

Strategic Entrepreneurial Orientation: Development of a Multi-Dimensional Construct Based on Literature Review

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Research in the field of entrepreneurship and strategy has largely developed independent of each other. While entrepreneurship has focused on opportunity seeking approach, strategic management has focused on advantage seeking behavior increasingly researchers have highlighted some overlapping areas in these two disciplines. This study talks about inter-linkage of entrepreneurship and strategy and the emergence of strategic and entrepreneurial orientation construct (EO). Increasingly entrepreneurship is considered as making a new entry and the process of making this new entry is called firm's strategic orientation. This led to development of firm's strategic and entrepreneurial orientation (EO) construct which talks about entrepreneurship as a firm level phenomenon and highlights the process of making new entry through its strategic approach. Most of the studies in this field tend to examine firm's strategic and entrepreneurial construct through three most commonly used dimensions of innovativeness, pro-activeness and risk-taking and put them together into a gestalt or uni-dimensional construct where these three dimensions co-vary. Prior research highlights that EO contributes positively to business performance but some studies have found the opposite or insignificant influence. This study tries to overcome this inconsistency by building on literature highlighting that EO construct is better explained by five dimensions rather than three by the addition of competitive aggressiveness and autonomy to the existing three dimensions and these dimensions vary independently rather than co-varying. This study argues the need to consider EO as a multidimensional construct rather than a uni-dimensional one and highlights that some of these dimensions may have a positive influence on firm performance whereas some may have a negative or insignificant influence and further this influence may vary across firm life-cycle.

INTRODUCTION

The origin of the term entrepreneurship can be traced back to the French word *entreprendre* that means to undertake, consequently, it is the alertness to new opportunities. Entrepreneurship includes new business venture creation or rejuvenation and would address questions like—What business do one enter and how do one make the new business successful. Schumpeter (1934) argued that the driving force of

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economic growth is entrepreneurs who introduce new products, new methods of production, and other innovations that stimulate economic activity. He described entrepreneurship as a process of "creative destruction in which an entrepreneur continually displaces or destroys existing products, processes, or methods of production with new ones. Ever since Schumpeter, the emergence of new businesses has been explored, not only in terms of opportunities, but also, in terms of resources combined in specific ways that best lead to competitive advantages (Barney, 1992). Entrepreneurship is defined as "identifying opportunities and taking advantage of opportunities by novel combination of resources in ways which have impact on the market" (Wiklund, 1999), and entrepreneurial actions as "creating new resources or combining existing resources in new ways to develop and commercialize new products, move into new markets, and /or service new customers" (Hitt *et al.*, 2001).

Strategic management is defined as set of decisions, commitments, and actions that result in the formulation and implementation of plans designed to achieve firm's objectives and produce a competitive advantage. Strategy reflects a firm's awareness of how, when and where it should compete; against whom it should compete; and for what purpose it should compete. A business competes on the basis of its available resources, skills and expertise, competitive capabilities, and its strategically valuable assets. Firms may look for entrepreneurial opportunities and utilize strategic management processes to identify and develop distinctive capabilities and competencies in the goal of acquiring competitive advantage and improved performance. In today's turbulent and dynamic business environment, the need for managers to adopt entrepreneurship while formulating their strategies has been increasingly recognized and many researchers argue that entrepreneurial attitude and behavior is necessary for firms of all sizes to prosper and grow (Covin and Slevin, 1989; Zahra, 1993; and Hitt, 2005). An evolving body of literature exists to explain the organizational processes that facilitate entrepreneurial behavior (Miller, 1983; Guth and Ginsberg, 1990; and Wiklund and Shepherd, 2005). The process of taking advantage of opportunities and combining new resources is driven by a firm's strategic orientation. This implies that when a firm wants to be entrepreneurial, it successfully implements a strategic orientation.

OVERLAP OF STRATEGY AND ENTREPRENEURSHIP

Both strategic management and entrepreneurship are concerned with decisions made by general managers who have responsibility for total business. Strategic management has placed greater emphasis on examining influences on firm performance, including strategy and environment and the source of sustainable competitive advantage whereas entrepreneurship has emphasized processes which lead to new venture creation or rejuvenation. Entrepreneurship and strategic management are both dynamic processes concerned with firm behaviour and performance. Strategic management calls for firms to establish and exploit competitive advantages within a particular environmental

context. Entrepreneurship promotes the search for competitive advantage through product, process and market innovations. Entrepreneurial and strategic actions are often intended to find new markets or competitive space for firms to create wealth. The effective integration of entrepreneurial and strategic management actions facilitates firm's wealth creation. Entrepreneurial actions are fundamental behavior of firms by which they move into new markets, seize new customers and/or combine resources in new ways whereas strategic actions are taken to select and implement firm's strategies. Increasingly due to intense competitive pressures these strategies are framed around the pursuit of entrepreneurial opportunities by taking entrepreneurial actions. Even though the heart of entrepreneurship is a strategic orientation toward seeing (and acting on) opportunities regardless of existing resources (Stevenson and Jarillo, 1990), organizations, especially small businesses, need to continually identify new opportunities if they are to survive and grow.

Wealth creation is at the heart of both entrepreneurship and strategic management (Venkataraman and Sarasvathy, 2001). Both are concerned with firm performance and both seek to adapt to environmental change and exploit opportunities to create wealth (Venkataraman and Sarasvathy, 2001; and Hitt and Ireland, 2001). A number of scholars suggest that strategic and entrepreneurial thinking should be integrated (Wiklund and Shepherd, 2005; Barringer and Bluedorn, 1999). It appears that integration of strategic management and entrepreneurship can advance the understanding of both opportunity recognition and how wealth is created through exploiting these opportunities. Strategic entrepreneurship is defined as "entrepreneurial action with strategic perspective" (Hitt *et al.*, 2001) and can be considered as "integration of entrepreneurial (i.e., opportunity-seeking behaviour) and strategic (i.e., advantage-seeking behavior) perspective in developing and taking actions designed to create wealth" (Hitt *et al.*, 2001).

EMERGENCE OF STRATEGIC AND ENTREPRENEURIAL ORIENTATION (EO) CONSTRUCT

The early strategy literature equated entrepreneurship with going into business, and the basic "entrepreneurial problem" (Miles and Snow, 1978) was to address the principal question of strategic content, that is, "What business should we enter?" The answer to this question determined firm's domain and guided its product-market relationship and resource deployment. As the field of strategic management developed, the emphasis shifted to entrepreneurial processes, that is, the methods, practices, and decision-making styles managers use to act entrepreneurially. These included processes such as experimenting with new technologies, being willing to seize new product-market opportunities and having a predisposition to undertake risky ventures. The trend has been to use concepts from the strategy-making literature to model firm-level entrepreneurship (Covin and Slevin, 1989, 1991; Miller, 1983). Strategic management theorists have suggested that an entrepreneurial approach to strategy making may be

vital for organizational success (Murray, 1984). Miller and Friesen (1982) posit that entrepreneurial organizations try to obtain a competitive advantage by habitually making dramatic innovations and taking challenging risks. Mintzberg (1973) identified such behaviour as one of three modes of strategy making (entrepreneurial, adaptive and planning) relating it to leadership style. The firms with an adaptive mode are 'reactive' compared to proactive ones while facing competitive environment. The study of firm's EO is analogous to Stevenson and Jarillo's (1990) concept of entrepreneurial management, in that it reflects the organizational processes, methods, and styles that firms use to act entrepreneurially. Many early studies contributed to the gradual establishment of strategic and EO as a theoretically and logically legitimate construct representing the entrepreneurial nature of a firm (Covin *et al.*, 2006).

