MARKETING STRATEGY SELECTION: IMPACT OF ENTREPRENEURIAL ORIENTATION AND ENVIRONMENTAL PERCEPTIONS

JEFFREY DILTS, University of Akron
SUSAN HANLON, University of Akron

The focus of this conceptual inquiry is the effect that entrepreneurial orientation and environmental uncertainty has on marketing strategy formulation and, in turn, on performance of the firm. Attention is given to a decision maker's underlying business posture (i.e., entrepreneurial orientation) and perception of environmental uncertainty. It is suggested that these will interact to affect strategic choice and, in turn, depending upon the coalignment of marketing strategy with entrepreneurial orientation and environmental conditions, impact the level of performance observed.

INTRODUCTION

Among business practitioners and scholars alike, entrepreneurship is a very popular topic with a strong positive connotation. Entrepreneurial activity is touted as the major engine of economic growth and an essential feature of high firm performance. Overall, the popular press and the scholarly press encourage a strong normative bias toward entrepreneurship and its related constructs (Clark, Varadarajan and Pride 1994; Dess, Lumpkin and Covin 1997; Lumpkin and Dess 1996; Wiklund 1999), such as entrepreneurial orientation. Entrepreneurial orientation (EO) refers to the mind set of entrepreneurs or managers who are engaged, in a proactive and creative way, in undertaking new ventures or pursuing new opportunities for the firm (Lumpkin and Dess 1996).

Increasingly, managers are faced with rapidly changing environments, involving changes in competition, customer demand and technology. These dynamics may serve to elicit greater environmental uncertainty among decision makers and encourage them to take actions and select marketing strategies that are congruent with their business posture (i.e., entrepreneurial orientation) in order to achieve or maintain a sustainable competitive advantage. This process of coping with the competitive environment reflects the "essence of strategy formulation" (Porter 1980).

The Marketing Management Journal
Volume 12, Issue 1, pages 32-48

Related to an entrepreneurial posture and perceived environmental uncertainty is the use of marketing, which has been reconceptualized by Zeithaml and Zeithaml (1984) as a proactive means by which to effect and/or manage change in the environment (Clark, Varadarajan and Pride 1994). According to researchers (e.g., Davis, Morris and Allen 1991; Clark, Varadarajan and Pride 1994), marketing activities may be viewed as a principal means for dealing with uncertain environments.

Recent empirical research has provided support for the positive influence of an entrepreneurial orientation on firm performance (Wiklund 1999) under conditions of environmental uncertainty (Covin and Slevin 1989). However, the effectiveness of an entrepreneurial orientation may vary depending upon its coalignment with the strategy selected and the environmental conditions in which it is implemented (Covin and Slevin 1989, 1991; Lumpkin and Dess 1996). The nature of the contingency relationship that may exist between an entrepreneurial orientation, the strategic process and environmental conditions represents a fertile area for research which should provide a better understanding as to how an entrepreneurial posture impacts strategic choice and contributes to organizational performance (Dess, Lumpkin and Covin 1997; Lumpkin and Dess 1996). Furthermore, given the competitive and dynamic conditions faced by decision makers today, exploration of this relationship is timely.

Purpose and Flow of Paper

While additional empirical evidence regarding the impact of entrepreneurial orientation on firm performance is still needed (Lumpkin and Dess 1996; Zahra 1993), there is sufficient support to move on in this research stream to questions regarding the nature of its impact. Why and how does entrepreneurial orientation impact marketing strategy formulation and firm performance? The purpose of this paper is to examine the relationship between entrepreneurial orientation, choice of marketing strategy, and perceived environmental uncertainty as they relate to firm performance. Since performance may vary depending upon the environmental context (Lumpkin and Dess 1996; Venkatraman and Prescott 1990), a contingency framework focusing on business posture, strategy and environment is examined so as to provide a more meaningful explanation as to how an entrepreneurial orientation contributes to performance outcomes.

The basic position of the authors is that a firm with a high level of entrepreneurial orientation experiences higher levels of firm performance because particular processes (dimensions of entrepreneurial orientation) are in place within the firm which facilitate the choice of marketing strategies which are most effective in conditions of high perceived environmental uncertainty. This is preceded by the argument that managers with high entrepreneurial orientation will associate less risk with uncertainty and so they will act when other competitors may not. In the case of this research, a focus of interest involves the certainty or uncertainty of the business environment, as perceived by the entrepreneur, within which he/she makes choices as to the competitive strategies that will be pursued by the firm. Attention is given to the perceptual process and cognitive style of the entrepreneur as these influence the strategic choice-making process.

The paper is divided into five sections. First, the nature of the entrepreneurial orientation and the impact that it may have on the way in which managers interpret and strategically respond to their task environment is examined. Second, environmental uncertainty is considered as a key environmental factor which may serve to shape perceptions of environmental conditions and influence strategic choice. Third, Zeithaml and Zeithaml's (1984) typology of environmental management strategies, which may be used to influence or alter a firm's external environment, is discussed.

Building on the considerations stated above, a contingency framework is developed in section four, that examines strategic choice and organizational performance under alternative levels of high and low entrepreneurial orientation and perceived environmental uncertainty. Finally, a discussion of the critical role that environmental perceptions play in achieving an appropriate match between business posture, strategy and environment and how the EO-performance relationship may be enhanced by improving upon the accuracy of decision-maker's perceptions of environmental uncertainty concludes the paper.

ENTREPRENEURIAL ORIENTATION

Unit of Analysis

An entrepreneurial orientation emphasizes the ability to identify and pursue new opportunities in a proactive and creative way. It involves the intentions and actions of individual business owners and/or key management decision makers functioning in the complex process of making strategic marketing choices aimed at the achievement of new ventures or opportunities. Consistent with Lumpkin and Dess (1996), entrepreneurship may be viewed as a firm-level phenomenon in which the individual entrepreneur is regarded as the firm, to the extent that a small business firm is but an extension of the individual owner or manager who is in charge.

Consequently, firm-level behavior is but a reflection of the underlying business posture of the owner/manager.

Of interest in this research are small business owners/managers and the business environment in which they compete. Particular attention is given to the entrepreneur/manager's perceptual and cognitive processes that are used to interpret the environment and make choices involving the competitive strategies that will be pursued by the firm.

