruction is an economic process through which existing paradigms and organizational structures are broken down, and replaced with novel processes, services and products. Naturally, these major shifts can sometimes cause substantial resource reallocation. This dynamic cycle created by the process of creative destruction is only made possible through the phenomenon of innovation, that constantly introduces new ways of conducting business, as well renovates and introduces novel products and services.

That being the case, innovativeness manifests itself in the organization in several ways. For instance, innovation can be characterized by the "willingness to either try a new product line or experiment with a new advertising venue, to a passionate commitment to master the latest in new products or technological advances" (Lumpkin & Dess, 1996, p. 143). The easiest and most straightforward method used to gauge the level of innovativeness of a firm is to examine the expenditures and resources allocated towards research and development activities (Lumpkin & Dess, 1996). Another indication of firm innovativeness is the number of specialists in said firm. In fact, Hage (1980) asserts that the number of engineers and scientists present in a firm is positively and significantly related to the level of innovativeness of the firm. These results were corroborated by subsequent studies that found that the presence of 'technically-trained' individuals was associated with higher level of firm innovativeness (Miller & Friesen, 1982). A third and final approach used to assess the level of firm innovativeness is to simply examine the frequency of the introduction of new products and services of a target firm (Covin & Slevin, 1989).

Risk taking

Miller and Friesen (1978, as cited in Wiklund and Shepherd, 2003, p. 1309) define the entrepreneurial orientation dimension of risk taking as the "willingness to commit large amounts of resources to projects where the cost of failure may be high". In doing so, the company strays away from standard procedures and ventures, and delves into the unknown. Risk-taking behaviors have always been fundamentally associated with entrepreneurship. In fact, some researchers even go as far as saying that risk-taking behaviors are what separate entrepreneurs from hired employees (Lumpkin & Dess, 1996). Baird and Thomas (1985) defined risk in the organizational context as having three characteristics. These characteristics are: (1) delving into uncharted territory; (2) allocating large amounts of resources into these novel ventures; and (3) displaying a willingness to borrow capital in order to finance these said ventures. In the literature, researchers measure the risk-taking proclivity of business firms by gauging the extent to which the firm's management undertakes projects that have not been done before, and whose returns are not certain (Lumpkin & Dess, 1996).

Proactiveness versus Competitive Aggressiveness

Wilkund and Shepherd (2003) define proactiveness as the act of "anticipating and acting on future wants and needs in the marketplace, thereby creating a first-mover advantage vis-à-vis competitors. With such a forward-looking perspective, proactive firms capitalize on emerging opportunities" (p. 1309). The economic value of proactiveness has been well documented in the literature. Lieberman and Montgomery (1988) argued that first-mover advantage plays a pivotal role in capitalizing on opportunities. In fact, first-movers usually gain competitive advantage in the market and benefit from developing early brand recognition which may grant them monopoly-like status (Lumpkin & Dess, 1996). That being the case, proactiveness is closely related to entrepreneurial orientation because it entails engaging in novel ventures.

As previously mentioned, some entrepreneurship scholars omit competitive aggressiveness from the entrepreneurial orientation model, or equate it with proactiveness, using the two terms interchangeably. Although, Lumpkin and Dess (1996) argue that these two terms are distinct dimensions of entrepreneurial orientation that are necessary to the understanding of the construct. The authors back-up this claim by arguing that proactiveness "refers to how a firm relates to market opportunities in the process of new entry" (p. 147) while competitive aggressiveness on the other hand "refers to how firms relate to competitors, that is, how firms respond to trends and demand that already exist in the marketplace" (p. 147). In other words, the competitive aggressiveness of an organization is depicted by the latter's readiness to challenge its counterparts in the marketplace to improve its position. Furthermore, the authors assert that the main distinction between the two dimensions is that proactiveness is concerned with *meeting* demand in the marketplace, while competitive aggressiveness is concerned with *competing* for demand in the marketplace (Lumpkin & Dess, 1996).

Finally, it is worthy to note that, given the fact that both proactiveness and innovativeness entail engaging in new ventures, the two constructs are correlated with one another leading them to co-vary. As previously mentioned, our study will only adopt the three-dimensions model (containing proactiveness, risk-taking, as well as innovativeness).

2.b. Entrepreneurial Orientation and Firm Performance:

It is common sense that individuals in their nature want to thrive in any activities they engage in. In the case of decision makers in organization, their critical goal is the continued survival of the organization, specifically its positive performance over time. In this section, we seek to establish that by making a firm more entrepreneurially oriented, decision makers are in fact working on the continued survival and prosperity of the firm.

There exists a myriad of studies examining the relationship between entrepreneurial orientation and firm performance. Zahra and Covin (1995) conducted a longitudinal study in order to ascertain the impact of entrepreneurial orientation on the financial performance of the firm. The authors collected data from 24 medium-sized manufacturing firms, 39 chemical companies, as well as 45 Fortune 500 companies over a span of seven years. The results of the study found that entrepreneurship was indeed significantly and positively related to better financial performance. The authors also found that this positive relationship between entrepreneurial orientation and financial performance intensifies with time, meaning that entrepreneurship was beneficial for firm performance on the long-run.

This notion of whether or not entrepreneurial orientation boosted firm performance on the short-run as opposed to the long-run was investigated again by Wiklund (2006). In fact, the author sought to examine if entrepreneurial orientation could lead to sustainable increase in performance, rather than just being a “quick fix” as he termed it. The author gathered data from small-sized Swedish firms, and the results of the study replicated Zahra and Covin’s (1995) study by finding that the positive effect of entrepreneurial orientation on firm performance increases over time, lending credence to the belief that entrepreneurial orientation is not merely a “quick fix”, but an approach that could benefit firms on the long run as well. In another vein, Wang (2008) investigated the relationship between entrepreneurial orientation and firm performance while taking into account the possible mediating role of learning orientation. The authors found that the relationship between entrepreneurial orientation and performance is maximized when learning orientation is present.

In previous sections of this study, we have examined the impact that the top executive can have on the firm. Indeed, the literature seems to indicate that the CEO of the firm has the power to shape the firm's strategy according to his or her own values and characteristics. That being the case, how would the firm operate differently if the CEO was an entrepreneur?

Schumpeter (1942) describes an entrepreneur as the individual who carries out 'new combinations' in an exchange economy. The author defines 'new combinations' as being one of five things:
1. The new combination can be an entirely novel product or service, or an improved quality of an existing product of service that the market is not familiar with.
2. The new combination can be the introduction of a new method of production that is efficient (this usually occurs following a scientific breakthrough).
3. The new combination can be the introduction of a completely new market in the country where the firm operates, regardless of whether or not the market in question existed in other countries.
4. The new combination can be the utilization of new sources of supply or raw materials that have not been previously used in the market in which the firm operates.
5. The new combination can be the re-ordering of the entire industry (creating, or, breaking-up monopolies).

As previously discussed, entrepreneurship has a significant and positive effect on firm performance. In fact, Antoncic & Scarlat (2005) found that "innovation in products and services can be considered crucial for performance of firms and economic growth" (p. 71). That being the case, it can be assumed that CEOs have a vested interest in ensuring that their firm engages in entrepreneurial activities, given that it has been shown that entrepreneurial companies are more likely to survive on the long-run.

2.c. The Antecedents of Entrepreneurial Orientation

Zahra et al. (1999) conducted a meta-analysis of 45 empirical studies in order to identify the antecedents and consequences of firm-level entrepreneurship. In analyzing these articles, Zahra et al. (1999) were able to identify 19 variables affecting firm-level entrepreneurship. These variables are: proactiveness; risk-taking; innovation; intrapreneurship; internal alliances; external alliances;

incubative ventures; initiative ventures; acquisition venturing; opportunistic venturing; administrative; venture capital; business definition; competitive approach; appropriate use of rewards; management support; resource availability; organizational structure and environment. Some of these antecedents are elucidated in greater detail in the passages below.

Another meta-analysis conducted by Zhao et al. (2010) sought to examine the effect of CEO personality (as modeled by the Big Five theory) on entrepreneurial intentions and performance. The authors found that Extraversion, Conscientiousness, Openness to Experience and Emotional Stability were all significantly related to both entrepreneurial intentions and performance, with openness to experience and conscientiousness being the "personality constructs most strongly associated with both of these important outcomes" (Zhao et al., 2010, p. 394). Moreover, the authors found that risk propensity was significantly and positively related to entrepreneurial intentions, but not significantly related to firm performance.

Covin & Slevin (1991) developed a model that seeks to evaluate the level of entrepreneurship of a firm based on certain variables. These variables are grouped into three main categories: external variables (comprising technological sophistication, dynamism, hostility as well as industry life stage), strategic variables (comprising mission strategy, business practices and competitive tactics), and finally, internal variables (comprising top management values and philosophies, organizational resources and competencies, organizational culture, and finally, organizational structure). Covin & Slevin (1991) further argue that these variables while all significantly contributing to the entrepreneurial posture of the firm, moderate the relationship between the latter and firm performance. The most relevant variable to this paper, however, is the internal variable of top management values and philosophies, because it implies that the CEO, being a top manager, can by virtue of his or her values, behaviors, and characteristic, affect the entrepreneurial orientation of the firm. In the authors' own words, "entrepreneurial organizations or, as described here, organizations with entrepreneurial postures, are those in which particular behavioral patterns are recurring. These patterns pervade the organization at all levels and reflect the top managers' overall strategic philosophy on effective management practice" (Covin & Slevin, 1991, pp. 5-6). The authors attribute that to the fact that "strategic decisions are influenced by the beliefs, value structures, and management philosophies of the strategists" (Covin & Slevin, 1991, p. 15). This view echoes several other authors who posited the same logic (Andrews, 1980; Guth & Taguiri, 1965).