Miller focused on the entrepreneurship process rather than the individual entrepreneur and defined as entrepreneurial organization as "one that engages in product market innovation, undertakes somewhat risky ventures, and is first to come up with 'proactive' innovations, beating competitors to the punch." Thus, the foundation of the EO construct was introduced, with key elements being innovativeness, risk taking and proactiveness. Numerous researchers have adopted this approach based on Miller's (1983) original conceptualization (e.g., Covin and Slevin, 1989; Ginsberg, 1985; Morris and Paul, 1987; Naman and Slevin, 1993; and Schafer, 1990). These key dimensions represent the Strategic and EO, which reflect firm's propensity to engage in entrepreneurial behaviour to achieve its strategic objectives (Covin and Slevin, 1989; Lumpkin and Dess, 1996; Wiklund, 1999). Researchers have been consistent in their use of EO concept, but slight variations have emerged in researcher perceptions of EO construct. This can be seen in the different definitions of EO proposed in more recent literature. For instance, EO has been viewed as the strategy making practices used for new venture creation (Dess *et al.*, 2005), a firm's strategic orientation, including entrepreneurial decision making and practices (Wiklund and Shepherd, 2005) and the rules and norms used for decision making (Sapienza *et al.*, 2005). Researchers have referred to firm level entrepreneurship as entrepreneurial posture (Covin and Slevin, 1991), strategic posture (Covin and Slevin, 1989; Covin *et al.*, 1990), strategic orientation (Wiklund and Shepherd, 2005), intrapreneurship (Kuratko, 1993), corporate entrepreneurship (Morris and Paul, 1987; Zahra, 1991 and 1993; and Zahra and Covin, 1995), and EO (Dess *et al.*, 1997; Covin *et al.*, 1990; and Zahra, 1991). It seems that more recent literature has adopted the use of "strategic and EO" as representative of firm level entrepreneurship.

DIMENSIONS OF EO CONSTRUCT

Emerging from Child's (1972) strategic choice perspective, EO has become a very important concept in entrepreneurship and strategy literature and research in this area has grown rapidly in the last quarter of a century (Zahra *et al.*, 1999). EO however

doesn't represent entrepreneurship, which is defined as new entry, that is, new entry explains what entrepreneurship consists of, and EO describes how new entry is undertaken. With regard to the specific dimensions of EO, Miller (1983) provided a useful starting point by suggesting the dimensions of "innovativeness," "risk taking," and "proactiveness" to characterize EO. The gradual development of EO concept has centered around three primary constructs: (1) Innovativeness; (2) Proactiveness; and (3) Risktaking. Lumpkin and Dess (1996) defined EO as a construct based on five dimensions; these are: (1) autonomy; (2) innovativeness; (3) risk taking; (4) proactiveness; and (5) competitive aggressiveness. Regarding the origin of additional two dimensions, autonomy and competitive aggressiveness can be traced back to Burgelman's (1983) autonomous strategic behaviour and Miller's (1983) idea of "beating competitors to the punch," respectively. Competitive aggressiveness, which captures the distinct idea of "beating competitors to the punch," was suggested by Miller's (1983). It refers to the type of intensity and head-to-head posturing that new entrants often need to compete with existing rivals. More specifically, competitive aggressiveness is the degree to which a firm challenges new market entry by firms and out-perform rival firms in their particular market segment. The other additional EO dimension is autonomy; it refers to the independent action of individuals or a team in developing an idea and/or vision and supporting its development from idea to completion (Lumpkin and Dess, 1996). The organization perspective focuses on entrepreneurship being a process, or activity within an organization, distinct from specific individuals, and applicable to different size and types of firms (Miller and Friesen, 1982). So, the key dimensions that characterize an EO include a propensity to act autonomously, a willingness to innovate, take risks, and a tendency to be aggressive toward competitors and proactive relative to marketplace opportunities. These five dimensions are posited to affect firm performance, which can be characterized as influencing sales growth, market share, profitability and overall performance.

INNOVATIVENESS

Much of the literature in entrepreneurship is dedicated to the entrepreneur's ability to innovate. It is the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or service. It is capable of being presented as a discipline, capable of being learnt and practiced. Entrepreneurs need to search purposefully for the sources of innovation, the changes and their symptoms that indicate opportunities for successful innovation and need to know how to apply the principles of successful innovation. Schumpeter (1934) was one of the first economists who stressed innovation as the engine of economic growth and its importance in entrepreneurship. He outlined an economic process of "creative destruction," by which wealth was created when existing market structures were disrupted by the introduction of new goods or services that shifted resources away from existing firms and caused new firms to grow. In other words, innovation eliminates

obsolete goods and services, as well as obsolete production methods. The key to this cycle of activity is entrepreneurship: competitive entry of innovative "new combinations" that propelled the dynamic evolution of economy Schumpeter (1942). He identified various forms of innovation: (a) the introduction of a new good or of a new quality of a good; (b) the introduction of a new method of production, or a new way of handling a commodity commercially; (c) the opening of a new market; (d) the conquest of a new source of supply of raw materials or half-manufactured goods; and (e) the carrying out of the new organization of any industry, like the creation of a monopoly position or the breaking up of a monopoly position.

There are numerous ways to classify innovation, but perhaps the most useful distinction is between product-market innovation and technological innovation. Early researchers sought to dichotomize innovation as either product market or technological (process) innovation. Even this broad categorization may be hard to distinguish; because innovativeness frequently represents considerable overlap and blending of product-market and technological innovation, as is the case of technologically sophisticated new products designed to meet specific market demand. In either case, innovativeness is an important component of EO, because it reflects an important mean by which firms pursue new opportunities. Cooper (1971) state that continuous innovation alters competitive boundaries and reduces product and process life cycles. Early definitions of innovation focused on the extent to which an organization could develop new technologies or practices which are currently not available in a market (Kimberly, 1981). Although innovation can vary in their degree of "radicalness" (Hage, 1980), it represents a basic willingness to depart from existing technologies or practices and venture beyond the current state of the art (Kimberly, 1981).

