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LETTER FROM THE EDITOR

We are extremely pleased to present the *Academy of Entrepreneurship Journal*, an official journal of the Academy of Entrepreneurship, Inc. The *AEJ* is owned and published by the DreamCathcers Group, LLC. Its editorial mission is to advance the knowledge, understanding, and teaching of entrepreneurship throughout the world. To that end, the journal publishes high quality, theoretical and empirical manuscripts, which advance the entrepreneurship discipline.

The manuscripts contained in this volume have been double blind refereed. The acceptance rate for manuscripts in this issue, 25%, conforms to our editorial policies.

As editors, we intend to foster a supportive, mentoring effort on the part of the referees which will result in encouraging and supporting writers. We welcome different viewpoints because in differences we find learning; in differences we develop understanding; in differences we gain knowledge and in differences we develop the discipline into a more comprehensive, less esoteric, and dynamic metier.

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MANUSCRIPTS

ENTREPRENEURIAL HUMAN CAPITAL AND NEW VENTURE PERFORMANCE: IN SEARCH OF THE ELUSIVE LINK

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ABSTRACT

This paper develops a new operationalization of the entrepreneur as a combination of skills and motivations. It is proposed that entrepreneurial skills, in combination with the motivations of the entrepreneur, i.e., their reasons for starting a business, would define different "types" of entrepreneurs. This typology is expected to have significant association with the strategic direction of the business, as well as its performance. Moreover, this research design would allow testing of an integrated model of New Venture Performance (NVP) by considering independent as well as interactional effects of the type of entrepreneur as well as the new venture strategy. The resulting conceptual framework proposes that certain combinations of entrepreneurial skills, motivations, and strategy may be more successful than others within a sample of new ventures. This link between the entrepreneurial human capital on the one hand, and the performance of the venture on the other can (i) validate the existence of a typology of entrepreneurs with the help of a theoretically grounded derivation; (ii) help the process of theory building in the area of entrepreneurship research, by allowing comparison and generalization of research findings, and (ii) replace the subjective assessment of entrepreneurial capability used by venture capitalists in evaluating proposals for financing new ventures.

INTRODUCTION

> *"Economic circumstances are important; marketing is important; finance is important; even public agency assistance is important. But none of these will, alone, create a new venture. For that we need a person, in whose mind all of the possibilities come together, who believes that innovation is possible, and who has the motivation to persist until the job is done. Person, process, and choice: for these we need a truly psychological perspective on new venture creation".* - Shaver and Scott (1991: 39)

Although the positive role of new ventures is widely acknowledged, it is also accepted that many new ventures go through a period of premature decline (Kimberley and Miles, 1980). This is also evident in the recent dotcom “bust”. The population ecology school of organization theorists have identified this phenomenon as ‘liability of newness’ (Stinchcombe, 1965), or the higher propensity for failure among young firms. Understanding how and why certain entrepreneurs succeed presents an enormous challenge for the entrepreneurship research community (Aldrich and Martinez, 2001). Thus, within the population of new and young firms, there is a wide variation in terms of performance and growth that has to be accounted for.

Cooper, Woo and Dunkelberg (1989) point out that while the majority of new jobs created are by only 15% of new firms, it is still not possible to predict which companies will be part of that 15%. Predicting the performance of new ventures has therefore been a challenge for researchers and investors. At a time when names of startup firms like eBay, Google and Infosys are almost household names, why do so many new businesses close down every day? The outstanding success stories of some startup businesses, coupled with the high failure rate of new ventures, generate many interesting questions about identification of key success factors among new ventures.

Although literature suggests that the entrepreneur is an important resource of the entrepreneurial firm; attempts at finding relationships between entrepreneurial personality traits and performance of ventures have been largely unsuccessful. Anecdotal literature focuses almost exclusively on the role of the entrepreneur, but this is not supported by empirical research (Sandberg and Hofer, 1987). As Sandberg and Hofer (1987) point out, one of the most important factors that a venture capitalist assesses at the time of financing a new venture is the entrepreneurial potential. At the same time, their model of NVP shows an insignificant effect of the entrepreneur. A search for the elusive link between the entrepreneurial capabilities and new venture performance which will allow us to predict with greater accuracy which new businesses will succeed, has presented a challenge to policy makers, venture capitalists, as well as entrepreneurship researchers.