Entrepreneurial Orientation (EO)

An entrepreneurial orientation (EO) refers to the processes, practices, and decision-making activities that lead to the pursuit of opportunities (Stevenson and Jarillo 1990) in a novel, proactive way (Lumpkin and Dess 1996). According to Lumpkin and Dess (1996), an entrepreneurial orientation is characterized by 1) a propensity to act autonomously; 2) a willingness to innovate and take risks; 3) a tendency to be aggressive toward competitors; and 4) a tendency to be proactive relative to marketplace opportunities. Conceptually opposite of an entrepreneurial posture is a conservative orientation (Dess, Lumpkin and Covin 1997; Miller and Friesen 1982). Rather than being an either/or situation, entrepreneurship may be viewed as a matter of degree (Davis, Morris and Allen 1991), or placement along a continuum ranging from conservative to entrepreneurial (Covin and Slevin 1989).

Researchers (e.g., Dickson and Weaver 1997; Miles and Arnold 1991) have found that a manager's underlying business philosophy or strategic posture (e.g., entrepreneurial orientation) affects how a manager interprets and responds to the environment and may serve to shape the overall decision making framework of the firm and the nature of the marketing strategies selected. Although some managers may see risk and uncertainty in a given situation, entrepreneurially oriented managers (High EO) are likely to frame the same objective environment in a more positive light than more conservative (Low EO) managers (Dickson and Weaver 1997). In fact, entrepreneurs may perceive greater opportunity (Palich and Bagby 1995) and engage in more proactive and novel strategic business responses (Miles, Arnold, Thompson 1993). According to Dickson and Weaver (1997, p. 407):

> The entrepreneurial orientation of a firm's key managers may play an important role in the firm's strategic behavior because of the orientation's impact on how the leader frames the risks inherent in the firms environment. Entrepreneurially oriented managers are not necessarily more willing to take risks but are more likely to frame seemingly risky and uncertain environment in a positive light than are more conservative managers.

Individual - Level Factors

Researchers (Begley and Boyd 1987; Palich and Bagly 1995; Shaver and Scott 1991) suggest that a psychological perspective on new venture creation may be helpful in explaining entrepreneurial activity, since strategic behavior is influenced by the way in which the external environment is represented in the mind of the decision maker. That is, relatively enduring individual-level psychological attributes, such as tolerance for ambiguity, locus of control and the cognitive tendencies of entrepreneurs, may offer further insights as to why entrepreneurs and more conservative managers frame and respond to the same environment differently.

For example, given their high level of tolerance for ambiguity, entrepreneurially oriented managers tend to be more comfortable with environmental uncertainty and strategy novelty than their more conservative counterparts (Begley and Boyd 1987; Lumpkin and Dess 1996; Tan 1996). In fact, entrepreneurs may be energized rather than threatened by uncertainty (Dickson and Weaver 1997), and may deliberately seek out and prefer dynamic, unstructured situations (Begley and Boyd 1987; Cooper, Woo and Dunkelberg 1988; Tan 1996), rather than placid, stable environments (Covin, 1991; Karagozoglu and Brown 1988).

Possessing high levels of "internal" locus-of-control, entrepreneurial-oriented individuals tend to exhibit strong beliefs in their ability to influence their task environments and achieve desired business goals (Brockhaus, 1980; Clark, Varadarajan and Pride 1994; Cooper, Woo and Dunkelberg 1988). They believe that the possibility of failure is relatively low (Brockhaus 1980). In contrast, "externals" (i.e., individuals that view themselves at the mercy of events) tend to exhibit less entrepreneurial behavior (Brockhaus 1980; Miller and Toulouse 1986). According to Clark, Varadarajan and Pride (1994, p.34):

> The external decision-maker would tend to view environmental events as ungovernable. He/she is more apt to take a passive-adaptive stance, a let it happen attitude toward external events, and thus is less likely to engage in high levels of environmental management. On the other hand, the internal decision maker would tend to view environmental events as controllable. We would expect a more aggressive stance in dealing with the environment, and a deliberate effort to achieve influence and/or control with environmental management resources.

This may serve, in part, to explain why entrepreneurially oriented managers tend to be more optimistic in their evaluation of environmental information (Busenitz and Barney 1997) and are more willing to experiment with novel strategic responses than their conservative counterparts.

Cognitive (categorization) theory may also offer an explanation as to why entrepreneurs and non-entrepreneurs differ (Dutton and Jackson 1987; Shaver and Scott 1991). According to Palich and Bagby (1995), entrepreneurs categorize equivocal business situations more favorably than non-entrepreneurs. That is, decision makers may differ as to the frame of reference (cognitive heuristic) employed to interpret a new business situation. Palich and Bagby (1995, p. 427) explain:

> ...what has been widely recognized as a propensity for risk on the part of the entrepreneur may instead be an artifact of this alternate framing. Entrepreneurs may not necessarily prefer to engage in more risky behavior; instead, their behavior may be the result of framing a given situation more positively than negatively; thereby focusing on the high probability for favorable outcomes and responding according to these perceptions.

Mitton (1989, p. 12) adds:

> Entrepreneurs see ways to put resources and information together in new combinations. They not only see the system as it is, but as it might be. They have a knack for looking at the usual and seeing the unusual, at the ordinary and seeing the extraordinary. Consequently, they can spot opportunities that turn the commonplace into the unique and unexpected.

Depending on how they label a strategic issue (i.e., as a threat or an opportunity), the categorization serves to impact future informational processing by filtering out critical and inconsequential strategic issues that are selectively attended to. According to Dutton and Jackson (1987, p. 85):

> The simple labeling of issues not only determines decision makers' affective responses to issues, but also it sets into place predictable, cognitive, and motivational processes that moves decisions and organizations in predictable directions.

This enables the decision maker to impose order on the environment and affects the nature of their strategic response (Dutton and Jackson 1987). Thus, while entrepreneurs may see greater strengths, opportunities and a potential for superior performance, conservative managers see greater weaknesses, threats and a less favorable outcome (Palich and Bagby 1995).

Consequently, individuals with a high entrepreneurial orientation may differ from their more conservative counterparts (Covin 1991; Covin and Slevin 1989) as to the manner in which they frame and strategically respond to their task environment (Dickson and Weaver 1997; Dutton and Jackson 1987; Palich and Bagby 1995). Below, attention is given to a manager's perceptions of the environment and environmental uncertainty.

PERCEIVED ENVIRONMENTAL UNCERTAINTY

Perceived Environment

Strategy formulation involves the matching of environmental conditions with organizational capabilities and resources. In attempting to achieve this strategic fit, perceptions of the environment are likely to play a key role in the strategic choices made by managers (Bourgeois 1980; Dickson and Weaver 1997; Downey and Slocum 1975; Elenkov 1997). According to Shaver and Scott (1991), it is perceptions about reality (objective environment), not reality per se, that determines strategic behavior.