Miller and Friesen (1982) extended this definition by adding the channels through which innovation is achieved. They viewed innovativeness as an effort the organization puts forth towards introducing new products, services, processes, technologies, plans and structures. They developed two competing models of innovation, depending on the goals and type of organization: the conservative model and the entrepreneurial model. The conservative model describes the innovative practices of organizations using innovation as a measure of defence, or a retaliation mechanism. In contrast, the entrepreneurial model is practiced in organizations which consistently and aggressively pursue innovative practices that will give the company an advantage. The organizations utilizing the entrepreneurial model of innovation viewed it as "a natural state of affairs" with innovative practices being essential to the functioning and future of their firm. Lumpkin and Dess (1996) suggested that firms fall along a continuum of innovativeness, ranging from willingness to try a new product line or new technology to a zealous pursuit of and commitment to leading an industry in technological and product advancement. The innovativeness dimension of EO reflects a propensity to support and engage in new ideas, experimentation, novelty, and creative processes, effectively departing from established practices and technologies (Lumpkin and Dess, 1996).

Knight (1997) defined innovation as “the pursuit of creative or novel solutions to challenges confronting the firm, including the development or enhancement of products and services, as well as new administrative techniques and technologies for performing organizational functions.” Innovativeness has been argued to represent a defining aspect of firm entrepreneurial behavior (Covin and Miles, 1999). It may be the most important component of a firm’s strategy since innovation contributes to business performance and the firm’s quest of wealth creation (Hamel, 2000; and Lumpkin and Dess, 1996).

RISK-TAKING

The propensity to accept risk is an important component of the EO construct. The influence of risk taking behavior on the actions of entrepreneurs was first proposed when the idea of entrepreneurship was originally generated. Cantillon (1734), who was the first to formally use the term entrepreneurship, argued that the principal factor that separated entrepreneurs from hired employees was the uncertainty and riskiness of self-employment, thus, the concept of risk taking is a quality that is frequently used to describe entrepreneurship. Risk-taking involves a relatively large commitment of resources to uncertain endeavors (Baird and Thomas, 1985). Lacking the resource base, operational efficiency, social legitimacy, and organizational stability typical of older, larger and established firms (Stinchcombe, 1965), young ventures may be forced to rely heavily upon calculated risk-taking in their strategy-making process as a mean to overcome barriers to survival and growth (Pfeffer and Salancik, 1978). As a term in financial analysis, risk is used in the context of the familiar risk-return trade-off, where it refers specifically to the probability of a loss or negative outcome. This is essentially the definition that Miller and Friesen (1982) adopted when they defined risk taking as “the degree to which managers are willing to make large and risky resource commitments—i.e, those which have a reasonable chance of costly failures”.

In the context of entrepreneurial strategy, Baird and Thomas (1985) identified three types of strategic risk: (a) venturing into the unknown; (b) committing a relatively large portion of assets; and (c) borrowing heavily. The first of these definitions conveys a sense of uncertainty and may apply generally to some types of risk often discussed in the entrepreneurship literature, such as personal risk, social risk, or psychological risk (Gasse, 1982). The second type of risk is the excessive commitment of resources into a specific investment. This is a common type of risk taken at both the small business entrepreneurship and corporate entrepreneurship level. For small businesses, this excessive commitment of resources can refer to the percentage of resources being allocated to a specific venture or product. For larger organizations, an excessive commitment is often figured as the actual amount of resources for a particular entrepreneurial project. Either way, risk is enhanced as the level of resource commitment is increased. The third of these represents the risks assumed when debt is undertaken to fund a project/venture. Borrowing heavily places intense financial pressure on an organization, often resulting

in non financial actions taken by lenders. Thus, firms with an EO are often typified by risk-taking behavior, such as incurring heavy debt or making large resource commitments, in the interest of obtaining high returns by seizing opportunities in the marketplace.

Brockhaus (1980) focused on risk propensity, which he defined as "perceived probability of receiving the rewards" associated with the successful outcome of a risky situation. Sitkin and Pablo (1992), in their model of risk behavior, distinguished between risk perceptions, risk preferences, and risk propensity. Their use of the term risk propensity "is consistent with Brockhaus's (1980) conceptualization of the term, but it does not conform either to his formal definition (which includes preferences) or to his empirical operationalization (which measures perceptions, rather than propensities or preferences)". Instead, they regard risk propensity as a mediator between risk preferences and risk behavior, arguing that "the general desire to avoid or pursue risks (i.e., risk preferences) does not determine specific risky behaviour, but rather it affects the general likelihood of a person's behaving in more or less risky ways (i.e., risk propensity)". Begley and Boyd (1987) in their study found that firm performance was maximized at moderate level of risk-taking. Risk taking means willingness to commit more resources where the cost of failure may be high. It largely reflects that the company is willing to break away from the tried route into the unknown. The research suggests that taking excessive risk may lead to performance variation but will be more profitable in the long run.

PROACTIVENESS

The third dimension of EO is proactiveness, it refers to a firm's intensity in identifying and capitalizing on available market asymmetries. It suggests a forward-looking perspective that is accompanied by innovative activity. Beginning with the work of Penrose (1959), primary emphasis was placed on the initiative taken by firms in capturing opportunity; research has focused on the response speed of companies to the emergence of available opportunities in their environment. Miller and Friesen (1982) argued that the proactiveness of a firm's decisions is determined by answering the question, "does it shape the environment by introducing new products, technologies, administrative techniques, or does it merely react?" They discussed the importance of introducing new products/technologies ahead of competitors, rather than following other firms or simply responding to competitive threats in the environment. Further pro-activeness was used to depict a firm that was the quickest to innovate and first to introduce new products or services. In this respect, proactive organizations seek to seize opportunities ahead of their competitors. Several studies have acknowledged the importance of capturing first mover advantage, labelling this as the key criterion of proactiveness (Miller, 1983; and Lieberman and Montgomery, 1988). Lieberman and Montgomery (1988) emphasized the importance of first-mover advantage as the best strategy for capitalizing on a market opportunity. By exploiting asymmetries in the marketplace, the first mover can capture unusually high profits and get a head start in establishing brand recognition. While

being the first mover is still considered proactive, more recent definitions of proactiveness have moved away from making this component as the defining variable of the construct.

According to Venkatraman (1989), proactiveness refers to processes aimed at anticipating and acting on future needs by seeking new opportunities; introducing new products and brands ahead of competition; strategically eliminating operations that are in the mature or declining stages of life cycle. Proactiveness, therefore, pertains to a willingness to initiate actions to which competitors respond. More recent contributions to the definition have placed emphasis on anticipating and pursuing new opportunities in emerging markets and taking initiative in the market place by having a forward looking perspective in identifying market asymmetries (Lumpkin and Dess, 1996; and Lumpkin and Dess, 2001). Stevenson and Jarillo (1990) considered this pursuit of emerging business opportunities to be the fundamental backbone of entrepreneurship. Miller (1983) posited that proactiveness meant that the firm was aggressive in its pursuit of its competitive priorities and goals, surpassing its rivals in this regard. Lumpkin and Dess (2001) considered proactiveness a posture of anticipating and acting on future wants and needs in the marketplace and creating a first-mover advantage. Since it is grounded in action orientation, proactiveness is associated with competitive superiority due to the—step-ahead tactics pursued, as well as the market leadership characteristics exhibited by firms with this strategic behavior (Gatignon and Xuereb, 1997). Proactive organizations identify the future needs of current and potential customers, monitor trends, and anticipate changes in demand. There is a strong corollary between this dimension of EO and strategic management. Strategic managers who manage proactively have their eye on the future and look for opportunities to exploit for growth and improved performance, and to create a competitive advantage. Becherer and Maurer (1999) found a significant positive relationship between proactiveness and firm's sales. With forward looking perspective, proactive firms try to become the pioneers by capitalising on future opportunities. These firms can target premium market segments, charge high prices and skim the market ahead of competitors thus influencing the firm performance in a big way.