While it is generally accepted that Entrepreneurial Orientation comprises the five dimensions of autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness, some researchers have taken the conceptualization of Entrepreneurial Orientation several steps further. For instance, Lee & Peterson (2000) studied the impact of culture on the concept. In their paper, the authors do a good job in summarizing the several approaches to Entrepreneurial Orientation, and the lenses through which it is viewed. Specifically, they assert that there are three main approaches to entrepreneurial orientation: the individual approach, the environmental/contextual approach, as well as the firm approach. Given that our study seeks to explain how individuals within a firm influence the firm's entrepreneurial orientation, we provide a brief description of the individual approach, as discussed by Lee & Peterson (2000). The individual approach constitutes the traditional view on entrepreneurship that relates it to certain individual traits present in the individuals. As the authors put it themselves, "many attribute entrepreneurship to the internal psychological traits of individual entrepreneurs whereby those with a propensity toward risk-taking, high achievement, or an internal locus of control are thought to be leaders of innovation" (Lee & Peterson, 2000, p. 402). In a somewhat related but parallel strain of thought, Bird (1989) posits that sociology, in addition to the psychometric traits of the individual, determine his or her aptitude for, and orientation towards entrepreneurial behaviors. For example, the author suggests that characteristics such as "being a first child, being an immigrant, and having early role models" (p. 402) can play a role in nurturing entrepreneurial tendencies. While this approach represents a more macro view when compared to the psychometric individual approach mentioned earlier, Lee & Peterson (2000) explore the antecedents of entrepreneurial orientation on an even higher level of analysis. Moreover, Meynhardt & Diefenbach (2012) examined the factors leading to department-level entrepreneurial orientation in the public sector. The authors suggested that (1) management support, (2) work discretion, (3) rewards/reinforcement, (4) resource availability, (5) multitude of expectations and (6) localism are all positively related to entrepreneurial orientation, while factors such as key performance indicator (KPI) focus and goal ambiguity negatively affected entrepreneurial orientation. The results of their study revealed, however, that only multitude of expectations and localism have a strong impact on entrepreneurial orientation, while the rest of the factors only had a limited relationship on EO.

To recap, the main premise of this paper is to establish a relationship between CEO entrepreneurship (through the dimensions of entrepreneurial self-efficacy and entrepreneurial alertness) and entrepreneurial orientation of the firm. It is clearly evident that this entails linking variables at different organizational levels, since the CEO entrepreneurship variables are individual, micro-level variables, whereas entrepreneurial orientation of the firm is a macro-level variable. Lumpkin and Dess (1996) address this level of analysis issue and treat EO as a firm level construct. However, they also argue that entrepreneurial orientation is a "process" or "decision making activity" that "involves the intentions and actions of key players" (p. 136). In our case, the "key players" identified in Lumpkin and Dess's (1996) discourse are the CEOs. Furthermore, Wales et al. (2011) state that "prior research has generally accorded top management a special role in the pervasiveness of EO within an organization" (p. 899). This lends credence to the assumption that CEOs, as individuals, have the ability, through their traits and values, to shape the strategy of the firm as a whole.

After having established that Entrepreneurial Self-Efficacy and Entrepreneurial Alertness are good predictors of CEO entrepreneurial characteristics, we expect that this study will establish a positive link between Entrepreneurial Self-Efficacy and Entrepreneurial Orientation, as well as Entrepreneurial Alertness and Entrepreneurial Orientation. In fact, Simsek et al. (2010) have already found that entrepreneurial self-efficacy positively and significantly influences entrepreneurial orientation. This paper builds on those findings and introduces another entrepreneurial characteristic, entrepreneurial alertness, as an additional independent variable. That being said, the first two hypotheses are as follows:

<u>Hypothesis 1:</u> *CEO entrepreneurial self-efficacy is positively related to the firm's Entrepreneurial Orientation (EO).*

<u>Hypothesis 2</u>: *CEO entrepreneurial alertness is positively related to the firm's Entrepreneurial Orientation (EO).*

Going back to one of the main tenets of this paper, we propose that the relationship between the CEO's entrepreneurial self-efficacy and alertness on one hand, and the entrepreneurial orientation of the firm on the other is moderated by organizational commitment of the CEO. We argue that the level of commitment that CEOs have to their organizations has a significant impact on a multitude of organizational outcomes, one of these outcomes being the firm's strategic posture. Given that we've previously established that there are several factors that could inhibit or amplify the CEO's influence on the firm's strategy, we suggest Organizational Commitment as a moderating factor in order to enrich the research in this field. Research has shown that organizational commitment does play a role in strengthening the impact of entrepreneurial orientation on firm performance by increasing "the amount and quality of knowledge exchange" in the organization (De Clercq et al., 2009, p. 14). Hence, we believe that looking at the CEO's organizational commitment will help strengthening the link between his personal entrepreneurial characteristics, and their implantation into the firm's strategies. There is wide consensus in the organizational commitment literature that this construct comprises three related but distinct dimensions: affective commitment, continuance commitment, and normative commitment. A detailed description of these three dimensions will be provided in the following section. We will briefly discuss the antecedents and outcomes of organizational commitment, and how the construct affects the strategic posture of the firm.

3. The Moderating Role of Organizational Commitment

Since the 1960s, many researchers have conducted studies examining the multidimensionality of organizational commitment. A big bulk of the research focuses on how employees' commitment may impact the firm as a whole (Mowday et al., 1982; Petty et al., 1984). In their review and meta-analysis, Mathieu & Zajac (1990) summarize their research on the concept of commitment as an antecedent, as a consequence and its correlates. The authors argue that organizational commitment is a predictor of employee absenteeism, performance, and turnover, as well as other behaviors. Additionally, organizational commitment has been linked to important employee outcomes such as reduced previously mentioned withdrawal behaviors, as well as increased likelihood to engage in extra-role behaviors that benefit the organization as a whole and grant it competitive advantage in the market. From a macro-level perspective, the authors claim that the society as a whole also benefits from employee-level organizational commitment by increasing national productivity and work quality. Moreover, the authors found that job involvement and job satisfaction are two behavioral outcomes that correlate heavily with organizational commitment. When it comes to the consequences of organizational commitment, the authors assert that organizational commitment leads to extrinsic as well as intrinsic (psychological) rewards. Given that organizational commitment has several important organizational outcomes, including macro-level outcomes, and that we've established that certain organizational factors can amplify the CEO's influence on the firm, we propose that organizational commitment can moderate the relationship between the CEO's entrepreneurial characteristics and entrepreneurial orientation. Essentially, CEOs that are more committed to the firm would also be more committed to the firm's success, and committed CEOs that are entrepreneurial in nature will be more inclined to use their entrepreneurial skills and knowledge to influence the firm's strategic posture and performance. While the vast majority of research in this area focuses on the outcomes of organizational commitment at the employee level, a few have linked organizational commitment to EO. De Clercq et al. (2009) find that organizational commitment moderates the relationship between EO and performance such as it strengthens when commitment is high and weakens when the commitment is low. In fact, in their paper, the authors base this relationship on two reasons. First, the successful realization of the firm's EO becomes more relevant with the increase in the amount of knowledge exchange between functional departments. Second, not only does the amount increase, but more importantly the quality of the knowledge exchange within the organization gets amplified, which plays a big role in achieving better performance. "Highly committed managers are more likely to exchange a richer set of knowledge with one another, which can be leveraged as the organization's ability to exploit entrepreneurial opportunities" (De Clercq et al., 2009, p. 15). In this study, we will try to examine the moderating role of organizational commitment on the relationship between CEO entrepreneurship and the entrepreneurial orientation of the firm.

Meyer and Allen (1997) developed a three-component model of commitment. Their model has been widely accepted and established in the relevant literature (Jernigan et al., 2002). These three components are: affective commitment, continuance commitment, as well as normative commitment. While each of these components will be discussed in greater detail later, it is important to note the main distinctions between these dimensions. As Meyer and Allen (1991) put it, “employees with a strong affective commitment continue employment with an organization because they want to do so. Employees whose primary link to the organization is based on continuance commitment remain because they need to do so. Employees with a high level of normative commitment feel that they ought to remain with the organization” (p. 67).

Even though Meyer and Allen’s model of commitment is the most widely accepted and frequently used, it is not uncontested. In fact, Penley and Gould (1988) developed a different model of commitment. The authors suggest that commitment can either be moral, calculative, or alienative. Jernigan et al. (2002) define moral commitment as “a highly positive affective form characterized by acceptance of and identification with organizational goals” (pp. 565-566). They go on to state that calculative commitment is “focused on one’s satisfaction with the exchange relationship” (p. 566). Finally, they define alienative commitment as a “highly negative affective form that is a consequence of a lack of control over the internal organizational environment and of a perceived absence of alternatives for organizational commitment” (p. 566). More simply put, individuals who are alienatively committed perform at the minimal level of effort, while expressing a desire to remain in their organizations.

Furthermore, literature is rampant with studies establishing a relation between organizational commitment and performance. The majority of findings were consistent with the belief that those two factors were positively interrelated (Abdul Rashid et al., 2003). This implies that employees who are significantly more committed will dedicate all their efforts in order to help their firm grow. They will therefore contribute in the best possible ways using their thoughts, abilities and skills. More studies examined this link between these two constructs and proposed moderators to that relationship such as job satisfaction (Syauta et al., 2012) and employee’s financial requirements (Brett et al., 1995). This paper will build on the premise that organizationally committed individuals do in fact achieve better performance for the organization, and study how the decision makers’ commitment (be it affective, normative or continuance), could influence the growth and longevity of a firm.

On another note, it’s worth mentioning that there are also negative aspects related to commitment. Brockner (1992) refers to this negative side of commitment as escalating commitment (or escalation) as "the tendency for decision makers to persist with failing courses of action" (Tversky & Kahneman, 1981, as cited in Brockner, 1992, p. 50). The author actually investigates decision makers' reluctance to acknowledge that their previous allocation of resources was without success. After the first failure, decision makers have to recognize their mistake and try to fix it, rather than being committed to their initial decision. Hereby their commitment to a certain project and their intention of proving their capabilities creates a problem for the firm as a whole. It also becomes a way of raising and satisfying one's ego in the sole purpose of self-accomplishment. This type of commitment will, in turn, negatively impact the firm seeing as the decision maker becomes selfish and the purpose of the job is thus considered personal.