A REVIEW OF CURRENT RESEARCH

NVP research

Early models of venture performance could be represented by NVP = f(E), where E represented the entrepreneur. These models tested for direct relationships between entrepreneurial characteristics and NVP. However, very few of these studies were able to demonstrate empirically any significant association between entrepreneurial characteristics and venture performance. On the other hand, Sandberg and Hofer (1987) tested a model of NVP, where they found significant effects of industry structure and business strategy, but no significant effect of the personal characteristics of the entrepreneur. However, they were still reluctant to drop the entrepreneur from their model of NVP, because this did not agree with anecdotal evidence that the entrepreneur is able to influence the performance of the new venture significantly. Moreover, Sandberg and Hofer (1987) also found that venture capitalists emphasize certain behavioral traits of the entrepreneur qualitatively, while evaluating venture proposals. Although these are mostly subjective assessments, it emphasizes the importance of the entrepreneur in the creation and future behavior of the entrepreneurial firm. Although resource based theories have led to many researchers trying to identify correlates of successful startups in terms of the financial and social capital of the entrepreneur, NVP models have not been very successful in tracing the link between NVP and entrepreneurial human capital.

This leads us to suggest that the operationalization of the entrepreneur as an empirical construct may be one of the issues that leads to the insignificant and inconsistent empirical linkage between NVP and entrepreneurial human capital.

Recent researchers have tried to identify predictors of success for new ventures, which typically link success/failure of these firms to certain initial or founding conditions like the entrepreneur's background, the venture strategy, environmental considerations, or some combination of these (Stevenson and Jarillo, 1990). The unit of analysis in this branch of entrepreneurship studies is the organization, and these studies have largely been conducted by researchers in strategic and entrepreneurial management. The variables that have been researched for effect on NVP can be broadly listed as (i) The Entrepreneur, (ii) New Venture Strategy, (iii) The Environment, (iv) Industry Structure, and (v) Organization structure. However, NVP research has suffered from the following limitations:

While the entrepreneur is widely accepted to be an important element in a model of NVP, much of the research trying to find a link between the individual entrepreneur and the performance of the venture has focused on specific entrepreneurial "traits", which has turned up results that are inconclusive or insignificant. Trait research, or studies attempting to explore links between entrepreneurial traits and organizational outcomes, can at best make conclusions about the particular traits under study.

These inconclusive results of entrepreneurial trait research led some researchers to drop the entrepreneur from their models. However, this is not consistent with theory or with anecdotal evidence, which points to important effects of the entrepreneur on small and young firms (Miller, 1983; Sandberg and Hofer, 1987). Moreover, the use of combinations such as Strategy and Industry structure to explain performance fails to take into account the effect of entrepreneurial human capital. The inclusion of the Entrepreneur in NVP models is what distinguishes entrepreneurship research from mainstream organizational behavior, and dropping it adds little to the already existing body of knowledge.

Although Gartner (1985) pointed out that there may be different types of entrepreneurs, there are no widely accepted, consistently defined typologies. Operationalizations of the entrepreneurial construct have been weak and inconsistent.

It is also suggested that this may be because of the failure on the part of most researchers to consider mediation paths and moderating variables like skills, motivations and strategy (Baum, 1995; Herron and Robinson, 1993) rather than testing for direct effects of variables. This may have led to results that are not very significant. Models using interaction terms have been more successful than those testing for direct effect of variables.

The Entrepreneur

Most research in the area of entrepreneurship till as late as the mid and late '80s focused on the differences between entrepreneurs and non-entrepreneurs. Researchers in this area tried to distinguish the entrepreneur from the non-entrepreneur, based on psychological, sociological, environmental or educational characteristics (Hornaday, 1982; Brockhaus, 1980). Research in this area examined the founder's traits such as need for achievement, internal locus of control, or tolerance for ambiguity, demographic variables like age, education and work experience, and sociological variables like networks and contacts, parents' background etc.

The results of empirical studies in this area produced mixed and inconclusive results (Stevenson and Jarillo, 1990; Low and MacMillan, 1988; Gartner, 1990). The assumption behind studies differentiating between entrepreneurs and non-entrepreneurs was that entrepreneurs were more or less a homogeneous set. This issue was later addressed by Gartner (1985), who suggested that differences between entrepreneurs are more significant than their commonalities, and hence the emphasis of entrepreneurship research should shift towards studying variations among entrepreneurs rather than between entrepreneurs and non-entrepreneurs.