COMPETITIVE AGGRESSIVENESS

Competitive aggressiveness refers to a firm's propensity to directly and intensely challenge its competitors to achieve entry or improve position, that is, to outperform industry rivals in the marketplace. Stinchcombe (1965) suggested that young firms are particularly susceptible to the "liability of newness" and must take steps to establish legitimacy and power relative to suppliers, customers, and competitors. Since new ventures are much more likely to fail than established businesses, many scholars have argued that an aggressive stance and intense competition is critical to the survival and success of new entrants (MacMillan, 1982; and Porter, 1985). As suggested, competitive aggressiveness is characterized by responsiveness, which may take the

form of head-to-head confrontation. Competitive aggressiveness reflects willingness to be unconventional rather than rely on traditional methods of competing. Porter (1985) recommended three aggressive approaches for existing firms: "doing things differently," that is, reconfiguration; changing the context, that is, redefining the product or service and its market channels or scope; and outspending the industry leader. Thus, competitive aggressiveness refers to firm's responsiveness directed toward achieving competitive advantage. The breadth and speed of new entry may also indicate an aggressive posture. A "fast-follower" approach is often used by firms to aggressively bring new products to market. This approach is accomplished by speeding up the product-development cycle time. Miller and Camp (1985) found that most successful aggressive firms were those that did not shy away from broadly defined markets "in terms of number, size and type of their customers, as well as the breadth of their product line". Competitive aggressiveness refers to the way firms react to trends and demands that exist in their market (Lumpkin and Dess, 2001) and the degree to which a firm challenges new market entry by firms and outperform rival firms in their particular market.

AUTONOMY

Autonomy refers to the independent action of an individual or a team in bringing forth an idea or a vision and carrying it through to completion (Lumpkin and Dess, 1996). In general, it means the ability and will to be self-directed in the pursuit of opportunities. In an organizational context, it refers to action taken free of stifling organizational constraints. Thus, even though factors such as resource availability, action by rivals, or internal organizational considerations may change the course of new-venture initiatives, these are not sufficient to extinguish the autonomous entrepreneurial processes that lead to new entry. Throughout the process, the organizational player remains free to act independently, to make key decisions, and to proceed. The history of entrepreneurship is filled with stories of self-determined pioneers who had a unique, new idea—a better idea—and made a business out of it. Entrepreneurship has flourished because independent minded people decided to leave secure positions in order to promote novel ideas or venture into new markets, rather than allow organizational superiors and processes to inhibit them. Within organizations as well, it is the freedom granted to individuals and teams who can exercise their creativity and champion promising ideas that is needed for entrepreneurship to occur. Thus, an important impetus for new-entry activity is the independent spirit necessary to further new ventures.

Mintzberg (1973) described an entrepreneurial strategy-making mode, in which decisive and risky actions are taken by a strong leader. This is similar to Hart's (1992) command mode and Bourgeois and Brodwin's (1984) commander model, both of which suggest entrepreneurial behavior that is characterized by centralized vision and strong leadership. This type of autonomy, which may be regarded as autocratic (Shrivastava

and Grant, 1985), is common in smaller, owner/manager firms where "the force for pattern or consistency in action is individual vision, the central actor's concept of his or her organization's place in its world. This is coupled with an ability to impose that vision on the organization through his or her personal control of firm's actions (Mintzberg and Waters, 1985). In various studies, the researchers have examined the nature and extent of autonomous behaviour of leadership and how it has an influence on firm's performance.

INDEPENDENCE OF EO DIMENSIONS

Beginning with the contribution of Miller (1983), the dimensions of EO construct are considered to co-vary and EO has been treated as a unidimensional construct, comprising three dimensions. Building primarily on the work of Khandwalla (1977), Miller and Friesen (1982) and Miller (1983), Covin and Slevin (1989) argued for the aggregation of these dimensions of EO, stating that they "comprise a basic, unidimensional strategic orientation." Based on these studies it implies that only firms that exhibit high levels of all three dimensions should be regarded as entrepreneurial. Lumpkin and Dess (1996) expanded the conceptualization of the EO by arguing that the relationship between EO and firm performance is context specific, and the entrepreneurial dimensions may vary independently. According to them, it is not necessary that all dimensions must be present when a firm behaves entrepreneurially. Many researchers argue that all five dimensions are central to understanding the entrepreneurial process, they may occur in different combinations, depending on the type of entrepreneurial opportunity a firm pursues.

Brockhaus (1980) suggested that entrepreneurs may be very cautious and risk averse under certain conditions. Research suggests that entrepreneurial firms may benefit more from imitation than from high levels of innovativeness (Nelson and Winter, 1982). In addition, the development of numerous typologies of entrepreneurial behavior suggests that an EO can be best characterized by several dimensions in various combinations. Schollhammer (1982) described five different types of entrepreneurship: acquisitive, administrative, opportunistic, incubative, and imitative. Firms employing the acquisitive type of entrepreneurship achieve new entry into markets by purchasing existing firms. This approach requires little or no innovativeness and, if the acquired firm is an established business, may involve relatively low risk. Cooper and Dunkelberg (1986) suggested that various paths to business ownership constitute different degrees of entrepreneurship. They agreed that starting a business requires initiative, creativity, and personal risk taking, but entrepreneurial owners who obtain their position by promotion or inheritance generally are not required to be innovative or to assume a substantial degree of personal risk. Lumpkin and Dess (1996) posited that EO construct to be multidimensional in nature comprising five independent dimensions with each variable having a unique relationship with proposed dependent variables. Several studies have empirically supported this proposal of a multidimensional construct (e.g., Lumpkin

and Dess, 1996; Kreiser *et al.*, 2002; and Hughes and Morgan, 2007). The previous examples suggest that an attempt to limit entrepreneurial behavior to only those cases in which high levels of all EO dimensions are evident falls short of explaining many types of entrepreneurship.