In this paper we will be relying on the three-component model of commitment initially developed by Allen & Meyer (1990), which is currently the most widely accepted model in the literature. The authors define each of the three components as follows:

Affective Commitment

Affective commitment is based on desire; it's essentially staying for the love of the job and what the organization represents. The commitment is considered to be affective when the individual "identifies with, is involved in, and enjoys membership in the organization" (Allen & Meyer, 1990, p. 2).

The fact that this paper researches an unexamined link in the literature makes it hard to find a simplistic theoretical bases for the arguments developed. Nevertheless, we managed to find significant relationships in the literature between certain dimensions of our variables. Studies have already examined the impact of distinctive types of commitment (affective, normative, and continuance when referring to Allen & Meyer (1990) or moral, normative and alienative when referring to Penley and Gould (1988)) with dimensions that are associated with EO, such as innovativeness (Chughtai, 2013).

In fact, through data gathered from surveys on 134 exporting organizations in Netherlands, Bloemer et al. (2013) found a link between trust and affective commitment on the firm's performance. In order to do so, they examined numerous mediators that might be facilitating that relationship. The authors found significant results that affective commitment is positively related to innovativeness and risk-taking.

Continuance Commitment

Continuance commitment, also known as calculative, is based on perceived opportunity costs involved. Continuance commitment occurs when the executive perceives that there is a "profit associated with continued participation and a cost associated with leaving" (Kanter, 1968, p. 504). In other words, this occurs when the opportunity costs of leaving the business aren't as high as the forecasted benefits of staying.

Continuance commitment in itself has been found to have a positive effect on a firm performance. We tend to think that a calculatively committed manager, will want to be fully involved in his tasks in order to succeed in the job, but "given its extrinsic nature it is unlikely to serve as an energizing force for the development of beneficial competencies" (Bloemer et al., 2013, p. 365). These results infer a difference between affective and continuance commitment. In accordance with the findings interpreted by Meyer et al. (1989), "the importance of distinguishing between commitment based on desire and commitment based on need and as supporting organizational efforts to foster affective commitment" (p. 152), is essential.

Normative Commitment

Normative commitment, also known as imperative commitment, is based on the perceived needs; it's more like remaining in the organization due to an obligation or the influence and pressure of others. It refers to the "totality of internalized normative pressures to act in a way which meets organizational goals and interests" (Wiener, 1982, p. 421). In other words, it is the personal obligation that the executive feels towards the firm, based on its current needs.

A meta-analysis conducted by Meyer et al. (2002) showed that the three components of commitment are indeed empirically distinguishable from one another. Additionally, the study showed that antecedents of affective commitment included "personal characteristics" and "work experiences", and antecedents for continuance commitment included "personal characteristics", "alternatives", and "investments" while no unique antecedents for normative commitment could be identified. Finally, all three types of commitment were positively associated with desirable outcomes such as attendance, organizational citizenship behavior (OCB), performance and employee health and well-being, and negatively associated with undesirable outcomes such as turnover intention and actual turnover.

As previously mentioned, organizational commitment is a predictor of several important employee outcomes, such as performance, absenteeism and turnover. We have also examined the different types of commitment in the organization. It is our contention that the organizational commitment of the CEO moderates the relationship between the CEO's individual entrepreneurial traits, and the entrepreneurial orientation as a whole. However, we argue that this moderating effect differs across the types of organizational commitment.

Meyer and Allen (1991) state that affective commitment is based on "emotional attachment to, identification with, and involvement in the organization" (p. 2). Sharma and Irving (2005) echo that statement by asserting that, in the family business context, "affective commitment is based on a family member's strong identification with, and desire to contribute to, their family business" (p. 16). It becomes obvious then, that identification as a construct is an essential pillar of the affective commitment dimension. Ashforth & Mael (1989) define organizational identification as "the perception of oneness with or belongingness to a group, involving direct or vicarious experience of its successes and failures" (p. 20). It has been described as the "coalescence between the individual and the organization that generates a sense of individual conviction and a willingness to devote increased effort to the organization" (Ashforth et al., 2008, p. 326). A survey of the literature relevant to Organizational Identification, however, reveals that the construct has both a cognitive and an affective dimension.

We expect a top-level executive who is there for the love of his/her job and what the organization represents, to care more about the growth of the organization and want to see it at its best in innovation and competing at the full potential. As mentioned by Bloemer et al. (2013), "affectively committed successors are willing to invest money, time and effort into developing and acquiring competences that would enhance their performance" (p. 372). It is this paper's contention that

Affective Commitment will strengthen the relationship between the CEO's Entrepreneurial Self-efficacy and entrepreneurial alertness on the one hand, and the company's Entrepreneurial Orientation on the other hand. That being the case, the third set of hypotheses is the following:

Hypothesis 3a: *The positive relationship between CEO entrepreneurial self-efficacy and the firm's Entrepreneurial Orientation (EO) is moderated by the type of commitment of the CEO, such as the relationship between them is stronger when the CEO has affective commitment.*

Hypothesis 3b: *The positive relationship between CEO entrepreneurial alertness and the firm's Entrepreneurial Orientation (EO) is moderated by the type of commitment of the CEO, such as the relationship between them is stronger when the CEO has affective commitment.*

On the other hand, we expect that individuals who are calculatively committed to their organizations (have continuance commitment towards the organization) are less likely to be willing to engage in entrepreneurial activities. As stated in previous sections of this paper, continuance commitment is determined by the extent to which individuals feel that they cannot financially or socially afford to leave the organization. For instance, they might believe that they wouldn't be able to find a better salary elsewhere, or that leaving the organization comes with the cost of losing important social status. It is then evident that continuance commitment is focused on the extrinsic rewards that the job dispenses, rather than any affection that one may have for the job itself, which is the case in affective commitment. That being the case, one can assume that CEOs who have continuance commitment towards their organizations would likely not want their firms to engage in entrepreneurial activities, since innovation by definition is risky and expensive. Meyer et al. (1989) said it best when they stated that "those who feel compelled to remain to avoid financial or other costs may do little more than the minimum required to retain their employment" (p. 152). In other words, the decision maker is not motivated to influence his firm positively and work hard, take risks, and find new competitive advantages; he/she is more focused on survival rather than improvement.

Having said that, we contend that Continuance Commitment will negatively impact the relationship between the CEO's Entrepreneurial Self-efficacy and entrepreneurial alertness on the one hand, and the company's Entrepreneurial Orientation on the other hand. The fourth set of hypotheses is as follows:

<u>Hypothesis 4a</u>: *The positive relationship between CEO entrepreneurial self-efficacy and the firm's Entrepreneurial Orientation (EO) is moderated by the type of commitment of the CEO, such as the relationship between them is weaker when the CEO has continuance commitment.*

<u>Hypothesis 4b</u>: *The positive relationship between CEO entrepreneurial alertness and the firm's Entrepreneurial Orientation (EO) is moderated by the type of commitment of the CEO, such as the relationship between them is weaker when the CEO has continuance commitment.*

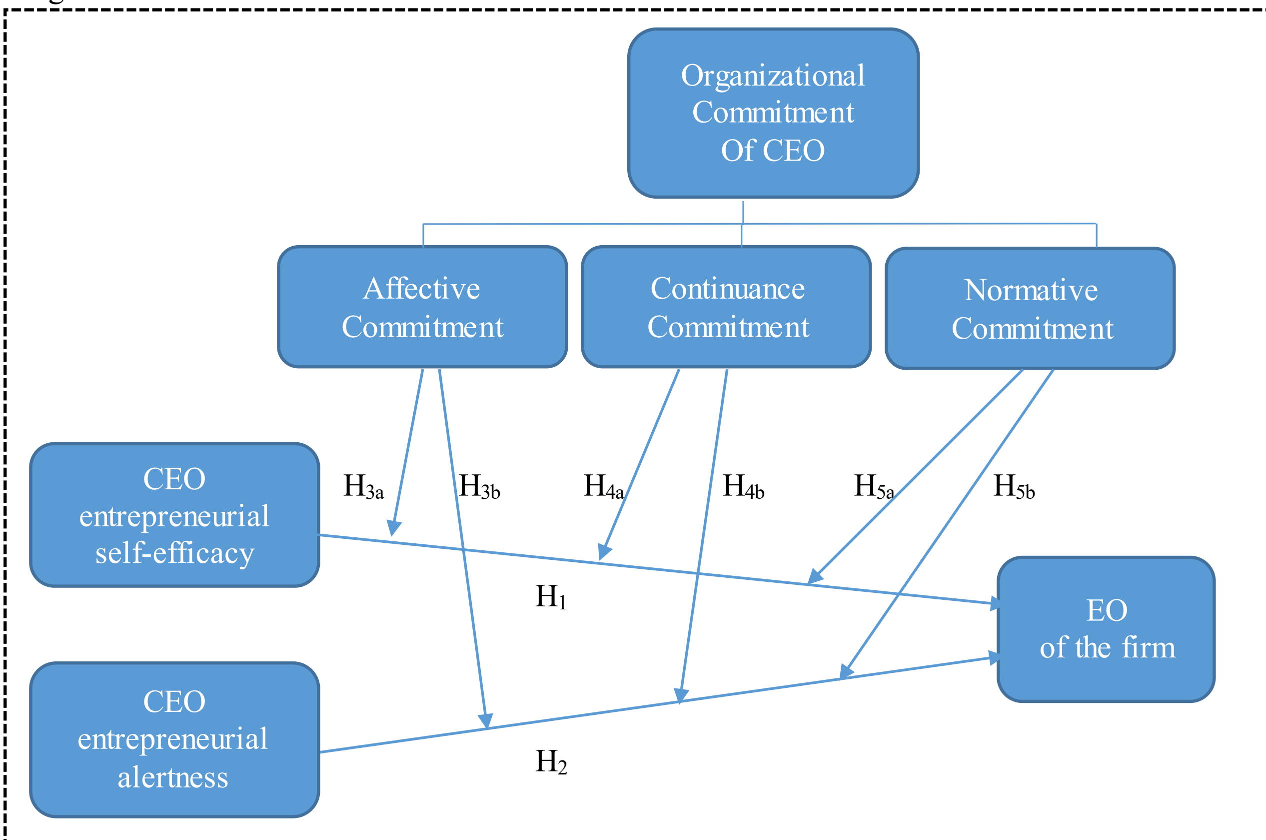
Finally, if an executive feels that, for whatever reason, he/she is obligated to stay in the organization (ex.: family-owned businesses), this manager will be motivated to invest and impress and thus, keep the organization growing. As Wiener & Vardi (1980) mention, "a committed individual retains membership in the organization, or exerts a high degree of task effort, not because he has figured out that doing so is to his personal benefit, but because he believes that he 'should' behave this way, since this is the 'right' and expected behavior" (p. 84). In other words, individuals may feel they ought to stay in the organization because they feel they have a moral obligation to do so. This could be due to several factors such as the organization investing a lot of time and effort in training the executive, or that the objectives of the organization serve some greater good. Normative commitment could also be due to certain pressures that are exerted on the executive by other individuals.