Uncertainty, as an attribute of a manager's behavioral environment, may be best understood by making reference to the environment that is perceived and reacted to, rather than to the physical proprieties of the environment (Downey and Slocum 1975; Shaver and Scott 1991; Tan 1996). This view suggests that the environment consists of a set of stimuli that lacks informational value or meaning until perceived.

The process by which the environment becomes known is influenced by an organization's domain (e.g., the market served and the functions performed). The tasks implied by this domain define a set of relevant environmental attributes upon which attention may be selectively focused (e.g., customers, competitors, suppliers, regulatory agents). These perceived attributes, in turn, may elicit a set of uncertainties for the organization (Downey and Slocum 1975). Thus, environments are neither certain nor uncertain, but are simply perceived differently by individuals. Decision-makers may vary as to their cognitive process (Palich and Bagby 1995); where they selectively emphasize or ignore information in the environment and act in ways that are congruent with these perceptions (Glazer and Weiss 1993).

Perceived Environmental Uncertainty (PEU)

Perceived environmental uncertainty (PEU) is viewed as a key environmental factor which may account for different decision frameworks and strategies (Buchko 1994) that may be employed by multiple managers operating in the same objective environment (Bourgeois 1980) . In its most general sense, environmental uncertainty has been defined as a decision maker's perceptual inability to predict environmental changes because of a lack of information or the ability to discern the relevancy of data (Buchko 1994; Clark, Varadarajan and Pride 1994).

The level of environmental uncertainty perceived may vary directly with an individual's tolerance for ambiguity (Downey, Hellriegel and Slocum 1977) and may account for the perceptions of greater opportunity (Miles, Arnold and Thompson 1993) and the enactment of more novel marketing strategies. For example, researchers have suggested that the use of diversification, the identification and adoption of new products and processes, will vary directly with the level of environmental uncertainty (Buchko 1994). This may serve to lessen the impact of a dynamic, yet uncertain, environment that entrepreneurs may not fully understand (Milliken 1987). As perceptions of environmental uncertainty increase, due to increasing dynamism and heterogeneity and hostility in the market place, uncertainty is likely to be positively associated with the adoption of an entrepreneurial orientation and the use of more aggressive and novel strategic behaviors (Davis, Morris and Allen 1991; Covin and Slevin, 1989; Miles and Arnold 1991; Morris and Paul 1987; Tan 1996).

ENVIRONMENTAL MANAGEMENT STRATEGIES

Faced with increasing environmental challenges and uncertainty, decision makers may respond by attempting to influence or alter the environment in which they operate. As managers formulate their response, they may select from categories of environmental management (marketing) strategies that have some capacity to create, shape or manage their environment (Clark, Varadarjan and Pride 1994; Zeithaml and Zeithaml 1984). Building on Galbraith's (1977) typology of environment management strategies, Zeithaml and Zeithaml (1984) suggest that business managers may proactively respond to a task environment by (1) using independent strategies: attempting to reduce uncertainty and dependence on the external environment by independently drawing on their own resources and ingenuity (e.g., by differentiating their products/services), (2) using cooperative strategies: by cooperating with other elements in the environment (e.g., by working through trade associations or consortia of independent firms or contracting with others), or (3) using strategic maneuvering: by employing strategies designed to alter the task environment in which they operate (e.g., by diversifying and seeking new customer niches).

While a manager may use a variety of types and categories of marketing strategies in an integrated program, the use of a particular strategy category may be more pronounced, depending on the circumstances. The perspective taken in this paper is summarized in Table 1 below.

Independent Strategies. By independently drawing on their own resources and ingenuity, entrepreneurial-oriented managers may more proactively attempt to manage their task environment (Galbraith 1977; Zeithaml and Zeithaml 1984). This category of strategy is designed to reduce the level of uncertainty and dependence on others in the environment, while maintaining the autonomy of the firm (Galbraith 1977). Independent strategies include competitive aggression (differentiation), public relations, dependence development and the use of legal actions. Here, attention is given more to the use of autonomous, rather than cooperative actions and to a more proactive, rather than a reactive approach to dealing with the external environment. These strategies are more likely to be considered by managers with a high entrepreneurial orientation and low to moderate levels of perceived environmental uncertainty (Galbraith 1977).

Cooperative Strategies. As environmental uncertainty increases, conservative managers may feel more threatened because of their self-perceived low-level of competency in dealing with a dynamic environment (Karagozoglu and Brown 1988). To reduce this uncertainty, they may increase their dependence on other organizations by adopting more cooperative strategies, involving coalitions or contracting (Galbraith 1977; Zeithaml and Zeithaml 1984). According to Zeithaml and Zeithaml (1984, p. 49), "Cooperative strategies are selected by many firms on the assumption that combined action reduces risks and costs to individual organizations while increasing their power." However, this is not without a cost as coordinated actions and contractual commitments lessens one's autonomy. Given the importance of retaining their autonomy (Lumpkin and Dess 1996), more entrepreneurial managers are less likely to employ explicit (contractual) cooperation. According to researchers, cooperative strategies, such as the use of alliances, are more likely to be associated with greater perceived environmental uncertainty (Bucklin and Sengupta 1993) and a low entrepreneurial (conservative) orientation (Dickson and Weaver 1997).

Strategic Maneuvering. Instead of attempting simply to manage or cope with their existing environment, entrepreneurial-oriented (high EO) managers may proactively attempt to change or alter their task environment (Galbraith 1977; Zeithaml and Zeithaml 1984). This could likely happen in response to increasing levels of environmental uncertainty (Morris and Paul 1987). Here, entrepreneurs are more likely to employ marketing strategies that are designed to alter the task environment in which they operate (e.g., by diversifying and seeking new customer niches). The use of strategic maneuvering, such as domain selection, diversification, or merger and acquisition strategies (Zeithaml and Zeithaml 1984), are likely to be more pronounced for the entrepreneurial-oriented (high EO) managers that perceive a higher level of environmental uncertainty.

These strategies involve the maximum desire to control or manage an environment. In the case of domain selection, the manager would attempt dramatic change to create what Hamel and Prahalad (1994) call a new competitive space, to create new competitive opportunities. Other dramatically different routes to growth and taking charge of one's environment include diversification into other areas of business (sometimes with greater stability or predictability) or merger and acquisition (also to improve one's chances of leveraging strengths through sheer size and market power).

Below, the concepts of entrepreneurial orientation and perceived environmental uncertainty are combined in a conceptual framework, so as to provide a better understanding of their impact on strategic choice and organizational performance.