THEORETICAL FRAMEWORK

The debate about the dimensionality issue of EO construct has caused research to examine the dimensions of this construct both independently and collectively. Theoretically it is possible that all five dimensions are valuable for a firm but it is quite possible that only a sub-set of them are valuable and the composition of this sub-set keeps on changing depending upon the context in which the firm operates. So it is largely unclear as to how the five dimensions of EO construct affect firm performance individually, it appears that all or at-least a combination of these dimensions exhibit a strong and positive relationship with firm performance as large number of studies in the past have reported a positive relationship between EO and firm performance. There is a strong possibility that some dimensions might have carried the other dimensions along who may have limited or insignificant influence on firm growth or even negative influence while viewing EO as a uni-dimensional construct. Clearly, an issue arises in the event the dimensions of EO are unique and unequal contributors and further a firm's EO may change to better suit its strategic and market needs. In recent years, many scholars have posited the independent nature of EO dimensions and suggested that some dimensions of EO are responsible for improving firm performance to a higher degree, while others may have limited or no influence at all or even negative influence. This leads to the question about whether innovativeness, pro-activeness, risk-taking competitive aggressiveness and autonomy do make equal or distinct contribution to firm performance. Considering the fact that these dimensions can have a unique and distinct influence on firm performance, it is very important to examine the relationship of individual dimensions of EO construct with firm performance, so that firms rather than focusing on all dimensions of EO can focus on those dimensions that have a significant and positive influence and seek the best combination to improve firm performance. In addressing the independence of dimensions, proponents of multi-dimensional nature of EO construct have highlighted the potential for each dimension to have a differential impact with key outcome variables such as firm performance. If the unique contribution of each dimension of EO is not equal across all five dimensions then failure to acknowledge this fact in developing an overall EO construct can result in biased measurement and can hamper the process of theory building in this field.

Research in the past has indicated that EO brings valuable rewards in terms of firm performance and various studies have reported positive association but at the same time there have been few studies that have reported insignificant and even negative outcomes. Literature in the past has clubbed dimensions of EO into a "basic,

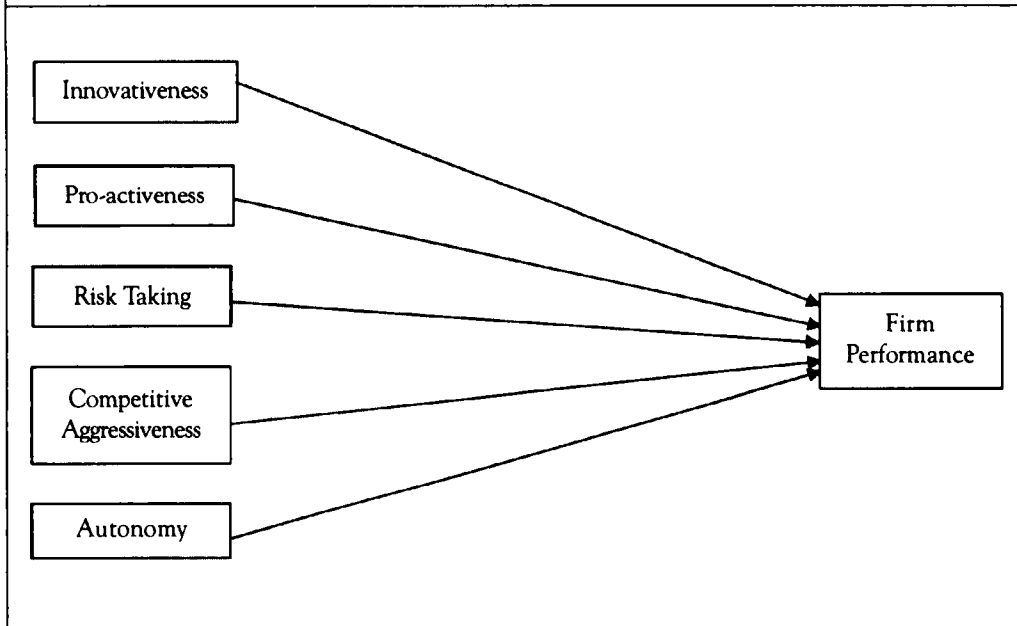
uni-dimensional strategic orientation construct" (Covin and Slevin, 1989) based on Miller's (1983) conceptualization of firm level entrepreneurship comprising three dimensions of innovativeness, pro-activeness and risk-taking which co-vary. However other researchers (Hughes and Morgan, 2007; Kreiser *et al.*, 2002; Lumpkin and Dess, 1996; and Stetz *et al.*, 2000) have held that the dimensions of EO vary independently. They held that EO construct comprises five dimensions, which vary independently and have a unique and distinct relationship with firm growth, implying that a firm might not display or require all dimensions simultaneously to be termed as entrepreneurial and these dimensions don't co-vary. This has important implications and may explain the reason behind some of the past findings that have observed inconsistent outcomes of EO construct on firm performance. If these dimensions do vary independently then a firm making new entry must know and decide which dimension of EO or their combination contribute to firm performance as this will help these firms plan and focus their energies better on the specific dimensions that will contribute to its performance.

This has far reaching implications especially for young firms with limited resource endowments as knowing which of the five dimensions or their combination is more valuable for firm performance is an important priority. It may help these firms to decide on which dimensions to focus on and how to use their limited resources judiciously by allocating them to specific dimensions of EO construct that maximize their growth prospects. This means that instead of focusing their efforts and energies on the entire EO construct, these firms should focus only on those dimensions of EO construct which are more valuable for them. Based on these considerations a conceptual model has been framed and presented below:

EFFECT OF EO DIMENSIONS ON FIRM PERFORMANCE

The relationship between EO and firm performance has been at the forefront of entrepreneurship literature for many years. From early studies such as Sandberg and Hofer's (1987) examination of new venture performance to the breadth of recent literature examining the EO construct, researchers have placed great emphasis on the relationship between EO and firm performance. Scholars have primarily theorized a positive relationship between EO and the performance of firm (Miller and Friesen, 1982; Covin and Slevin, 1991; and Lumpkin and Dess, 1996). Researchers have studied the relationship between an entrepreneurial strategy- making mode and performance mainly by exploring the effects of the EO construct, i.e., proactiveness, risk-taking, innovativeness, competitive aggressiveness, and autonomy. Various studies have employed Miller (1983) or Covin and Slevin (1989) dimensions of EO to study their relation to performance. Why would there be a positive effect of EO on performance? The conceptual argument suggests that firms benefit from highlighting newness, responsiveness, and a degree of boldness. Hamel (2000) mentioned that a general tendency in today's business environment is the shortening of product and business model lifecycles. Consequently, the future profit

Figure 1: Proposed Conceptual Model (EO Dimensions and Firm Performance)



streams from existing operations are uncertain and businesses need to constantly seek out new opportunities. Entrepreneurial firms innovate boldly and regularly while taking considerable risks in their product-market strategies (Miller and Friesen, 1982). Enlightened efforts to anticipate demand and aggressively position new product/service offerings result in strong performance. These firms monitor market changes and respond quickly, thus capitalizing on emerging opportunities. Therefore, it appears that businesses with an EO can target premium market segments, charge high prices and “skim” the market ahead of competitors (Zahra and Covin, 1995), thus gaining the potential of achieving high performance. While literature in this area has theorized the positive relationship between EO and performance, empirical results analyzing the relationship between these variables continue to surmount with the wide majority supporting a positive relationship, it has become increasingly evident that an overall perspective of the EO-performance relationship will reveal a significant positive relationship between the two variables.