Thus, we venture to propose a final positive moderating effect of normative commitment on the relationship between the CEO's Entrepreneurial Self-efficacy and entrepreneurial alertness on the one hand, and the company's Entrepreneurial Orientation on the other hand. The fifth set of hypotheses is as follows:

<u>Hypothesis 5a</u>: *The positive relationship between CEO entrepreneurial self-efficacy and the firm's Entrepreneurial Orientation (EO) is moderated by the type of commitment of the CEO, such as the relationship between them is stronger when the CEO has normative commitment.*

<u>Hypothesis 5b:</u> The positive relationship between CEO entrepreneurial alertness and the firm's Entrepreneurial Orientation (EO) is moderated by the type of commitment of the CEO, such as the relationship between them is stronger when the CEO has normative commitment.

Figure 1: Theoretical Model



Methodology

Sample and Data Collection Procedure

The sample consisted of 33 CEOs based in various regions in Lebanon and representing diverse industries. Limiting the data collection to a particular country helps in getting a step closer to reduced environmental diversity, which has been shown to affect entrepreneurship (Covin & Slevin, 1991). Lebanon was the country of choice given the accessibility to diverse CEOs who are in for-profit businesses. The organizations contacted were private for-profit businesses in order to maximize the validity of the study, in accordance with Clark et al. (2014) who argue that the firm's ownership and governance structure plays an important role in either inhibiting or facilitating the CEO's impact on the firm. The data were gathered from CEOs and top executives in various firms in Lebanon. The firms targeted were mainly but not restricted to family businesses. Out of the 33 participants who filled the survey, 85% indicated that they considered themselves "family businesses". This sample of family owned businesses consisted of family members that are themselves in charge of the day-to-day management of the firms, which is the case for most of the companies in the Lebanese industry. More precisely, out of the participants who disclosed that information, 23% of these companies still have the 1st generation in charge of the business, 50% are led by the 2nd generation, 15% are solely managed by the 3rd generation, and 12% have a mix of generation handling the business together.

The sample consisted of 30 males (91%, coded as 1) and only 3 females (coded as 2). The mean age of the participants was 42.45 (Max = 65, Min = 26, SD = 13.989). Actually, 46% had an age between 26 (Min) and 36, 15% between 37 and 47, 18% between 48 and 58, and 21% between 59 and 65 (Max). The CEO's education level averaged 3.21 (SD = 0.99) on a scale of 1 to 5 with 5 being the highest (1 = High school, 2 = Undergraduate degree, 3 = Master's degree, 4 = MBA, 5 = PhD). The average company age was 36.82 (SD = 26.44) with 43% of the companies surveyed situated between 2 (Min) and 24 years, 24% between 25 and 47 years of age, 27% between 48 and 70 years of age, and 6% (2 firms), were older than 70, at 98 and 101 (Max) years of age.

Data were gathered through surveys that included questions about our various variables. The participants had the choice between filling a hand-written version of the survey that would remain confidential or to receive an email with a link to an online version (via Qualtrics) that would be anonymous. After conducting basic market research and networking with family connections, a compiled list was formed of potential participants that would be ideal for my study. A snowball sampling method was used to try and reach out to more potential participants (with one follow-up for non-respondents). Response rate was at a high 51%, which is considered well elevated for a sample of CEOs. This is explained in part by the fact that respondents were personally known by the researcher or referred to by his network, and by the fact that the CEOs were only sent the questionnaire if they stated they were interested in participating. There were no outliers in the dataset.

The cover page of the survey clearly informed partakers that their participation is completely voluntary and that if they decide to stop, they could do so at any point without any repercussions. It also included the necessary information in case they had any complaints or were interested in learning about the results (refer to Appendix A).

Measures

This section describes the measures that were used to assess the variables in this study. We will be referring to already established and validated measures in the literature. First, we measured both the entrepreneurial self-efficacy and the entrepreneurial alertness of the decision-maker, constituting our independent variables.

Entrepreneurial Self-Efficacy. ESE was measured using the scale developed by Chen et al. (1998), which consists of 22 items representing 5 factors (Marketing, Innovation, Management, Risk-Taking, Financial Control), measured on a 5-point Likert Scale indicating how certain the CEOs are in completing each of the tasks (Entirely Sure/Unsure). Items included statements such as: “Develop new Ideas”, “Expand the business”. The mean score was 4.16 and the reliability of the scale was $\alpha = 0.914$. See Appendix B for a complete list of factors and items.

Entrepreneurial Alertness. CEOs responded to 13-items regarding their entrepreneurial alertness (EA), an already established scale developed by Tang et al., 2012, measured on a 5-point Likert Scale (Entirely Agree/Disagree). These items load on 3 factors: Scanning and Search, Association and Connection, Evaluation and Judgement. Sample items used were as follows: "I have a knack for telling high-value opportunities apart from low-value opportunities", "I am an avid information seeker". The mean score was 4.08 and the reliability of the scale was $\alpha = 0.886$ (See Appendix C for a complete list of factors and items)

Second, for *Entrepreneurial Orientation (EO)*, this study's dependent variable, we will refer to Covin and Slevin's (1989) original measure. This measure is composed of 18 items assessing the 5 dimensions of EO: 3 items measuring the environment hostility (competitive aggressiveness) 6 items for organizational structure (autonomy), and 9 items for the strategic posture, split into 3 items for each of Innovativeness, Proactiveness and Risk-Taking. This original scale comprises of 18 paired statements to each question. The pairs included an entrepreneurially oriented statement on one side and non-entrepreneurially oriented statement on the other, and each CEO would have to position himself on a 5-point Likert scale. For example, one of the questions goes as follows: "In dealing with its competitors, my firm…", and here the participant will have to position himself in between "Typically seeks to avoid competitive clashes, preferring a live and let live posture" on one side and "Typically adopts a very competitive, undo-the-competitors posture" on the other. Nevertheless, in this paper, we will rely on a more simplified entrepreneurial orientation model that also exists in the literature (Covin and Wales, 2012), and that consists of only the innovativeness, risk-taking, and proactiveness dimensions of the original model developed. The mean score for this (9-item) scale was 3.08 and the reliability of the scale was $\alpha = 0.905$ (compared to an average of 3.03 for the 18-item measure and a reliability of $\alpha = 0.882$). (See Appendix D for a complete list of factors and items)

Third, for the three dimensions of *Organizational Commitment* (OC), the moderator variables, we will rely on the measure revised by Allen & Meyer (2007), which was originally developed by them in 1990. The measure consists of a 5-point Likert Scale (Entirely Agree/Disagree) with 6 items for affective (such as "I would be very happy to spend the rest of my career in this organization") – 6 items for continuance (such as "It would be very hard for me to leave my organization right now, even if I wanted to") and 6 items for normative for example "This organization deserves my loyalty" (refer to appendix for all the questions). Organizational commitment had a mean score of 4.07 (Min = 3.09) with a good reliability of $\alpha = 0.839$. All three of the components independently had a good reliability as well: $\alpha = 0.80$ for affective, $\alpha = 0.70$ for continuance, and $\alpha = 0.81$ for normative commitment. Also, it is worth mentioning that the affective dimension had 3 reverse coded questions that were accounted for in the computations. (See Appendix E for a complete list of factors and items)

Control Variables: In addition to the previous variables that make up our theoretical framework, we introduced several control variables. To account for other variables that might be affecting the relationships, company size was also taken into consideration as a categorical and control variable with an average size of 2.36. To put that value in perspective, firm size was measured in regards to the total number of employees; The 6 classes for firm size included were: 1-9, 10-49 (small firms, 70%) which means 23 out of the 33 respondents had less than 50 employees, 50-199 (medium firms, 18%), 200-499, 500-999, 1000 or more (large firms, 12%, which consisted of 2 respondents in the "200-499" category and 2 respondents with more than 1000 employees). In fact, firm size could have a major impact on the entrepreneurial orientation of the firm (Wiklund & Shepherd, 2003). The difference could lie in the allocation of resources to the growth and innovation of a company. For instance, small firms could try to grow into different markets and invest in different portfolios in order to avoid putting "all their eggs in one basket", while on the other hand, large firms usually possess more organizational slack that permits them to explore more options and take more risks. Hence, controlling firm size would allow for our model to account for any effect it has on the model and allows for a better understanding of the results.

The respondents represented diverse industries with the majority of the companies involved in the study being in manufacturing such as jewelry, plastic, dairy, packaging businesses (48%), 21% in the service industry such as architecture and sports recreation businesses, 12% in retail trade such as supermarket chains, and 6% in each of (1) construction, (2) wholesale trade, and (3) finance & real estate (according to the SIC directory, 2 digit codes). We controlled for industry type due to the fact that some industries offer more room for innovations than others, since "they vary considerably in their technological opportunities" (Zahra, 1996, p. 1720). Gender was also controlled for in this study in light of previous research findings that revealed that entrepreneurship education had more significant effects on the entrepreneurial self-efficacy of women rather than men (Wilson et al., 2007; Shneor & Jenssen, 2014). Furthermore, we controlled for age given that previous research has shown that there is a negative relationship between age and entrepreneurial experience (Machado et al., 2016). Finally, we controlled for firm age, because previous research has shown that older firms respond differently to risk, and are generally more risk-averse than younger firms (Yiu et al., 2007). In light of these diversities, all of respondent gender, age, and education, firm age, firm size and industry were used as control variables.