Given that differences between entrepreneurs exist, it becomes important to study the causes and effects of such diversity. Typically, the method adopted by researchers has been to group entrepreneurs by some common, meaningful, characteristics (Woo, Cooper and Dunkelberg, 1991). This serves as a useful middle ground between the anecdotal style of treating every individual entrepreneur as a unique case, and trying to generalize over a diverse group of entrepreneurs as a whole. Following Gartner (1985)'s lead, there have been a number of studies that try to differentiate between types of entrepreneurs.

The earliest work in this area came from Smith (1967), who isolated two types of entrepreneurs, based on their personal characteristics and work motivations. 'Craftsman' entrepreneurs came from blue-collar backgrounds, relatively lower levels of education, and had been associated with operations rather than management in the past. In running their firms, they were typically paternalistic, used personal finances or relatives and friends for financing, used personal relationships in marketing, and adopted rigid strategies. 'Opportunistic' entrepreneurs, on the other hand, had middle class backgrounds, were more educated, had a greater variety of work experience, and had some past experience with management. They were more aware of and sensitive to the market, and better oriented towards spotting opportunities and growth. Their management style was more professional, they delegated more, looked for more financing options, adopted more innovative competitive strategies, and led adaptive and faster growing firms.

Other researchers have tried to build upon Smith's (1967) craftsman-opportunistic typology (Filley and Aldag, 1978; Smith and Miner, 1983; Cooper and Dunkelberg, 1986, Lafuente and Salas, 1989). Broadly, three types of entrepreneurs have been identified, 1) the craftsman entrepreneurs, who are strongly motivated to do what they enjoy doing, and value their independence, 2) managerial entrepreneurs, who are motivated by economic gain or building an organization, and are more concerned with administrative details and control systems, and 3) opportunistic entrepreneurs who can exploit the market conditions by spotting a particular need (Smith, 1967; Smith and Miner, 1983; Lafuente and Salas, 1989; Cooper and Dunkelberg, 1986; Woo, Cooper and Dunkelberg, 1991).

Further studies by Filley and Aldag (1978), Cooper and Dunkelberg (1986), and Lafuente and Salas (1989) have also identified different types of entrepreneurs based on different sets of initial classificatory variables like education, previous work experience, the process of ownership, work expectations etc, and related these classification variables to growth rates or type of firm created.

As Gartner (1985) pointed out, there are significant variations among entrepreneurs and the firms they create. Smith (1967) found opportunistic entrepreneurs' chances for survival and growth to be higher than that of craftsman entrepreneurs. Carland et al (1984) differentiated between entrepreneurs and small business owners based on the firm's growth orientation. Birch (1987) has discussed two types of small firms, income substitutors and entrepreneurs, and noted the difference in growth orientation between them. Westhead and Wright (1988) have distinguished between novice, portfolio, and serial entrepreneurs, based on the entrepreneur's experience in new venture creation, and conclude that portfolio and serial entrepreneurs are significantly associated with higher job creation rates.

LIMITATIONS OF RESEARCH IN THIS AREA

The operationalization of the entrepreneur as a construct has been inconsistent. Either personality, personal characteristics, or motivations have been used in isolation, often without conceptual or theoretical explanations of why they have been used. This has led to lack of generalization across different studies. Most of these studies have not been able to report significant association between the entrepreneur, and growth or performance of the venture. One reason for this could be that the basis for categorization is by itself not enough to serve as a strong predictor of behavior in new ventures.

Although many studies have assumed, a priori, the presence of the craftsman-opportunistic dimension among entrepreneurs, few researchers have tried to validate the typology empirically. While Woo, Cooper, and Dunkelberg (1991) have suggested that a two-way classification may not be wide enough to describe a varied sample of entrepreneurs, there have been few empirical tests for a wider and more clearly defined typology.

Even when an empirical verification has been attempted, the variables used for classifying entrepreneurs have been different. For example, Lafuente and Salas (1989) have used only work motivations to classify entrepreneurs, while Smith's (1967) original classification was based on the background, education, training as well as attitude to work. This has led to lack of clarity at the construct level, leading to lack of generalizability across research findings.

Although skills of an entrepreneur have implicitly been part of Smith's original definition, it has not explicitly been used to differentiate between entrepreneurs.