CONTINGENCY FRAMEWORK

Overview

It is suggested that entrepreneurial orientation (EO) and perceived environmental uncertainty (PEU) will influence strategic choice through their individual and combined effects, and, depending upon the coalignment of strategy with actual environmental conditions, impact the level of performance observed. Table 2 provides an overview regarding strategic choice and performance under alternative conditions of high and low EO and PEU.

Strategic Choice

The manner in which decision makers frame and strategically respond to the environment may be dependent upon their underlying business philosophy (e.g., entrepreneurial orientation) (Covin, 1991; Dickson and Weaver, 1997) and their perceptions of environmental uncertainty (Clark, Varadarajan and Pride 1994; Tan 1996). As previously discussed, this may be influenced by the cognitive process by which new business situations are interpreted and categorized (e.g., as involving either an opportunity or a threat) (Dutton and Jackson 1987; Palich and Bagby 1995; Shaver and Scott 1991).

For example, managers with a high level of entrepreneurial orientation and a high level of perceived environmental uncertainty may view strategic maneuvering, (e.g., altering market domain, diversification) as more effective (Milliken 1987). Conservative managers with a low entrepreneurial orientation and a high level of perceived environmental uncertainty may view cooperative strategies (e.g., forming alliances) as more effective (Bucklin and Sengupta 1993; Dickson and Weaver 1997). Unlike their entrepreneurial counterparts, conservative decision makers tend to categorize equivocal business situations less favorably (Palich and Bagby 1995) and prefer more predictable, stable environments (Karagozoglu and Brown 1988) and employ strategic behaviors that are different (Covin 1991).

P_1: Entrepreneurs and managers will vary as to the perceived effectiveness of alternative environmental management (marketing) strategies, depending on their level of entrepreneurial orientation (EO) and perceived environmental uncertainty (PEU).

EO - Performance Relationship

The nature of the EO-performance relationship will depend upon its coalignment with the appropriate strategy and actual environmental conditions (Dess Lumpkin and Covin 1997; Lumpkin and Dess 1996; Venkatraman and Prescott 1990). For example, entrepreneurially-oriented firms, employing more aggressive and novel strategies, tend to perform best in more uncertain and dynamic environments. More conservative firms, employing less aggressive and more traditional behaviors, tend to perform best in more placid environments (Covin and Slevin 1989). According to researchers (Covin and Slevin 1989;

TABLE 1
Environmental Marketing Strategies

Entrepreneurial Orientation		Conservative Orientation
Strategic Maneuvering	**Independent Strategies**	**Cooperative Strategies**
High PEU/High EO	**Low PEU/High EO**	**High PEU/Low EO**
Domain Selection Selectively enter attractive markets	**Competitive Aggression** Exploit distinctive competence Improve internal efficiency	**Contracting** Develop contractual vertical & horizontal marketing systems
Diversification Invest in new products/ markets to reduce dependence on existing products/markets	**Public Relations** Establish, maintain favorable image	**Coalition** Act jointly with respect some set of issues over a defined period of time
Mergers & Acquisition Combine two or more firms into a single enterprise	**Legal Action** Pursue litigation against competition	
	Dependence Development Modify relationships so as to increase dependence of others on organization	

Adapted from: Zeithaml and Zeithaml (1984). "Environmental Management: Revising the Marketing Perspective," *Journal of Marketing*, Vol. 48 (Spring), 50.

TABLE 2
Perceived Environmental Uncertainty (PEU)

	HIGH PEU	**LOW PEU**
HIGH EO	***Condition One: High EO/High PEU*** **Strategic Manuvering Strategies** Domain selection Diversification Merger and acquisition **Performance:** High. Superior to condition two and four.	***Condition Two: High EO/Low PEU*** **Independent Strategies** Competitive aggression Public relations Legal actions Demand smoothing **Performance:** Moderate. Weaker than under condition one or three, depending on the alignment of strategy and environment.
LOW EO	***Condition Four: Low EO/High PEU*** **Cooperative Strategies** Contracting Co-optation Coalition Alliance **Performance:** Moderate. Weaker than under conditions one or three.	***Condition Three: Low EO/Low PEU*** **Defender Strategy** Maintain status quo Cost minimization Incremental change **Performance:** Moderate to high. Superior to condition two and four, depending on the alignment of strategy and environment.

VERTICAL AXIS: ENTREPRENEURIAL ORIENTATION (EO)

Note: Although a decision maker may consider and employ a variety of strategies, the use (preference) for the strategies indicated above for each condition should be more pronounced.

It should also be noted that although an entrepreneurial orientation may be associated with superior performance under given conditions (Lumpkin and Dess 1996), the level of performance observed may depend upon the congruence of strategy (Covin and Slevin 1989) with the actual and not the perceived environment. While managers may act on and select strategies based on how they categorize business situations, inaccurate environmental perceptions may lead to a misalignment of strategy with actual environmental conditions and a suboptimal level of firm performance.

Zahra and Covin 1995), it is clear that the environmental context in which a given business posture and strategy are employed can make a difference, with a coalignment serving to enhance organizational performance while a nonalignment weakens it. These observations are consistent with Miller (1988) and others (Dess, Lumpkin and Covin 1997; Lumpkin and Dess 1996) who suggest that a configurational framework may further theory development.

It should be noted that although an entrepreneurial orientation may be associated with superior performance under given conditions (Lumpkin and

Dess 1996), the level of performance observed may depend upon the congruence of strategy (Covin and Slevin 1989) with the actual and not the perceived environment. While managers may act on and select strategies based on how they categorize business situations, inaccurate environmental perceptions may lead to a misalignment of strategy with actual environmental conditions and a suboptimal level of firm performance. This concern is further explored in the discussion section below.

P_2: The nature of the EO-performance relationship will vary depending upon its coalignment with strategy selected and actual environmental conditions.

High Entrepreneurial Orientation

Entrepreneurial behavior is conceptually examined below under high and low levels of perceived environmental uncertainty. As previously mentioned, a high entrepreneurial orientation may serve to influence individual business practices and competitive actions that collectively comprise a firm's marketing strategy. Unlike their conservative counterparts, entrepreneurs tend to be more optimistic in their evaluation of environmental information (Busenitz and Barney 1997) and tend to employ more novel, proactive strategies (Dess, Lumpkin and Covin 1997) and greater market differentiation (Covin 1991).