Given that the premise of the paper is to examine the influence of entrepreneurial self-efficacy and alertness on entrepreneurial orientation, both self-efficacy and alertness are considered as our independent variables, and entrepreneurial orientation is considered as our dependent variable. Furthermore, the three dimensions of organizational commitment are used as moderating variables. Finally, gender, age, firm size, firm age, industry type, and the CEO's education constitute our control variables.[1]

Results

A summarized descriptive statistics and bivariate correlations amongst all the variables in the study, as well as their reliability are shown in Table 1 below. The table shows some significant relationships that seem worthy of mention. Company age seem to be positively correlated with size ($p < 0.01$). ESE and Education appear to be negatively correlated ($p < 0.05$).

We performed linear regressions (OLS) to test our hypothesis using SPSS. First, we introduced the control variables to the model: gender, education, age, company age, firm size and industry. Next we tested hypotheses 1 and 2, to check for significant relationships between each of Entrepreneurial Self-Efficacy (ESE) and Entrepreneurial Alertness (EA) with the Entrepreneurial Orientation of the firm (EO). Table 2 provides a detailed representation of the metrics of each of

[1] We also controlled for CEO tenure (Mean = 11.9, Min = 1, Max = 40) however this did not change the results and the variable was omitted since it reduced the significance of the others

Table 1: Means, Standard Deviations, Correlations, and Reliability

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
Gender	1.09	.29												
Education	3.21	.99	-.069											
Age	42.45	13.99	.089	.182										
Company Age	36.82	26.44	.395*	-.033	.073									
Size	2.36	1.22	.343†	.218	.151	.483**								
Industry	5.73	2.20	-.009	-.130	-.470**	-.397*	-.440*							
ESE	4.16	.49	.025	-.347*	-.261	-.104	-.131	.288	(0.91)					
EA	4.08	.52	-.033	-.285	-.367*	-.010	-.172	.087	.488**	(0.89)				
EO	3.08	.90	.236	.179	.073	-.095	.093	-.083	.516**	.231	(0.91)			
AC	4.47	.58	-.073	-.122	-.389*	-.049	-.150	.273	.300†	.118	.108	(0.80)		
CC	4.08	.67	-.117	-.262	-.207	-.126	-.317†	.025	.089	.042	-.156	.559**	(0.81)	
NC	3.67	.65	-.141	-.091	.028	-.109	-.273	-.179	-.350*	-.167	-.383*	.088	.441*	(0.70)

N = 33

Note1: The values in parenthesis along the diagonal access represent the Cronbach Alpha coefficient assessing the reliability of the scale.

Note 2: The significance levels of those correlations are indicated by the following symbols, such that:

† $p < 0.1$

* $p < 0.05$

** $p < 0.01$

the models. At a first glance at table 1, results seem to show strong support for Hypothesis 1, but no significant relationship in support of Hypothesis 2. However, the regression model performed while accounting for the control variables, show a strong support for Hypothesis 1 ($\beta = 1.33$, $p < 0.001$) in the model with the ESE variable (Model 1), as well as marginal support for hypothesis 2 ($\beta = 0.62$, $p < 0.10$ / significance of $p = 0.074$) in the model including EA (Model 2).

To test for the moderating effect of the organizational commitment of the CEO on both relationships represented by Hypotheses 3a, 4a, 5a (that examine the relationship between Entrepreneurial Self-Efficacy and Entrepreneurial Orientation) on one hand, and Hypotheses 3b, 4b and 5b (that examine the relationship between Entrepreneurial alertness and Entrepreneurial Orientation) on the other hand, we performed a moderated regression testing the effect of the three dimensions of Organizational Commitment (OC): affective (AC), continuative (CC), and normative (NC). Unfortunately, none of Hypotheses 3a, 4a nor 5a showed any significant outcomes; and we could not find enough support for these hypotheses with the information from the data gathered (please refer to Models 3, 4, and 5 in table 2). Therefore, it appears there is not enough evidence to support the claim that any of the dimensions of Organizational Commitment moderates the relationship between Entrepreneurial Self-Efficacy and the Entrepreneurial Orientation of the firm

On the other hand, looking at the moderating effect on the relationship between Entrepreneurial Alertness (EA) and entrepreneurial Orientation (EO) – Hypotheses 3b, 4b, 5b – the results show a marginally significant but negative moderation effect for affective commitment ($\beta = -1.13$, $p < 0.1$), thus countering our initial assumptions for Hypothesis 3b (Model 6).

Second, there was not enough evidence to support the claim that the continuance dimension moderates said relationship (hypothesis 4b; Model 7). Third, the results show a marginally significant and positive moderation effect for normative commitment ($\beta = 1.44$, $p < 0.1$) supporting Hypothesis 5b (Model 8).

Table 2: Regression coefficients and significance of the variables for each of our models

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
	ESE	EA	ESE			EA		
			AC	CC	NC	AC	CC	NC
ESE	1.326***		3.718	2.597	0.908			
EA		0.624†				5.631*	2.880	-4.390†
AC			2.264			5.029†		
ESExAC			-0.527					
EAxAC						-1.125†		
CC				1.096			2.461	
ESExCC				-0.299				
EAxCC							-0.593	
NC					-0.605			-6.927*
ESExNC					0.065			
EAxNC								1.437†
Industry	-0.147†	-0.060	-0.158*	-0.169*	-0.182*	-0.125	-0.090	-0.101
Age	0.001	0.005	0.003	0.000	-0.002	0.011	0.002	0.005
Gender	1.129*	1.121†	1.167*	1.188*	1.153*	1.400*	1.279†	0.898
Education	0.370**	0.229	0.375*	0.350*	0.340*	0.282†	0.231	0.279†
Firm age	-0.009	-0.011	-0.010	-0.010†	-0.010†	-0.012	-0.012	-0.011
Size	-0.044	0.038	-0.079	-0.100	-0.112	-0.030	0.001	-0.161
Adjusted R^2	0.464	0.061	0.445	0.454	0.467	0.166	0.013	0.272
F	4.961	1.296	3.849	3.961	4.113	1.706	1.048	2.327
Significance	0.001	0.293	0.004	0.004	0.003	0.145	0.434	0.049

*** $p < 0.001$

** $p < 0.01$

* $p < 0.05$

† $p < 0.1$

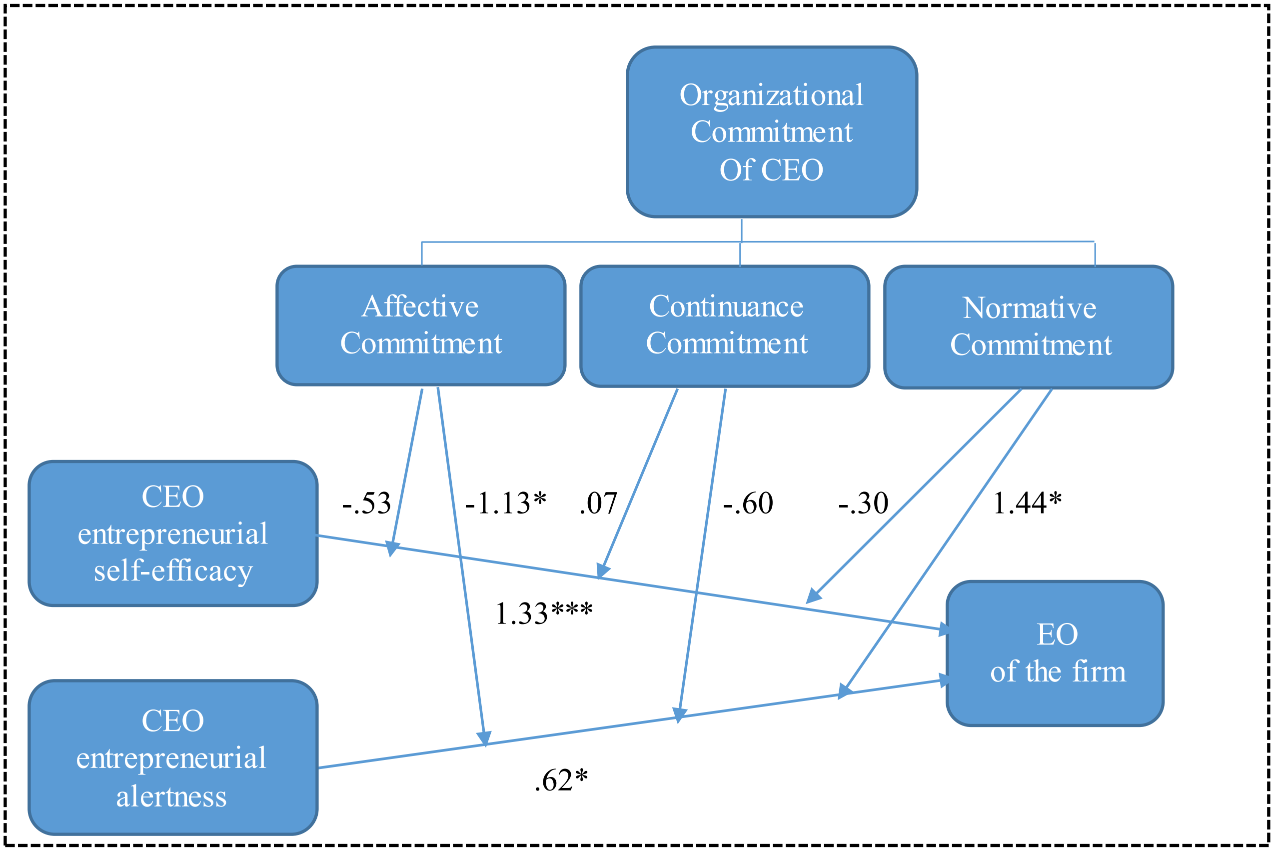
Note: ESE = entrepreneurial self-efficacy; EA = entrepreneurial alertness; AC = affective commitment; CC = continuance commitment; NC = normative commitment.