A SYNTHESIS

Entrepreneurs create new ventures for a variety of reasons, and satisfying a variety of personal objectives. Motivational structures will be very different for the entrepreneur who wants challenging work, and for one who chooses self employment as "a more desirable form of earning a living" (Chell, Haworth, and Brearley, 1991). This is expected to have a significant effect on the behavior of the entrepreneur, and hence the future performance of the ventures created by them. Kolvereid (1991, cited in Gundry and Welsch, 1997) found that higher levels of growth aspirations were related to entrepreneurs who started businesses as a means of personal achievement. Similarly, Amit and Muller (1996) found that "Pull" entrepreneurs had significantly higher chances of success than "Push" entrepreneurs. Thus, reasons for starting a business may be related to the growth orientation of the entrepreneur.

Moreover, although entrepreneurship is a situational phenomenon, combinations of circumstances cannot create a new venture by themselves. The entrepreneur as an individual has to employ his own skills to "shape a new organization out of complexity and chaos" (Herron, 1990, quoted in Herron and Sapienza, 1992: 50). Entrepreneurs come from different social backgrounds, have varied education, training and work experience, all of which result in the development of different skill sets. These differences may impact their decisions and be another source of variation between the ventures they create.

Moreover, it is suggested that personality is manifested in knowledge, skill and ability (Baum, 1995). Herron and Robinson (1993) conceptualize 'skills' as a function of aptitude and training. Hence, skill sets of entrepreneurs will capture the effect of the knowledge and abilities acquired by them through their education, training and work experience.

One of the major problems with entrepreneurship research is that mediating and moderating paths between variables have often not been examined (Herron and Robinson, 1993). Studies which have tried to link personality traits and other demographic characteristics of the entrepreneur directly to outcomes, instead of testing contingent sets of relationships, have not reported significant findings. Baum (1995) suggests that the limited effect of entrepreneurial personality on performance may be explained by analysis of mediation paths through competencies, motivation, strategy, and structure. Herron and Robinson (1993) suggest that personality traits do not have a strong direct effect on behavior and performance, but are mediated by motivations and moderated by abilities, or skills of the entrepreneur. This is consistent with literature on psychological job testing which suggests that the relationship between traits and performance is not a direct one, but is moderated and mediated by other variables (Herron and Robinson, 1990).

Thus, personality, background and experience of the entrepreneur, which are used more often in entrepreneurship research, may not have a direct impact on organizational outcomes, but may be mediated by a combination of skills and motivations.

Gartner, Shaver, Gatewood and Katz (1994) advocate the use of a combination of work ability and motivation to capture the effect of the entrepreneur on the performance of his venture. They suggest the use of measures of specific knowledge and skills rather than general measures like number of years of experience in industry or number of years of education. Although Smith's (1967) early categorization of entrepreneurial types implicitly included skill dimensions, no other empirical study has explicitly incorporated the skills of individual entrepreneurs in defining a typology. Thus, a combination of motivations and abilities of individuals may yield a more robust basis for differentiating between types of entrepreneurs.

Many researchers have studied the associations between the characteristics of senior managers and the strategies they adopt (Miller and Toulouse, 1986; Miller, Kets de Vries, 1982; Hambrick and Mason, 1984).

The upper echelon theory propounded by Hambrick and Mason (1984) suggests that the choices made by executives are representative of the characteristics of its managers. Managers take decisions based on their interpretation of the objective environment, and their own values and experiences. Bamberger (1983, cited in Kotey and Meredith, 1997) goes further by stating that business strategies are products of managers' visions which in turn originate from their personalities. After the initial decision to launch a new venture, the entrepreneur is faced with many other decisions about the nature of industry, nature of entry, competitive strategies and operational decisions. Considering that in small businesses, the owner's goals "become intricately entwined with the strategies of the business" (Chaganti, DeCarolis, Deeds, 1995: 9), it may be expected that the entrepreneur would take strategic decisions based on how he perceives the environment through the lens of his own beliefs, values and attitudes (Wiersema and Bantel, 1992). Moreover, strategies are particularly likely to reflect the orientations and priorities of the founder in small and new ventures (Kisfalvi, 2002). Thus it can be expected that the strategic decisions taken, and hence the early strategies adopted by the entrepreneurial firm will be related to the type of entrepreneur who makes those decisions. Specifically, using the arguments above, these decisions will be associated with the entrepreneurial skill-motivation sets.