Condition 1: High EO & High PEU

The use of strategic maneuvering, such as domain selection, diversification, or merger and acquisition strategies (Zeithaml and Zeithaml 1984), are likely to be more pronounced for managers with a high EO and a high PEU. Researchers (Covin and Slevin 1989; Miller, Droge and Toulouse 1988) have found dynamism, heterogeneity and hostility (all dimensions of environmental uncertainty) to be positively related to an entrepreneurial orientation and the use of more novel strategies (Dess, Lumpkin and Covin 1997).

Instead of attempting to manage their existing environment, entrepreneurial-oriented managers may proactively attempt to change or alter their task environment (Galbraith 1977; Zeithaml and Zeithaml 1984) in response to increasing levels of environmental uncertainty (Morris and Paul 1987). Given their high level of tolerance for ambiguity, entrepreneurs tend to be energized rather than threatened by uncertainty (Begley and Boyd 1987; Dickson and Weaver 1997) and may delibertly seek out dynamic, unstructured situations rather than placid, stable environments (Covin 1991; Karagozolu and Brown 1988). They tend to experiment, using more aggressive and novel strategies (Begley and Boyd 1987; Cooper, Woo and Dunkelberg 1988; Lumpkin and Dess 1966; Tan 1996), in an attempt to influence situations that they believe are controllable (Clark, Varadarajan and Pride 1994). Possessing high levels of "internal" locus-of-control, these entrepreneurial-oriented individuals, unlike their more conservative counterparts, tend to exhibit strong beliefs in their ability to influence their task environments and achieve desired business goals (Brockhaus 1980; Clark, Varadarajan and Pride 1994; Cooper, Woo and Dunkelberg 1988). Consequently, entreprenurial-oriented managers are likely to categorize equivocal business situations more favorably (i.e., as opportunities) (Palich and Bagby 1995) and employ noval strategies that differ from conservative managers.

P_3: While alternative proactive strategies may be considered, the use (preference) for strategic manuevering strategies will be more pronounced among entrepreneurs possessing a high EO in conditions of high PEU.

Entrepreneurial firms tend to perform better in dynamic environments (Covin and Slevin 1989). Given a coalignment between dynamic, unstructured environmental situations and the use of more novel strategies, the potential for superior performance should be enhanced (Dess, Lumpkin and Covin 1997; Karagozoglu and Brown 1988). As previously mentioned, researchers (Covin and Slevin 1989; Zahra and Covin 1995) have found environmental hostility (a dimension of environmental uncertainty) to be related to an entrepreneurial orientation and superior performance and use of novel, aggressive strategy. Under highly uncertain environments, entrepreneurial firms tend to exhibit greater flexibility (Tan 1996) and distinctive marketing competencies than their more conservative counterparts and are more successful in dealing with the environment (Karagozoglu and Brown 1988; Smart and Conant, 1994). Energized by the dynamic nature of the situation (Begley and Boyd 1987; Covin 1991), entrepreneurial-oriented managers may see ways to put resources together in new combinations (Mitton 1989) that enhances the probability for a favorable outcome (Palich and Bagby 1995).

P_4: High level of performance should be observed under condition one (high EO/high PEU).

Condition 2: High EO/Low PEU

In an attempt to manage their existing task environment, entrepreneurs may draw on their own ingenuity and resources and engage in competitive strategies that are designed to differentiate their firm or products and services from competitors' (Galbraith 1977; Zeithaml and Zeithaml 1984). For instance, Covin (1991) observed that entrepreneurial firms tend to place a greater emphasis on the use of differentiation tactics, involving higher prices and quality. Marketing differentiation may be characterized by heavy promotion, image positioning and the offering of value added benefits, such as convenience, quality and guarantees (Dess, Lumpkin and Covin 1997).

These competitively-oriented "independent strategies" (e.g., competitive aggression, public relations, legal actions, demand smoothing), may be pursued under conditions of low to moderate levels of uncertainty (Galbraith 1977), compared to the previously mentioned strategic maneuvering strategies (e.g., diversification) that may be preferred in more uncertain environments (Buchko 1994; Milliken 1987). The use of these independent strategies enables entrepreneurs to proactively respond to the existing environment, while retaining their autonomy, (Zeithaml and Zeithaml 1984). The freedom to act independently represents a critical dimension of an entrepreneurial posture (Lumpkin and Dess 1996).

P_5: While alternative environmental management strategies may be considered, the use (preference) for competitively-oriented "independent strategies" should be more pronounced among entrepreneurs, possessing a high EO in conditions of low PEU.

Performance under this condition may be moderately high; although less than that observed under condition one. According to Covin and Slevin (1989), entrepreneurial firms tend to perform better in dynamic, rather than more benign environments. This might be explained, in part, by their preference for a more dynamic environment, where entrepreneurs tend to be more comfortable with environmental complexity and tend to engage in and prefer more novel, environmental shaping strategies (Begley and Boyd 1987; Karagozoglu and Brown 1988; Miller and Friesen 1982). However, experimentation and the use of novel strategies (i.e., strategic maneuvering) in a more predictable and placid enviromental situation may serve to lessen the level of performance observed (Covin and Slevin 1989; Miller and Friesen 1982). Strategy novelty may be excessive and wasteful under more certain and placid competitive conditions, which may require a less proactive and more traditional strategic approach (Karagozoglu and Brown 1988; Miller and Friesen 1982). In fact, more conservative (Low EO) managers operating in similar (i.e., stable and certain) environments (condition 3 below) may outperform their entrepreneurial counterparts (condition 2 here) by focusing on operational efficiencies (Karagozoglu and Brown 1988).

P_6: The level of performance observed under condition two (high EO/low PEU) may be weaker than under condition one (high EO/high PEU) or three (low EO/low PEU), depending on the alignment of strategy and the perceived environmental conditions.

Low Entrepreneurial (Conservative) Orientation

Conservative decision makers, possessing a low entrepreneurial orientation, tend to differ from their entrepreneurial counterparts as to their strategic response to the environment (Covin and Slevin 1989; Covin 1991; Karagozoglu and Brown 1988). The nature of the relationship is conceptually examined below under low and high levels of environmental uncertainty.