Table 3: Hypotheses results

Hypothesis		Supported	Not Supported
H1	*CEO entrepreneurial self-efficacy is positively related to the firm's Entrepreneurial Orientation (EO).*	X***	
H2	*CEO entrepreneurial alertness is positively related to the firm's Entrepreneurial Orientation (EO).*	X*	
H3a	*The relationship between CEO entrepreneurial self-efficacy and the firm's Entrepreneurial Orientation (EO) is moderated by the type of commitment of the CEO, such as the relationship between them is stronger when the commitment is affective*		X
H3b	*The relationship between CEO entrepreneurial alertness and the firm's Entrepreneurial Orientation (EO) is moderated by the type of commitment of the CEO, such as the relationship between them is stronger when the commitment is affective.*		X*
H4a	*The relationship between CEO entrepreneurial self-efficacy and the firm's Entrepreneurial Orientation (EO) is moderated by the type of commitment of the CEO, such as the relationship between them is weaker when the commitment is calculative (continuance).*		X
H4b	*The relationship between CEO entrepreneurial alertness and the firm's Entrepreneurial Orientation (EO) is moderated by the type of commitment of the CEO, such as the relationship between them is weaker when the commitment is calculative (continuance).*		X
H5a	*The relationship between CEO entrepreneurial self-efficacy and the firm's Entrepreneurial Orientation (EO) is moderated by the type of commitment of the CEO, such as the relationship between them is stronger when the commitment is normative*		X
H5b	*The relationship between CEO entrepreneurial alertness and the firm's Entrepreneurial Orientation (EO) is moderated by the type of commitment of the CEO, such as the relationship between them is stronger when the commitment is normative*	X*	

* $p < 0.1$
*** $p < 0.001$

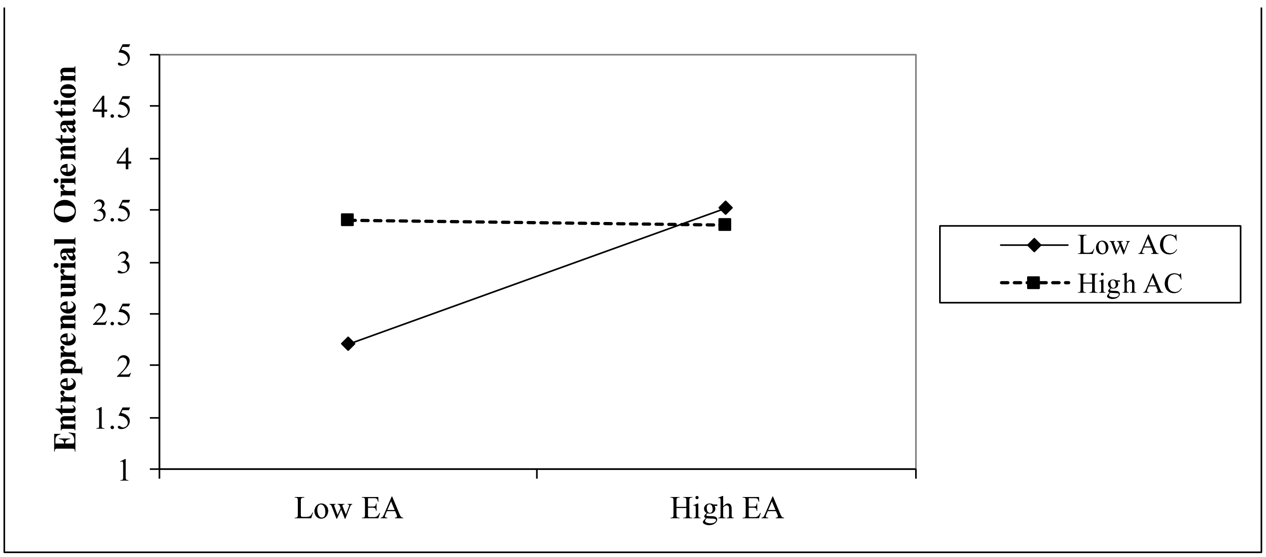
Figure 2: Theoretical Model Results



Note: The coefficients represent the outcomes of each regression run separately according to the models that appear in Table 2, and do not report the outcome of a single model that includes all of the variables together.

Taking the interpretations a step further, we conducted a two-way interaction effect of the unstandardized variables to see how the association between Entrepreneurial Alertness and Affective Commitment (AC) differs according to theses variables' highs and lows. We relied on the procedures and worksheets developed by Aiken and West (1991), Dawson (2014) and Dawson and Richter (2006) to plot the interaction effects (Figure 3 and 4). The plot in Figure 3 demonstrates visually that the relationship between the dependent variable (EO) and EA does not vary much with high or low AC (around 3.4 for High AC and 3.5 for Low AC). Instead, for low levels of EA the difference is well pronounced (2.2 for Low AC, compared to 3.4 for High AC), which is in line with the results found for hypothesis 2 and opposite to hypothesis 3b.

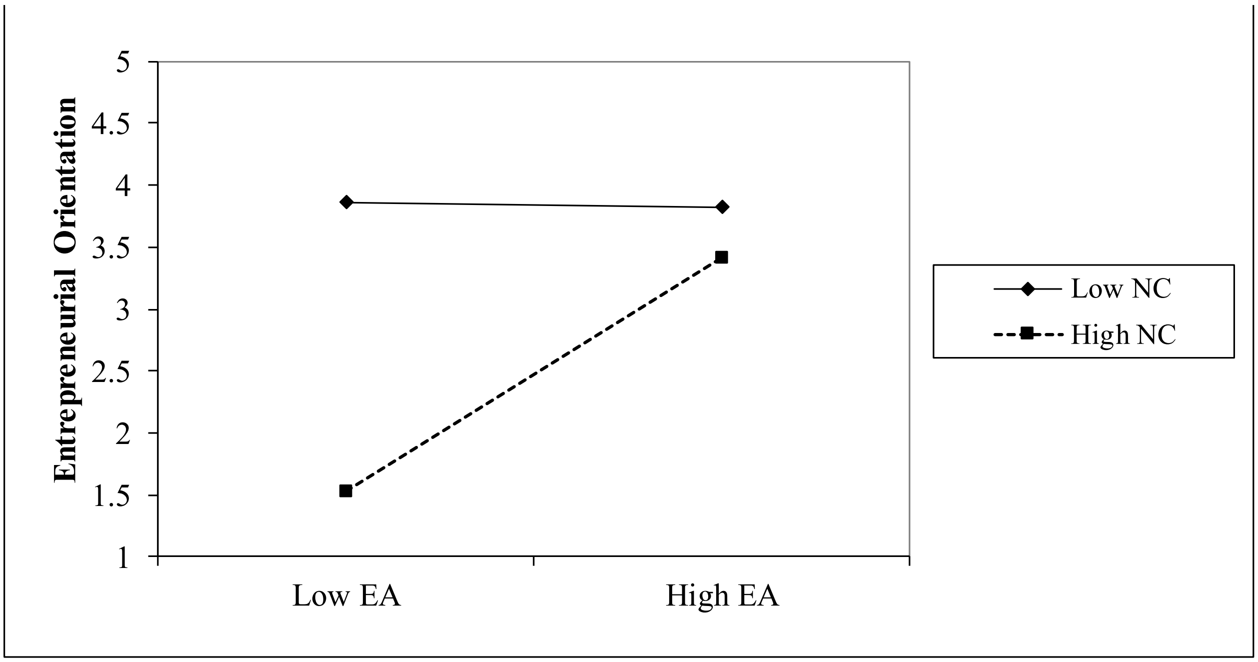
Figure 3: 2-way unstandardized interaction between EA and AC



NOTE: *The plot illustrated was calculated using the unstandardized values of the main variable of the models, and the standardized values of the control variables, following the instructions* given *by Aiken and West (1991), Dawson (2014) and Dawson and Richter (2006).*

Using the same tools as for the previous association, Figure 4 below illustrates a plot for the 2-way interactions between EA and Normative Commitment (NC). The plot shows little variation in EO when the EA is high (3.4 for High NC and 3.8 for Low NC), whereas the difference becomes significant when the EA is low (1.5 for High NC and 3.9 for Low NC), which shows additional support for hypothesis 2 and hypothesis 5b.

Figure 4:2-way unstandardized interaction between EA and NC



NOTE: The plot illustrated was calculated using the unstandardized values of the main variable of the models, and the standardized values of the control variables, following the instructions given by Aiken and West (1991), Dawson (2014) and Dawson and Richter (2006).

Discussion

The purpose of this study was to examine the relationship between the CEO's entrepreneurial self-efficacy and alertness on one hand, and the firm's entrepreneurial orientation on the other. More specifically, we also wanted to test the moderating role of affective commitment, continuance commitment, and normative commitment on the latter relationship. In order to test our hypotheses, we conducted linear regressions analyses using SPSS on a sample of 33 CEOs of mostly small, family-owned and -managed firms operating in the Lebanese market.

In concordance with Simsek et al.'s (2010) somewhat similar findings, our analysis revealed a positive and significant relationship between entrepreneurial self-efficacy and entrepreneurial orientation (H1). Judge et al. (2005) argue that individuals who are high in self-efficacy pursue goals that are highly consistent with their values and traits. After having established in earlier sections of this paper that CEOs are aptly capable of influencing the overall strategy of their firms, especially in smaller and family owned/managed firms, it is then reasonable to assume that CEOs that have high entrepreneurial self-efficacy would shape their firms to be more entrepreneurially oriented. Similarly, we found that entrepreneurial alertness was also positively, albeit weakly, related to entrepreneurial orientation (H2). This result was also expected since there is a plethora of evidence in the literature linking entrepreneurial alertness to entrepreneurial behavior. In fact, McGrath & McMillan (2000) characterized individuals that are high in entrepreneurial alertness as the "habitual entrepreneurs". Moreover, Ireland et al. (2003) affirm that "those with keen entrepreneurial alertness demonstrate a strong entrepreneurial mindset" (p. 969). Looking at these results in the context of our sample, which is constituted mostly of small family-managed businesses, it should come as no surprise that the firms whose CEOs or top executives are high in entrepreneurial self-efficacy and alertness would have a posture that's more entrepreneurially oriented. Overall, individuals with high entrepreneurial self-efficacy and high entrepreneurial alertness demonstrate better chances of translating these entrepreneurial characteristics into palpable entrepreneurial action, and apply their entrepreneurial inclination with confidence in their workplace. This is especially true in small to medium sized family businesses (that constitute the majority of our sample). This statement has been empirically proven to be true in numerous research articles that investigated the relationship between CEO characteristics and corporate strategy. For instance, Miller & Toulouse's (1986) results revealed that "the relationship between personality and organizational characteristics were found to be by far the strongest in small firms" (p. 1389). In fact, the impact of top-level executives will be immediately felt in small to medium-sized family businesses, and possessing self-efficacy skills allowing them to know what they're capable of achieving on one side, coupled with the ability of recognizing competitive opportunities on another side, shows promise of growth and sustainable future for the firm.