Zahra and Covin (1995) found a significant positive relationship between EO and performance and that this relationship is enhanced over time. Further, they noted the importance of gaining first mover advantage as a result of high EO that ultimately led to higher firm performance. Numerous researchers have posited that multiple dimensions of firm performance should be used in organization research (Lumpkin and Dess, 1991; and Venkatraman and Ramanujam, 1986). Lumpkin and Dess (1996) suggest that entrepreneurial processes may lead to favorable outcomes on one performance dimension and unfavorable outcome on another performance dimension. Multiple measures

incorporating both financial and non-financial goals supporting the strategic plan should be utilized to allow for a broader and more comprehensive conceptualization of firm performance. Nonetheless, strategy research has focused on two aspects of performance, namely financial and operational (Venkatraman and Ramanujam, 1986). A small, privately owned firm may regard its continued existence as a satisfactory indicator of high performance (Lumpkin and Dess, 1996). It may take a conscious decision not to grow beyond a certain size, in order to maintain the control of business. Factors such as overall satisfaction and non-financial goals of the SME owners may need to be weighted more heavily in evaluating performance, especially among privately held firms (Lumpkin and Dess, 1996).

CONCLUSION

This article explores the integration of the concept of strategy and entrepreneurship and the emergence of the EO construct. It reflects the decision making mode and organizational style of a firm which can be a source of competitive advantage or leads to strategic renewal. EO integrates the concept of strategic management and entrepreneurship and the effective combination of various dimensions of EO, innovativeness, risk taking, proactiveness, autonomy and competitive aggressiveness make a firm entrepreneurial. Though the initial construct of EO had only three dimensions: innovativeness, proactiveness, and risk taking (Miller, 1983), but Lumpkin and Dess (1996) and many other scholars suggested two more dimensions: competitive aggressiveness and autonomy. We concur with Lumpkin and Dess (1996) and (2001) on the potential contribution of these two new dimensions to the construct of EO. As Baumol (1986) mentioned that entrepreneurial activities fall under two main categories: initiating and imitative, so initiating entrepreneurship comes from innovativeness, proactiveness and high degree of autonomy and imitative new entry can be achieved from competitive aggressiveness and risk-taking capability. This argument strongly favors the inclusion of five dimensions of EO construct. Keeping this in mind, all these five dimensions are considered and proposed to have an effect on firm performance. Another objective of this paper is to explore the multidimensionality of the EO construct, as the literature (Stetz *et al.*, 2000; and Kreiser *et al.*, 2002) has suggested to study the dimensions of EO separately, as it was found that they do not co-vary but are unique from each other. The idea that these dimensions vary independent of each other is consistent with the research of various scholars. Hence, the theoretical and conceptual discussion of this study is geared toward multidimensional nature of EO construct comprising five independent dimensions and the influence of each dimension on firm performance. While exploring the relationship between entrepreneurship and strategy and emergence of EO construct, researchers should investigate the processes of entrepreneurial behaviour which enhances firm performance. We believe that this article lays the groundwork to further study the EO construct and test empirically the linkage between individual dimensions of EO construct to firm performance.

MANAGERIAL IMPLICATIONS

Based on the arguments put forward firms should revisit their focus on EO Construct and assess whether these dimensions are delivering value equally, this needs a complete reassessment on the part of firms to assess whether they are putting misplaced attention and resources to the EO Construct. As Lumpkin and Dess (1996) rightly noted that every dimension varies independently, indicating that firms should focus solely on those dimensions that add value to the firm at that point of time. The blind pursuit of uniform implementation of EO dimensions is not a right method for firms to make competitive advantage; reversely it will cause wastage of precious resources. Firms should focus their resources and energies on those dimensions of EO that are valuable to them instead of spending their efforts on all dimensions of EO. This implies firms should act with restraint before adopting wholesome approach to EO where they begin focusing on each dimension of EO to enhance their growth prospects. Managers mustn't think about EO as a summative, uni-dimensional construct and focus on solely those dimensions that add value and improve firm growth. As per the arguments put forward in this study, firms should prepare themselves to focus on both the emerging opportunities and threats coming from external environment. Whereas pro-activeness is a response to opportunities, competitive aggressiveness is a response to emerging threats; similarly autonomous behavior on the part of firms is necessary to face both opportunities and threats. This means that EO is better explained by five dimensions rather than three by including competitive aggressiveness and autonomy to existing three dimensions of innovativeness, pro-activeness and risk-taking and these dimensions vary independently.

So, in the light of these arguments the existing approach towards uniform adoption of EO as a wholesale construct contributing to the growth of SMEs should be reviewed. This blind pursuit of uniform focus on all EO dimensions is not the most effective way for firms to grow. The study provides finer grained analysis of EO construct, its multidimensional nature comprising five dimensions. The independent nature of dimensions will encourage the owners/managers and policy makers to re-examine their understanding about the EO construct and rethink whether the construct is delivering adequate value in its present form. So the owners/managers should focus only on those dimensions that add significant value as focusing on all EO dimensions can overstretch them and this is hardly beneficial. If the owners/managers of these firms know that it is the sub-set of EO dimensions, which contribute in firm's growth rather than all dimensions then they can focus their energies only on those dimensions rather than putting their efforts on the entire EO construct and this would save their limited resources and they can focus in a better manner on the sub-set of relevant EO dimensions. This study helps the owners/managers and the policy makers in developing an understanding that not all dimensions of EO construct are equally responsible for their growth and they should identify the dimensions of EO or the combination, which contributes strongly to their performance. This provides them the strategic flexibility

about selectively deploying EO dimensions based on their assessment about what is the beneficial entrepreneurial strategy to pursue.

LIMITATIONS

This study has examined the multidimensional nature of EO construct comprising five independent dimensions and the influence of individual dimension on firm performance. Since this study has focused on main-effect relationship and not taken into account the impact of various external and internal factors, which can influence this relationship or the strength of this relationship. Firm performance may not be only dependent on EO dimensions and these contextual factors play an important role in influencing the relationship between EO dimensions and firm performance. One of the limitations of this study is that it has not considered the influence of contextual factors. Further this study has developed a conceptual model about the influence of individual dimensions of EO on firm performance but this study has not empirically examined this influence, so this is another limitation of this study.

FUTURE RESEARCH

Since EO is not uniformly helpful for firm growth, so further research can explore the reasons behind this complex EO-Firm performance relationship. The fact that several studies have found little or no relationship of EO with firm performance further strengthens this argument. This study argues that EO is a multidimensional construct comprising five dimensions which vary independently. So this study developed a conceptual framework that indicates the influence of each dimension of EO on firm performance and provides strong support to the argument raised by Lumpkin and Dess (1996) that individual dimensions of EO act independently and are not equally valuable. The firms ought to be more informed about the relative importance of these EO dimensions. Though this study has shown some understanding about the EO construct however it has additionally raised a number of queries which can be the areas of future research on this topic. A firm's strategy can't stay static, so at different stages, what elements of EO dimensions a firm should pursue through their strategy must be examined. Future research can empirically examine the multidimensional nature of EO construct and the influence of individual dimensions on firm performance.

This study helps the firms to identify the triggers of entrepreneurial strategy to grow, but an important area for future research can be examined through various combinations of EO among its dimensions suited for firm performance and whether the inequality of importance of these EO dimensions require that these dimensions should be assigned differential weights as per their level of importance. In general, future research can look into further refining these measures and exploring the various processes related with strategic and EO of firms. Since this is a conceptual study that has provided a theoretical framework but future research should empirically examine whether EO is a multidimensional construct comprising five independent dimensions and study the

influence of each of these dimensions separately on firm performance both in a cross-sectional and longitudinal study as this may highlight the role of different EO dimensions at different stages of firm life-cycle.