Condition 3: Low EO and Low PEU

In contrast to their entrepreneurial counterparts, conservative managers tend to prefer more predictable and stable task environments (Karagozoglu and Brown 1988), where they can concentrate on incremental improvements (Miles and Arnold 1991). Strategically, they are similar to Miles and Snow's defender firms; being less innovative and more risk-adverse and reactive to changes in their environment (Covin 1991; Covin and Slevin 1989). They tend to place more emphasis on refinements of existing products/services (Covin and Slevin 1989) and incremental change (Davis, Morris and Allen 1991; Miles and Arnold 1991) rather than on innovations, and focus more on a narrowly defined market domain (Covin and Slevin 1989) with a limited, standardized range of products and services (Karagozoglu and Brown 1988). Given their perceptions of a more stable environment and a lower level of need for internal change, conservative managers may adjust their practices slowly, preferring to maintain the status quo (Karagozoglu and Brown 1988). When their market domain is threatened, they tend to respond cautiously to competition (Covin and Slevin 1989). They are more likely to derive their strengths from pursuing cost minimization strategies that focus on achieving greater efficiencies (Covin 1991; Karagozoglu and Brown 1988). According to Dess, Lumpkin and Covin (1997, p. 692), such a strategy is "...widely regarded as a potentially effective yet independent (of entrepreneurial posture) means to achieve competitive advantage."

P_7: While alternative strategies may be considered, the use (preference) for maintaining the status quo, cost minimization strategies and incremental change may be more pronounced among conservative managers, possessing a low EO in conditions of low PEU.

Conservative firms tend to perform better in more structured, predictable environments (Covin and Slevin 1989). The use of a cost minimization strategy has been associated with successful firms in stable and certain environments (Miller 1988). Given the coalignment between strategy and environment, conservative managers may outperform their entrepreneurial counterparts (condition 2) by focusing on operational efficiencies to achieve a competitive advantage (Covin and Slevin 1989; Karagozoglu and Brown 1988). Competition in relatively certain environments requires a greater emphasis on operational efficiencies (Karagozoglu and Brown 1988); while the entrepreneur's preferred use of more novel, proactive behaviors under similar conditions may be excessive and wasteful (Karagozoglu and Brown 1988; Miller and Friesen 1982) and represent an unnecessary risk (Covin and Slevin 1990).

P_8: The level of performance experienced by conservative managers in more predictable environments (Condition 3: low EO/low PEU) should be high. And, given a coalignment between strategy and environment, may be superior to the performance achieved by entrepreneurs in placid environments (Condition 2: high EO/low PEU).

Condition 4: Low EO and High PEU

Cooperative strategies, such as the use of alliances, are more likely to be associated with a low entrepreneurial (conservative) orientation (Dickson and Weaver 1997) and a greater level of environmental uncertainty (Bucklin and Sengupta 1993). As environmental uncertainty increases, conservative managers may feel more threatened because of their perceived low-level of competency in dealing with a dynamic environment (Karagozoglu and Brown 1988; Smart and Conant 1994). Unlike their entrepreneurial-counterparts, conservative managers (low EO) tend to perceive the environment as less predictable and controllable (Dickson and Weaver 1997). Possessing a lower level of tolerance for ambiguity (Begley and Boyd, 1987) and a lower level of "internal" locus-of-control (Brockhaus 1980; Clark, Varadarajan and Pride 1994), they may view themselves more at the mercy of events (Brockhaus 1980; Miller and Toulouse 1986). Consequently, conservative managers may categorize the same business situation less favorably than entrepreneurial-oriented managers (high EO) (Palich and Bagby 1995) and act on their beliefs to reduce the risks perceived. To reduce this uncertainty, they may increase their dependence on other organizations by adopting more cooperative strategies (i.e., exchange relationships), involving coalitions or contracting (Galbraith 1977; Lado, Boyd and Hanlon 1997; Zeithaml and Zeithaml 1984).

According to Zeithaml and Zeithaml (1984, p. 49), "Cooperative strategies are selected by many firms on the assumption that combined action reduces risks and costs to individual organizations while increasing their power." However, this is not without a cost as coordinated actions and contractual commitments lessens one's autonomy. This is particularly true of explicit cooperation (i.e., contracting), in which an agreement is made among organizations and behaviors are contractually coordinated. Given the importance of retaining their autonomy (Lumpkin and Dess 1996), entrepreneurs are less likely to employ explicit cooperation.

P_9: While alternative environmental management strategies may be considered, the use of cooperative strategies will be more pronounced among conservative managers, possessing a low EO in conditions of high PEU.

The use of cooperative strategies (e.g., strategic alliances) may enable allied members to perform better than their non-allied counterparts under uncertain environmental conditions (Reijnders and Verhallen 1996). Given their lower level of perceived competence and greater risk under uncertainty and their preference for a more stable and certain environment (Karagozoglu and Brown 1988), nonaligned conservative managers may not perform as well as their conservative counterparts in more certain environments (condition three) and entrepreneurs in more uncertain environments (condition one). A misalignment of strategy and environment may serve to weaken performance. As Covin and Slevin (1989) suggest, conservative firms tend to perform best in more benign environments, while entrepreneurs perform best in more uncertain environments..

P_{10}: The level of performance under condition four (low EO/high PEU) may be weaker than under conditions one (high EO/high PEU) or three (low EO/low PEU).

DISCUSSION

A major implication of the model proposed in this paper is that its explanatory power will be constrained by the accuracy of the decision-makers' perceptions of environmental uncertainty. That is, the manner in which environmental information is processed or categorized may lead to a serious bias (e.g., excessive optimism by entrepreneurs or pessimism by conservatives) and result in less than optimal strategic behavior. Inaccurate impressions may cause entrepreneurs to underestimate the riskiness of the situation, while conservatives may overlook possible opportunities by inflating the risk involved (Palich and Bagby 1995).

High levels of firm performance are expected only when the prescribed match between a firm's business posture, strategies and environmental conditions occurs. The notion of match or fit, as implied in the contingency framework, is deeply imbedded within management and business strategy literature. A match between the strategy of a firm and the environment within which the firm operates is accepted as a meaningful mechanism for understanding how firms adjust effectively to environmental changes (Ansoff 1971; Ginsberg and Venkatraman 1985; Hofer and Schendel 1978; Porter 1980; Venkatraman and Prescott 1990). Another important match that is associated with high firm performance is the extent of match, or congruency, between the business strategies of the firm and its organizational structures, processes, values, and culture. The degree of this match is a significant moderator of management's ability to implement chosen strategies (Galbraith 1995; Lawler 1996). In general, the notions of match, fit, and/or congruency convey the extent to which strategies, processes, structures, values, resources, etc. of a firm are consistent with each other and mutually meet the requirements of each in a complementary and comprehensive nature.