Having found support for the first two hypotheses, we move on to discussing the moderating effect of the CEO's commitment on the latter relationships, to uncover if the entrepreneurial CEO's level and type of commitment to the organization significantly strengthens or weakens the likelihood that the latter's entrepreneurial characteristics impact the firm's strategy, and render it entrepreneurially oriented.

The statistical analyses concerned with the moderating effects of commitment revealed that, consistent with our expectations, normative commitment significantly and positively moderated the relationship between entrepreneurial alertness and entrepreneurial orientation. As we had expected, individuals who are pressured into staying in the organization, will most probably remain subjected to those pressures. For instance, in the case of family businesses, the CEO is under constant pressure to keep the firm running smoothly not only for the CEO's sake, but for future generations as well. In fact, 85% of our sample (28 out of 33) consisted of family-owned businesses, which could help explain this outcome. Additionally, the chart (figure 4) shows a relatively constant level of EO when the NC is low. This is in line with the thinking that for low NC, the level of EA does not play a significant role anymore. We can also see that with low NC there tends to be higher EO regardless of EA. This could be due to the fact that, regardless of EA, executives take more risks when they have less normative attachment because there are less obligations tying them to the company. It is well known that high risks lead to high returns, so only individuals with low normative commitment to the firm could take risks regardless of their ability to distinguish between profitable and not so profitable opportunities or identify good market opportunities. These findings have important implications on both internal and external recruitment as well as employee development within the firm. The theoretical and practical implications of these findings will be discussed in greater detail in the following sections.

On the other hand, and contrary to our expectations, Affective Commitment significantly and negatively moderated the relationship between entrepreneurial alertness and entrepreneurial orientation (H3b). One possible explanation of these peculiar findings could be that CEOs that are affectively committed to their organizations do not want to bear the risk and the substantial financial expenses inherent in entrepreneurial activities. "In the absence of strong emotional bonds with the organization, functional managers give up more easily in the face of the uncertainty or costs associates with entrepreneurial initiatives" (De Clercq et al., 2009, p. 33).

As we can see in Figure 3, the plot shows for high AC the level of EO remains stable and high, regardless of the level of EA. Which means that in the presence of high attachment to the organization, there is higher realization of the firm's EO, no matter the individual's capacity to "connect dots". Furthermore, the plot also illustrates that when EA is high, there is close to no difference in the firm's EO, in comparison to the level of AC, whereas the difference becomes more noticeable when the EA is low. From these results, we can see that CEOs and top executives that are high in Entrepreneurial Alertness manage firms that are more entrepreneurially oriented. This appears to be true regardless of the levels of Affective Commitment. Also, it appears that CEOs and executives with low EA but high AC seem to have firms with higher EO, so this suggests that AC can act as a substitute for EA. In addition to what has previously been established, this also shows that individuals with little ability to recognize good opportunities from bad ones, would less likely take risks if they are highly affectively committed to the organization.

However, all three dimensions of commitment (affective, continuance, and normative) did not significantly moderate the relationship between entrepreneurial self-efficacy and entrepreneurial orientation (H3a, H4a, and H5a). Additionally, continuance commitment did not significantly moderate the relationship between entrepreneurial alertness and entrepreneurial orientation (H4b).

The lack of significant results may be attributed to the fact that the survey used to measure Entrepreneurial Orientation was initially tailored towards manufacturing firms, whereas a good portion of the sample used in this study consisted of non-manufacturing firms (17 out of 33). While initial efforts for recruiting respondents were focused on recruiting CEOs of manufacturing firms, the lack of such respondents forced us to diversify our sample. Moreover, the relatively low number of overall respondents compromised the robustness of the statistical regressions that were done, and may have contributed to the lack of significant results.

Another interesting result was the significant negative correlation between level of education and entrepreneurial self-efficacy ($r = -0.35$, $p < 0.05$). One possible interpretation of this is the Dunning-Krueger effect which states that "low information" individuals tend to overestimate their abilities (Schlösser et al., 2013). Applied to the present context, it can be argued that CEOs with lower levels of education might tend to overestimate their aptitude in completing their tasks.

In summary, we were able to find support that a significant and positive relationship exists between the CEO's entrepreneurial self-efficacy and alertness on one hand, and the firm's entrepreneurial orientation on the other hand. These commonsense findings seem to imply, in keeping with previous similar findings, that the CEO (or top executive) of the firm has the capability to instill his or her own values in the firm's strategy, and shape it in his or her image. Naturally, there are several factors that could affect these relationships. For instance, we found that only normative commitment positively moderates the relationship between entrepreneurial alertness and entrepreneurial orientation. We also found that affective commitment negatively moderated the relationship between entrepreneurial alertness and entrepreneurial orientation, which makes sense since the CEOs of such firms would be reluctant in engaging in expensive and risky endeavors, especially since a misstep in that regard can very well bankrupt the firm. All other commitment types did not have any significant effects on either relationship. Bringing all of this back to the theoretical model we sought out to explore in the context of our sample, we suggest that the small size and the ownership structure of the firm acted as catalysts that created the underlying conditions leading to these results. In fact, the small size of the firms made the relationships between the micro-level entrepreneurial characteristics of the CEO, and the entrepreneurial orientation of the firm more pronounced. In a similar vein, the ownership structure of the majority of the firms in the sample could explain the results of the moderating effects of normative and affective commitment on the EA-EO relationship. All in all, this study contributed to the relevant literature by reinforcing the notion that individual-level variables can influence firm-level outcomes, specifically in the context of entrepreneurship. Moreover, we were able to shed light on the role that firm size and governance plays in the manifestation of those variables.

Limitations & Future Directions

There are some limitations to this study. Firstly, the cross-sectional nature of the study limits the validity of the findings. In fact, the data were gathered at one specific point in time which makes it hard to establish causality between the independent variables and the dependent variable. That being the case, we can't be sure if entrepreneurial self-efficacy and entrepreneurial alertness actually caused the firm to become more entrepreneurially oriented, or if the positive significant result was due to other effects. Although the study accounted for several control variables, there are still many individual, organizational such as organizational culture and environmental factors such as dynamism (Simsek et al., 2010) that could influence entrepreneurial orientation (Lumpkin & Dess, 1996). A possible way to remedy this problem would be to conduct a longitudinal study and measure the effects of the interactions over an extended period of time. Moreover, additional moderators could be included in the study to better understand the dynamics of the relationship between self-efficacy and alertness on the one hand, and entrepreneurial orientation on the other hand.

These moderators could include environmental dynamism (Simsek et al., 2010), ownership structure (Clark et al., 2014) and leadership style (Engelen et al., 2015).

A second limitation is the fact that the data concerning entrepreneurial self-efficacy and alertness, organizational commitment, as well as the entrepreneurial orientation of the firm, were all self-reported by the CEOs of the firm. This raises the possibility that the data could have been biased and not reflective of the real situation. For instance, social desirability effect could have led to the CEOs overinflating their answers with regards to their self-efficacy, alertness, and the entrepreneurial orientation of their firms. Actually, the average for commitment types were quite high (4.5 for AC, 4.1 for CC, 3.8 for NC) which pushes us to the validation of this limitation.

Moreover, since the data for both the independent variables and the dependent variable were collected using the same survey instrument, common-method variance (CMV) could have played a role in skewing the results away from an accurate depiction (Podsakoff et al., 2012). Future research should take this into consideration and collect the data at separate points in time.

A third possible contributor to the lack of significant results in the study may be the fact that we substituted the original 7-point Likert scale format of the entrepreneurial orientation measure with a 5-point format because it flowed better with the rest of the paper.

A fourth limitation is the geographical constraint of the data collection. Given that all the data were gathered in Lebanon, our findings cannot be generalized given the socio-economic disparities that exist among countries, specifically since past research has shown that environmental and cultural factors influence entrepreneurship (Simsek et al., 2010; Lee & Peterson, 2001).

Theoretical and Practical Implications:

From a theoretical standpoint, our study shows that there is a relationship between the micro-level characteristics of the CEO, and the macro-level posture of the firm. Although Simsek et al. (2010) already addressed the relationship between CEO core self-evaluation and entrepreneurial orientation. Core self-evaluation represent a notion of subconscious traits an individual possesses about themselves, giving them confidence in their own abilities, that is categorized into four traits in the literature: self-esteem, general self-efficacy, internal locus of control, and emotional stability (Judge & Bono, 2001). Our study examines a more entrepreneurial aspect by looking at entrepreneurial self-efficacy and adds to that by revealing that the CEO's entrepreneurial alertness is also positively related to EO. This being the case, the present study offers insights on the mechanisms through which entrepreneurial orientation develops in the firm. The present study also paves the way for other researchers to examine how other CEO characteristics affect firm strategy. Moreover, from a managerial standpoint, our study suggests that CEOs and top executives should pay mind to the benefits and competitive advantages of exhibiting entrepreneurial behaviors, specifically entrepreneurial self-efficacy and alertness at the individual level. Although we recognize that these skills and characteristics are hard to acquire so late in the game, we do believe that proper company-sponsored training efforts could help CEOs develop and improve their entrepreneurial self-efficacy and alertness, leading to better performance outcomes for the firm. Interestingly, both the entrepreneurial characteristics we examined can be trained. On one hand, "entrepreneurial alertness represents a capability that can be learned and improved, and may offer guidance to aspiring entrepreneurs" (Tang et al., 2012, p. 78), and on the other, entrepreneurial self-efficacy can also be enhanced through training programs (Bandura, 2009). Also, we believe that our study has important implications on the selection and recruiting process of the firm, in that firms should seek individuals who demonstrate these entrepreneurial characteristics, given the important link between entrepreneurial orientation of the firm, and firm performance (Lumpkin & Dess, 1996).