REFERENCES

1. Baird I S and Thomas H (1985), "Toward a Contingency Model of Strategic Risk Taking", *Academy of Management Review*, Vol. 10, pp. 230-243.
2. Barney J (1992), "Integrating Organizational Behaviour and Strategy Formulation Research: A Resource Based Analysis", *Advances in Strategic Management*, pp. 39-62, JAI Press, Greenwich, CT.
3. Baumol W J (1986), "Entrepreneurship and a Century of Growth", *Journal of Business Venturing*, Vol. 2, No. 1, pp. 79-93.
4. Barringer B R and Bluedorn A C (1999), "The Relationship Between Corporate Entrepreneurship and Strategic Management", *Strategic Management Journal*, Vol. 20, pp. 421-444.
5. Becherer R C and Maurer J G (1999), "The Proactive Personality Disposition and Entrepreneurial Behaviour among Small Company Presidents", *Journal of Small Business Management*, Vol. 37, No. 1, pp. 28-36
6. Begley T M and Boyd D P (1987), "Psychological Characteristics Associated with Performance in Entrepreneurial Firms and Smaller Businesses", *Journal of Business Venturing*, Vol. 2, No. 1, pp. 79-93.
7. Bourgeois L and Brodwin D (1984), "Strategic Implementation: Five Approaches to an Elusive Phenomenon", *Strategic Management Journal*, Vol. 5, pp. 241-264.
8. Brockhaus R H (1980), "Risk Taking Propensity of Entrepreneurs", *Academy of Management Journal*, Vol. 23, No. 5, pp. 509-520.
9. Burgelman R A (1983), "Corporate Entrepreneurship and Strategic Management: Insights from a Process Study", *Management Science*, Vol. 29, No. 8, pp. 1349-1364.
10. Cantillon R (1734), "Essaisur La Nature du Commerce en General", Translation by H Higgs (Ed.), MacMillan, London.
11. Child J (1972), "Organization Structure, Environment, and Performance: The Role of Strategic Choice", *Sociology*, Vol. 6, pp. 1-22.
12. Cooper A C (1971), "The Founding of Technologically Based Firms", The Centre for Venture Management, Milwaukee, WI.
13. Cooper A C and Dunkelberg W C (1986), "Entrepreneurship and Paths to Business Ownership", *Strategic Management Journal*, Vol. 7, No. 1, pp. 53-68.

14. Covin J G and Slevin D P and Covin T J (1990), "Content and Performance of Growth Seeking Strategies: A Comparison of Small Firms In High And Low Technology Industries", *Journal of Business Venturing*, Vol. 5, No. 6, pp. 391-412.
15. Covin J, Green K M and Slevin D P (2006), "Strategic Process Effects on the Entrepreneurial Orientation Sales Growth Rate Relationships", *Entrepreneurship: Theory and Practice*, Vol. 30, No. 1, pp. 57-81.
16. Covin J and Miles M (1999), "Corporate Entrepreneurship and the Pursuit of Competitive Advantage", *Entrepreneurship: Theory and Practice*, Vol. 23, No. 3, pp. 47-63.
17. Covin J G and Slevin D P (1989), "Strategic Management of Small Firms in Hostile and Benign Environments", *Strategic Management Journal*, Vol. 10, pp. 75-87.
18. Covin J G and Slevin D P (1991), "A Conceptual Model of Entrepreneurship as Firm Behavior", *Entrepreneurship Theory and Practice*, Vol. 16, No. 1, pp. 7-24.
19. Dess G, Lumpkin T and Covin J G (1997), "Entrepreneurial Strategy Making and Firm Performance: Tests of Contingency and Configurational Models", *Strategic Management Journal*, Vol. 18, No. 9, pp. 677-695.
20. Dess G, Lumpkin T and McFarlin D (2005), "The Role of Entrepreneurial Orientation in Stimulating Effective Corporate Entrepreneurship", *Academy of Management Executive*, Vol. 19, No. 1, pp. 147-156.
21. Gasse Y (1982), "Elaborations on the Psychology of the Entrepreneur", In C A Kent, D L Sexton and K H Vesper (Eds.), *Encyclopedia of Entrepreneurship*, pp. 209-223, Prentice Hall, Englewood Cliffs, NJ.
22. Gatignon H and Xuereb J M (1997), "Strategic Orientation of the Firm and New Product Performance", *Journal of Marketing Research*, Vol. 34, pp. 77-90.
23. Ginsberg A (1985), "Measuring Changes in Entrepreneurial Orientation Allowing Industry Deregulation: The Development of a Diagnostic Instrument", *Proceedings of the International Council of Small Business*, pp. 50-57.
24. Guth W D and Ginsberg A (1990), "Guest Editor's Introduction: Corporate Entrepreneurship", *Strategic Management Journal* (Special Issue), Vol. 11, pp. 5-15.
25. Hage J (1980), *Theories of Organizations*, John Wiley and Sons Ltd., Canada.
26. Hamel G (2000), *Leading the Revolution*, Harvard University Press, Cambridge, MA.
27. Hart S L (1992), "An Integrative Framework For Strategy Making Processes", *Academy of Management Review*, Vol. 17, No. 2, pp. 327-351.

28. Hitt M A (2005), "Spotlight on Strategic Management", *Business Horizons*, Vol. 48, No. 3, pp. 371-377.
29. Hitt M A, Ireland R D, Camp M and Sexton D (2001), "Guest Editors Introduction to the Special Issue Strategic Entrepreneurship: Entrepreneurial Strategies for Wealth Creation", *Strategic Management Journal*, Vol. 22, No. 6, pp. 479-491.
30. Hitt M A, Jaeland M D, Camp S M and Sexton D L (2001), "Strategic Entrepreneurship: Entrepreneurial Strategies for Wealth Creation", *Strategic Management Journal*, Vol. 22 (Special Issue), pp. 479-491.
31. Hughes M and Morgan R (2007), "Deconstructing the Relationship Between Entrepreneurial Orientation and Business Performance at the Embryonic Stage of Firm Growth", *Journal of Industrial Marketing Management*, Vol. 36, No. 6, pp. 651-661.
32. Khandwalla P N (1977), *The Design of Organizations*, Harcourt Brace Jovanovich, New York.
33. Kimberly J R (1981) "Managerial Innovation", in P C Nystrom and W H Starbuck (Eds.), *Handbook of Organizational Design*, Vol. 1, pp. 84-104, Oxford University Press, New York.
34. Knight G A (1997), *Firm Orientation and Strategy Under Regional Market Integration: A Study of Canadian Firms*, *International Executive*, Vol. 39, No. 3, pp. 351-374.
35. Kreiser P M, Marino L W and Weaver K M (2002), "Assessing the Psychometric Properties of the Entrepreneurial Orientation Scale: A Multi Country Analysis", *Entrepreneurship: Theory & Practice*, Vol. 26, No. 1, pp. 71-94.
36. Kuratko D F (1993), "Intrapreneurship: Developing Innovation in the Corporation", *Advances in Global High Technology Management-High Technology Venturing*, Vol. 3, pp. 3-14.
37. Lieberman M and Montgomery D (1988), "First Mover Advantages", *Strategic Management Journal*, Vol. 9, pp. 41-58.
38. Lumpkin G T and Dess G G (1996), "Clarifying the Entrepreneurial Orientation Construct and Linking it to Performance", *Academy of Management Review*, Vol. 21, No. 1, pp. 135-172.
39. Lumpkin G T and Dess G G (2001), "Linking Two Dimensions of Entrepreneurial Orientation to Firm Performance: The Moderating Role of Environment and Industry Lifecycle", *Journal of Business Venturing*, Vol. 16, pp. 429-451.
40. MacMillan I C (1982), "Seizing Competitive Initiative", *Journal of Business Strategy*, Vol. 2, No. 1, pp. 43-57.