Prescribed matches will occur only if decision-makers accurately perceive the business environment. Apparently, in the case of entrepreneurs, lack of perceptual accuracy may be a concern. That is, entrepreneurs tend to be overly optimistic in evaluating environmental information (Busenitz and Barney 1997), especially when they lack familiarity with the situation or when considerable uncertainty exists (Tan 1996). Although this overconfidence may help them from being overwhelmed by the multiple hurdles that they face (Busenitz and Barney 1997), a high entrepreneurial orientation may contribute to a predisposition to underestimate risk (Lumpkin and Dess 1996). One basis of underestimations of risk could be the initial inaccuracy of perceptions of environmental uncertainty. If this is so, entrepreneurial decision-makers may find themselves in a mismatch of strategy to environment; with performance being adversely affected.

Specifically, they may not select strategies that best match highly uncertain environments because they do not perceive the environment as highly uncertain and highly risky, rather they perceive moderate or low uncertainty and risk (Palich and Bagby 1995). A source of inaccurate perceptions and underestimates of risk is the use of cognitive heuristics, of mental shortcuts, by entrepreneurs (Busenitz and Barney 1997). Representativeness, illusion of control and overconfidence, are cognitive heuristics commonly used by entrepreneurs to expedite the information processing that precedes strategic choice decisions (Simon and Houghton 1999).

The seriousness of inaccurate perceptions of environmental uncertainty can be reduced if decision-makers possess a learning orientation (Palich and Bagby 1995). This will enable them to correct their initial inaccurate perceptions as they attempt to implement mistakenly chosen marketing strategies. They can learn from the negative results of poorly chosen strategies that the nature of their business environment is not as it was initially perceived (Simon and Houghton 1999). Match may eventually result as the entrepreneurs' perceptions of their environment is corrected if the businesses and decision-makers are flexible and the industry is benevolent (Simon and Houghton 1999).

All of this implies that the accuracy of the initial perceptions of environmental uncertainty by decision-makers of firms with high level of entrepreneurial orientation will be suspect. Also, accuracy of perceptions may require an evolutionary process. In practice, awareness of this condition must be increased and then followed by means of creating appropriate cognitive changes. One such means would be to make entrepreneurs aware of the mental shortcuts they are likely to use, and that this type of cognitive process is associated with inaccurate perceptions. Therefore, use of such shortcuts are best minimized.

Another means of increasing accuracy of perceptions of environmental uncertainty may be to expose decision-makers with high entrepreneurial orientation to frame of reference training. This type of training has been used successfully to increase assessment accuracy of individuals (Sulsky and Day 1992). The objective of frames of reference training is to increase the frequency of correct categorizations of attributes such as the case of correctly categorizing attributes of the environment into varying categories of uncertainty. By increasing the match between the environmental uncertainty that an entrepreneur perceives and actual environmental volatility, economic performance of the firm should be enhanced (Bourgeois 1980; Elenkov 1997).

SUMMARY

The conceptual framework presented should contribute to a better understanding of the factors affecting strategy formulation and the relationship between entrepreneurial orientation and performance. The competitive actions that collectively comprise a firm's marketing strategy may be shaped by an entrepreneur/manager's business orientation and perception of environmental conditions. Conceptually, this may be influenced by the cognitive process by which new business situations and conditions are interpreted and categorized. In turn, the EO-performance relationship may depend upon the strategy that is selected and its congruence with other key variables, including business posture and environmental conditions. That is, the effectiveness of an entrepreneurial orientation may depend upon the context in which it is observed. When an entrepreneurial posture is combined with the appropriate strategy and proper environmental conditions, performance should be enhanced (Lumpkin and Dess 1996); when there is a misalignment performance may be less than optimal. By examining and testing the contingency relationship among these key variables (i.e., EO, strategy, environment) more meaningful insights should be obtained as to how an entrepreneurial orientation contributes to performance outcomes.

REFERENCES

Ansoff, H. I. (1971), *Business Strategy*, Bungay: Penguin Books.

Begley, T. M. and D. P. Boyd (1987), "Psychological Characteristics Associated with Performance in Entrepreneurial Firms and Smaller Businesses," *Journal of Business Venturing, 2,* 79-93.

Bourgeois, L. J. III (1980), "Strategy and Environment: A Conceptual Integration," *Academy of Management Review* 5(January), *25-39.*

Brockhaus, R. H. (1980), "Risk Taking Propensity of Entrepreneurs," *Academy of Management Journal*, 23(3), 509-520.

Buchko, A. A. (1994), "Conceptualization and Measurement of Environmental Uncertainty: An Assessment of the Miles and Snow Perceived Environmental Uncertainty Scale," *Academy of Management Journal, 37(2),* (April), 410-425.

Bucklin, L. P. and S. Sengupta (1993), "Organizing Successful Co-marketing Alliances," *Journal of Marketing, 57* (April), 32-46.

Busenitz, L. W. and J. B. Barney (1997), "Biases and Heuristics in Strategic Decision-Making: Differences Between Entrepreneurs and Managers in Large Organizations," *Journal of Business Venturing, 12*(1), 9-30.

Clark, T. P., R. Varadarajan and W. M. Pride (1994), "Environmental Management. The Construct and Research Propositions," *Journal of Business Research, 29(1)*, (January), 23-28.

Cooper, A. C., C. Y. Woo and W. C. Dunkelberg (1988), "Entrepreneurs′ Perceived Chances for Success," *Journal of Business Venturing, 3*, 97-108.

Covin, J. G. (1991), "Entrepreneurial Versus Conservative Firms: A Comparison of Strategies and Performance," *Journal of Management Studies, 28*(5), (September), 439-462.

_____ and D. P. Slevin (1989), "Strategic Management of Small Firms in Hostile and Benign Environments," *Strategic Management Journal, 10*, 75-87.

_____ and _____ (1991), "A Conceptual Model of Entrepreneurship as Firm Behavior," *Entrepreneurship: Theory and Practice, 16*(1), 7-25.

Davis, D., M. Morris and J. Allen (1991), "Perceived Environmental Turbulence and Its Effect On Selected Entrepreneurship, Marketing, and Organizational Characteristics in Industrial Firms," *Journal of the Academy of Marketing Science, 19*(1), (Winter), 43-51.

Dess, G. G., G. T. Lumpkin and J. G. Covin (1997), "Entrepreneurial Strategy Making and Firm Performance: Tests of Contingency and Configurational Models," *Strategic Management Journal, 18*(9) (October), 677-695.

Dickson, P. H. and K. M. Weaver (1997), "Environmental Determinants and Individual-Level Moderators of Alliance Use," *Academy of Management Journal, 40*(2), 404-425.

Downey, H. K., D. Hellriegel and J. W. Slocum (1977), "Environmental Uncertainty: The Construct and Its Application," *Administrative Science Quarterly, 17*, 313-327.