Finally, our study revealed that normative commitment positively moderated the relationship between entrepreneurial alertness and entrepreneurial orientation. This means that when it comes to internal recruitment to top levels, the firm should promote individuals that feel like they have an obligation towards the firm.

Conclusion

The intent of this study was to examine the effect of micro-level entrepreneurial characteristics on the macro-level strategic posture of the firm. In other words, we wanted to shed light on the mechanisms explaining how entrepreneurial CEO's influence the entrepreneurial orientation of the firm, and by extension, its performance. Previous research had determined that CEOs, through their values, traits and characteristics have the power to shape the overall strategy of the firm (De Vries & Miller, 1986; Kernberg, 1976; Zacharias et al., 2015, among others). More specifically, we wanted to see if the CEO's entrepreneurial self-efficacy and alertness positively influenced the entrepreneurial orientation of the firm. Moreover, we wanted to know how the organizational commitment of the CEO moderated that relationship. To that end, we adopted Meyer & Allen's (1997) model of organizational commitment which segregates the latter into three dimensions: affective commitment, continuance commitment and normative commitment. We argued that affective and normative commitment positively moderated the relationship between entrepreneurial self-efficacy and alertness on one hand, and entrepreneurial orientation on the other hand, while continuance commitment negatively moderated the latter. To test our hypotheses, we collected data from 33 CEOs and top executives of business firm in Lebanon. The results of the data analysis revealed that both entrepreneurial self-efficacy and alertness positively and significantly influenced entrepreneurial orientation, in accordance with our expectations. Similarly, normative commitment significantly and positively moderated the relationship between entrepreneurial alertness and entrepreneurial orientation. However, contrary to our expectations, all three dimensions of commitment did not significantly moderate the relationship between self-efficacy and entrepreneurial orientation, and continuance commitment did not significantly moderate the relationship between entrepreneurial alertness and entrepreneurial orientation. What was even more peculiar is that affective commitment negatively and significantly moderated the relationship between entrepreneurial alertness and entrepreneurial orientation. Finally, we suggested that the results of this study could be used in the CEO selection process, given that entrepreneurship has been linked to firm performance (Lumpkin & Dess, 2001; Wang 2010; Lumpkin & Dess, 1996; Li et al., 2009).

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Appendices

Appendix A

Survey Cover Page

Dear Participant,

Thank you for taking the time and agreeing to take part in this survey. My name is Albert Karam and I am a MSc student at Concordia University's John Molson School of Business and really appreciate your participation in my research which is a requirement for the completion of my thesis.

We expect the survey will take about 10-12 min to complete. Your participation in this study is completely voluntary and if you decide to stop, you may do so at any point. Responses are confidential and won't be disclosed. The outcomes won't be identified by individual but all answers will be compiled together and analyzed as a group. In order to ensure that all information will remain anonymous, please do not include your name.

The purpose of the study is to research decision-makers' influence on the entrepreneurial orientation of a firm. If you would like to learn about the final results of the study, or require additional information, please contact me at the number or email listed below.

Please note that completion and return of the questionnaire will indicate your willingness to participate in this study.

If you have any questions or concerns about the manner in which this study is being conducted, you may contact the Office of Research at Concordia University at 514.848.2424 ex. 7481 or oor.ethics@concordia.ca.

Thank you,

Albert Karam
Cellphone number: 438-989-3337
Email : albert.karam@hotmail.com

Appendix B

Entrepreneurial Self-Efficacy Questions

How certain do you feel about accomplishing each of the following roles/tasks when managing your business. (5-point Likert Scale)

1- Develop new ideas
2- Develop new products and services
3- Develop new markets
4- Develop new methods of production, marketing, and management
5- Set and meet sales goals
6- Set and meet market share goals
7- Set and attain profit goals
8- Expand the business
9- Conduct market analysis
10- Establish a position in product markets
11- Conduct strategic planning
12- Reduce risk and uncertainty
13- Establish and achieve goals and objectives
14- Define organizational roles, responsibilities, and policies
15- Manage time by setting goals
16- Take calculated risks
17- Make decisions under risk and uncertainty
18- Take responsibility for ideas and decisions
19- Work under pressure and conflict
20- Develop a financial system and internal controls
21- Perform financial analysis
22- Control cost

Appendix C

Entrepreneurial Alertness Questions

Please circle the most appropriate number for each statement which corresponds most closely to your desired response

1- I have frequent interactions with others to acquire new information
2- I always keep an eye out for new business ideas when looking for information
3- I read news, magazines, or trade publications regularly to acquire new information
4- I browse the Internet every day
5- I am an avid information seeker
6- I am always actively looking for new information
7- I see links between seemingly unrelated pieces of information
8- - I am good at "connecting dots"
9- I often see connections between previously unconnected domains of information
10- - I have a gut feeling for potential opportunities
11- I can distinguish between profitable opportunities and not-so-profitable opportunities
12- I have a knack for telling high-value opportunities apart from low-value opportunities
13- When facing multiple opportunities, I am able to select the good ones

Appendix D

Entrepreneurial Orientation Questions

Please circle the most appropriate number for each statement which corresponds most closely to your desired response

1 How would you characterize the external environment within which your firm operates?

Very safe, little threat to the survival and well-being of my firm	1	2	3	4	5	Very risky, a false step can mean my firm's undoing
Rich in investment and marketing opportunities	1	2	3	4	5	Very stressful, exacting, hostile; very hard to keep afloat
An environment that my firm can control and manipulate to its own advantage	1	2	3	4	5	A dominating environment in which my firm's initiatives count for very little against the tremendous competitive, political, or technological forces

2 In general, the operating management philosophy in my firm favors…

Highly structured channels of communication and a highly restricted access to important financial and operating information	1	2	3	4	5	Open channels of communication with important financial and operating information flowing quite freely throughout the organization
A strong insistence on a uniform managerial style throughout the firm	1	2	3	4	5	Manages' operating styles allowed to range freely from the very formal to the very informal
A strong emphasis on holding fast to tied and true management principles despite any changes in business conditions	1	2	3	4	5	A strong emphasis on holding fast to tried changing circumstances without too much concern for past practice
A strong emphasis on always getting personnel to follow the formality laid down procedures	1	2	3	4	5	A strong emphasis on getting things done even if this means disregarding formal procedures

	Tight formal control of most operations by means of sophisticated control and information systems	1	2	3	4	5	Loose, informal control; heavy dependence on informal relationships and norm of cooperation for getting work done
	A strong emphasis on getting line and staff personnel to adhere closely to formal descriptions	1	2	3	4	5	A strong emphasis on R&D, technological leadership, and innovations
3	In general, the top managers of my firm favor …						
	A strong emphasis on the marketing of tried and true products or services	1	2	3	4	5	A strong emphasis on R&D, technological leadership and innovations
4	How many lines of products or services has your firm marketed in the past 5 years?						
	No new lines of product or services	1	2	3	4	5	Very many new lines of products or services
	Changes in product or service lines have been mostly of minor nature	1	2	3	4	5	Changes in product or service lines have usually been quite dramatic
5	In dealing with its competitors, my firm….						
	Typically responds to action which competitors initiate	1	2	3	4	5	Typically initiates actions which competitors then responds to
	Is very seldom the first business to introduce new product/services, administrative	1	2	3	4	5	Is very often the first business to introduce new product/services, administrative techniques, operating technologies, etc.
	Typically seeks to avoid competitive clashes, preferring a "live and let live" posture	1	2	3	4	5	Typically adopts a very competitive, "undo-the-competitors" posture
6	In general the top managers of my firm have…						
	A strong proclivity for low-risk projects	1	2	3	4	5	A strong proclivity for high-risk projects
7	In general, the top managers of my firm believe that…						

Owing to the nature of the environment, it is best to explore it gradually via timid, incremental behavior	1	2	3	4	5	Owing to the nature of the environment, bold wide-ranging acts are necessary to achieve the firms' objectives

8 When confronted with decision-making situations involving uncertainty my firm…

Typically adopts a cautious, "wait-and-see" posture in order to minimize the probability of making costly decisions	1	2	3	4	5	Typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities

Appendix E

Organizational Commitment Questions

Affective, Normative and Continuance Employee- Organizational Commitment (5-point Likert Scale)

Affective Commitment Scale Items

1. I would be very happy to spend the rest of my career in this organization.
2. I really feel as if this organization's problems are my own.
3. I do not feel like "part of the family" at my organization. (R)
4. I do not feel "emotionally" attached to this organization. (R)
5. This organization has a great deal of personal meaning for me.
6. I do not feel a strong sense of belonging to my organization. (R)

Continuance Commitment Scale Items

1. I worry about the loss of investments I have made in this organization
2. If I wasn't a member of this organization, I would be sad because my life would be disrupted
3. I am loyal to this organization because I have invested a lot in it, emotionally, socially, and economically
4. I often fell anxious about what I have to lose with this organization
5. Sometimes I worry about what might happen if something was to happen to this organization and I was no longer a member
6. I am dedicated to this organization because I fear what I have to lose in it

Normative Commitment Scale Items

1. I feel that I owe this organization quite a bit because of what it has done for me
2. My organization deserves my loyalty because of its treatment towards me
3. I feel I would be letting my co-workers down if I wasn't a member of this organization
4. I am loyal to this organization because my values are largely its values
5. This organization has a mission that I believe in and am committed to
6. I feel it is "morally correct" to dedicate myself to this organization