41. Miles R and Snow C (1978), "Organizational Strategy", *Structure and Process*, McGraw Hill, NewYork.
42. Miller D (1983), "The Correlates of Entrepreneurship in Three Types of Firms", *Management Science*, Vol. 29, pp. 770-791.
43. Miller D and Camp B (1985), "Exploring Determinants of Success in Corporate Ventures", *Entrepreneurship Theory and Practice*, Vol. 9, No. 2, pp. 42-64.
44. Miller D and Friesen P (1982), "Innovation in Conservative and Entrepreneurial Firms: Two Models of Strategic Momentum", *Strategic Management Journal*, Vol. 3, pp. 1-25.
45. Mintzberg H (1973), "Strategy Making in Three Modes", *California Management Review*, Vol. 16, No. 2, pp. 44-53.
46. Mintzberg H and Waters J A (1985), "Of Strategies, Deliberate and Emergent", *Strategic Management Journal*, Vol. 6, No. 2, pp. 257-272.
47. Morris M H and Paul G W (1987), "Innovation in Conservative and Entrepreneurship Firms", *Journal of Business Venturing*, Vol. 2, No. 2, pp. 247-259.
48. Murray J A (1984), "A Concept of Entrepreneurial Strategy", *Strategic Management Journal*, p. 5.
49. Naman J L and Slevin D P (1993), "Entrepreneurship and the Concept of Fit: A Model of Empirical Tests", *Strategic Management Journal*, Vol. 14, pp. 137-153.
50. Nelson R and Winter S (1982), *An Evolutionary Theory of Economic Theory and Capabilities*, Harvard University Press, Cambridge, MA.
51. Penrose E T (1959), *The Theory of the Growth of the Firm*, Oxford University Press, Oxford, England.
52. Pfeffer J and Salancik G R (1978), *The External Control of Organizations*, Harper & Row, NewYork.
53. Porter M E (1985), *Competitive Advantage*, The Free Press, New York.
54. Sandberg W and Hofer C (1987), "Improving New Venture Performance: The Role of Strategy, Industry Structure, and the Entrepreneur", *Journal of Business Venturing*, Vol. 2, No. 1, pp. 5-28.
55. Sapienza H, DeClercq D and Sandberg W (2005), "Antecedents of International and Domestic Learning Effort", *Journal of Business Venturing*, Vol. 20, No. 4, pp.437-457.
56. Schafer D S (1990), "Level of Entrepreneurship as Scanning Source Usage in Very Small Businesses", *Entrepreneurship Theory and Practice*, Vol. 15, No. 2, pp. 9-31.

57. Schollhammer H (1982), "Internal Corporate Entrepreneurship", in C A Kent, D L Sexton and K H Vesper (Eds.), *Encyclopedia of Entrepreneurship*, pp. 209-223, Englewood Cliffs, Prentice Hall, NJ.
58. Schumpeter J A (1934), *The Theory of Economic Development*, Harvard University Press, Cambridge, MA.
59. Schumpeter J A (1942), *Capitalism, Socialism, and Democracy*, Harper & Brothers, New York.
60. Shrivastava P and Grant J H (1985), "Empirically Derived Models of Strategic Decision Making Processes", *Strategic Management Journal*, Vol. 6, No. 1, pp. 97-113.
61. Sitkin S B and Pablo A L (1992), "Reconceptualizing the Determinants of Risk Behavior", *Academy of Management Review*, Vol. 17, No. 1, pp. 9-38.
62. Stetz P E, Howell R, Stewart A, Blair J D and Fottler M D (2000), "Multidimensionality of Entrepreneurial Firm-level Processes: Do the Dimensions Covary?", In *Frontiers of Entrepreneurship Research*, Babson College, Wellesley, MA.
63. Stevenson H H and Jarillo J C (1990), "A Paradigm of Entrepreneurship: Entrepreneurial Management", *Strategic Management Journal*, Vol. 11, No. 4, pp. 17-27.
64. Stinchcombe A L (1965), "Social Structure and Organizations", In James G March (Ed.), *Hand-book of Organizations*, pp. 142-193, Rand McNally, Chicago.
65. Venkatraman S (1989), "The Concept of Fit in Strategy Research: Toward Verbal and Statistical Correspondence", *Academy of Management Review*, Vol. 14, No. 4, pp. 423-444.
66. Venkatraman S and Ramanujam V (1986), "Measurement of Business Economic Performance: An Examination of Method Convergence", *Journal of Management*, Vol. 13, pp. 109-122.
67. Venkataraman S and Sarasvathy S D (2001), "Strategy and Entrepreneurship: Outlines of An Untold Story", In M A Hitt, E Freeman and J S Harrison (Eds.), *Handbook of Strategic Management*, Blackwell, Oxford.
68. Wiklund J (1999), "The Sustainability of the Entrepreneurial Orientation Performance Relationship", *Entrepreneurship Theory & Practice*, Vol. 24, No. 1, pp. 37-48.
69. Wiklund J and Shepherd D (2005), "Entrepreneurial Orientation and Small Business Performance: A Configurational Approach", *Journal of Business Venturing*, Vol. 20, No. 1, pp. 71-91.

70. Zahra S A (1991), "Predictors and Financial Outcomes of Corporate Entrepreneurship: An Exploratory Study", *Journal of Business Venturing*, Vol. 6, No. 4, pp. 259-285.
71. Zahra S A (1993), "A Conceptual Model of Entrepreneurship as Firm Behaviour; A Critique and Extension", *Entrepreneurship: Theory & Practice*, Vol. 17, No. 1, pp. 5-22.
72. Zahra S A and Covin J (1995), "Contextual Influence on the Corporate Entrepreneurship-Performance Relationship: A Longitudinal Analysis", *Journal of Business Venturing*, Vol. 10, No. 1, pp. 43-58.
73. Zahra S A, Nielsen A P and Bogner W C (1999), "Corporate Entrepreneurship, Knowledge and Competence Development", *Entrepreneurship Theory and Practice*, Vol. 24, No. 3, pp. 169-190.