_____ and J. W. Slocum (1975), "Uncertainty: Measures, Research and Sources of Variation," *Academy of Management Journal*, 18, 562-577.

Dutton, J. E. and S. E. Jackson (1987), "Categorizing Strategic Issues: Links to Organizational Action," *Academy of Management Review*, 12(1), 76-90.

Elenkov, D. S. (1997), "Strategic Uncertainty and Environmental Scanning: The Case for Institutional Influences on Scanning Behavior," *Strategic Management Journal, 18* (4), (April), 287-302.

Galbraith, J. R. (1977), *Organizational Design*. Philippines: Addison-Wesley Publishing Company.

_____ (1995), *Designing Organizations: A Briefing on Strategy, Structure, and Process*. San Francisco: Jossey-Bassm.

Ginsberg, A. and N. Venkatraman (1985), "Contingency Perspective of Organizational Strategy: A Critical Review of Empirical Research," *Academy of Management Review, 10*, 421-434.

Glazer, R. and A. M. Weiss (1993), "Marketing in Turbulent Environments: Decision Processes and the Time-Sensitivity of Information," *Journal of Marketing Research, 30* (November), 509-521.

Hamel, G. and C. K. Prahalad (1994), *Competing for the Future*. Boston: Harvard Business School Press.

Hofer, C. W. and D. Schendel (1978), *Strategy Formulation: Analytical Concepts*. St. Paul, MN: West Publishing.

Karagozoglu, N. and W. B. Brown (1988), "Adaptive Responses by Conservative and Entrepreneurial Firms," *Journal of Product Innovation Management, 5*, 269-281.

Lado, A. A., N. G. Boyd and S. C. Hanlon (1997), "Competition, Cooperation, and the Search for Economic Rents: A Syncretic Model," *Academy of Management Review, 22* (1), 110-141.

Lawler, E. E. III (1996), *From the Ground Up: Six Principles for Building the New Logic Corporation*. San Francisco: Jossey-Bass.

Lumpkin, G. T. and G. G. Dess (1996), "Clarifying the Entrepreneurial Orientation Construct and Linking it to Performance," *Academy of Management Review, 21*(1), 135-172.

Miles, M. P. and D.R. Arnold (1991), "The Relationship Between Marketing Orientation and Entrepreneurial Orientation," *Entrepreneurship: Theory and Practice*, (Summer), 49-65.

_____, D. R. Arnold and D. L. Thompson (1993), "The Interrelationship Between Environmental Hostility and Entrepreneurial Orientation," *Journal of Applied Business Research, 9*(4), (Fall), 12-23.

Miller, D. (1988), "Relating Porters Business Strategies to Environment and Structure: Analysis and Performance Implications," *Academy of Management Journal, 31*, 280-309.

_____, C. Droge and J. Toulouse (1988), "Strategic Process and Context as Mediators Between Organizational Context and Structure," *Academy of Management Journal*, 31(3), (September), 544-569.

_____ and P. Friesen (1982), "Innovation in Conservative and Entrepreneurial Firms: Two Models of Strategic Momentum," *Strategic Management Journal, 3*, 1-25.

_____ and J. Toulouse (1986), "Strategy, Structure, CEO Personality and Performance in Small Firms," *Entrepreneurship: Theory and Practice*, 10(3), (Winter), 47-62.

Milliken, F. J. (1987), "Three Types of Perceived Uncertainty About the Environment: State, Effect and Response Uncertainty," *Academy of Management Review*, 12, 133-143.

Mitton, D. G. (1989), "The Compleat Entrepreneur," *Entrepreneurship: Theory and Practice*, 13(3), (Spring), 9-19.

Morris, M. H. and G. W. Paul (1987), "The Relationship Between Entrepreneurship and Marketing in Established Firms," *Journal of Business Venturing,* 2, 247-259.

Palich, L. E. and D. R. Bagby (1995), "Using Cognitive Theory to Explain Entrepreneurial Risk-Taking: Challenging Conventional Wisdom," *Journal of Business Venturing,* 10, 425-438.

Porter, M. (1980), *Competitive Strategy*. New York: Free Press.

Reijnders, W. J. M.. and T. M. M. Verhallen (1996), "Strategic Alliances Among Small Retailing Firms: Empirical Evidence for the Netherlands," *Journal of Small Business Management, 34*(1), (January), 36-45.

Shaver, K. G. and L. R. Scott (1991), "Person, Process, Choice: The Psychology of New Venture Creation," *Entrepreneurship: Theory and Practice*, (Winter), 23-45.

Simon, M. and S. M. Houghton (1999), "The Effects of Cognitive Heuristics on Strategic Action: Overcoming the Risk Hurdle to First Move," *New England Journal of Entrepreneurship, 2*(1), 35-44.

Smart, D. T. and J. S. Conant (1994), "Entrepreneurial Orientation, Distinctive Marketing Competencies and Organizational Performance," *Journal of Applied Business Research, 10*, 2, 28-37.

Stevenson, H. H. and J. C. Jarillo (1990), "A Paradigm of Entrepreneurship: Entrepreneurial Management," *Strategic Management Journal, 11*, 17-27.

Sulsky, L. M. and D. V. Day (1992), "Frame-Of-Reference Training and Cognitive Categorization: An Empirical Investigation of Rater Memory Issues," *Journal of Applied Psychology, 77*(4), 501-510.

Tan, J. (1996), "Regulatory Environment and Strategic Orientations in a Transitional Economy: A Study of Chinese Private Enterprise," *Entrepreneurship: Theory and Practice*, (Fall), 31-46.

Venkatraman, N. and J. E. Prescott (1990), "Environment- Strategy Coalignment: An Empirical Test of Its Performance Implimications," *Strategic Management Journal, 11*, 1-23.

Wiklund, J. (1999), "The Sustainability of the Entrepreneurial Orientation- Performance Relationship," *Entrepreneurship: Theory and Practice, 24*(1), 27-48.

Zahra, S. A. (1993), "Environment, Corporate Entrepreneurship and Financial Performance: A Taxonomic Approach," *Journal of Business Venturing, 8,* 319-340.

_____ and J. G. Covin, (1995), "Contextual Influences on the Corporate Entrepreneurship-Performance Relationship: A Longitudinal Analysis," *Journal of Business Venturing, 10*, 43-58.

Zeithaml, C. P. and V. A. Zeithaml (1984), "Environmental Management: Revising the Marketing Perspective," *Journal of Marketing, 48* (Spring), 46-53.