Feeser and Willard's (1990) research studies the effect of founding strategies on performance. The researchers have defined founding strategies to include the characteristics and experiences of the entrepreneurs, as well as the decisions taken by them regarding markets, technologies, and competitive postures. Moreover, Timmons, Smollen, and Dingee (1977) advocate the need for different sets of skills for different types of entrepreneurial ventures. Keeping in mind that the entrepreneur as an individual is one of the most important assets of the new venture, a combination of the entrepreneur's skills and motivations, and the resource allocation decisions he makes, may have implications for the growth and performance of the firm. Hence both the entrepreneur and the strategy of the venture may have implications for performance.

Thomas, Litschert and Ramaswamy (1991) point out that if the argument that managerial characteristics are associated with strategic decisions is true, then a match or congruence between the two must have performance implications. They argue that absence of this alignment would result in a "conflict between the distinctive competencies of the organization and managerial decisions… (leading to) suboptimal resource deployments, failure to build on organizational strengths, and a lack of clear direction, all of which would have a negative impact on performance" (Thomas, Litschert and Ramaswamy, 1991, p 511). Naman and Slevin (1993) argue that fit implies 'efficient allocation of managerial resources', and hence misfit would be associated with inefficiency. Govindarajan (1989) presents the following rationale for matching managers to strategies:

- A different set of behavior, knowledge and skills will be effective in different strategies.
- Mangers may have different sets of behavior, knowledge and skills based on their personalities, background, education, experience etc.
- Managers can change their styles, but to a limited degree only. Managers whose behavior, knowledge and skill sets are congruent with the requirements of the particular strategies will be more effective than others (: 252).

Many studies have attempted to find a link between the entrepreneurial human capital (i.e., the knowledge, skills and abilities of the entrepreneur), and the new venture performance (Ucbasaran, Westhead and Wright, 2001). However, resource based theories of organization recognize that resources alone cannot generate sustainable competitive advantage, and hence entrepreneurs must select strategies that best exploit the resources that they have access to (Ucbasaran, Westhead and Wright, 2001). Chandler and Hanks (1994) suggest that a fit between the available resources and the venture strategy should enhance performance of the venture. Hence the alignment of the characteristics of the entrepreneur to the requirements of the strategy will have implications for the performance of the new venture.

From the above arguments it may be concluded that:

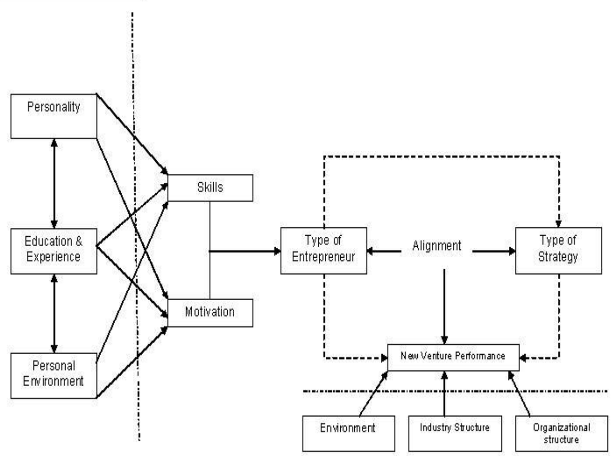
- Founders can have a significant influence on organizational outcomes.
- Certain organizational decisions may be associated with certain entrepreneurial characteristics.

- ♦ The skill-motivation combination of the entrepreneur, as well as the strategic decisions taken by the entrepreneur, may have associations with NVP.
- ♦ Congruence or alignment of entrepreneurial characteristics with the requirements of the strategy may lead to effectiveness of the venture.

CONCEPTUAL FRAMEWORK

Figure 1 represents the conceptual model for the framework suggested above.

Figure 1: Conceptual Diagram



Research Questions and Propositions

The arguments outlined earlier generated the following research questions:

1. Are certain combinations of skills and motivations associated with certain entrepreneurial "types"?
2. Are these skill-motivation sets associated with certain competitive strategy decisions taken by entrepreneurs?
3. Does the entrepreneur-strategy alignment lead to higher performance?

An operationalization of the entrepreneur as a combination of his skills and motivations has not been attempted in earlier studies. Hence the first part of the study is exploratory in nature, and the propositions will reflect the exploratory nature in that they will state the relationships that are expected to be found, based on constructs and dimensions from previous literature.

Based on earlier research on the subject (Smith, 1967; Smith and Miner, 1983; Filley and Aldag, 1978; Cooper and Dunkelberg, 1984), the following types of entrepreneurs can be defined: The 'craftsman' entrepreneur is likely to be technically skilled and his primary entrepreneurial motivation would be the need to enjoy freedom at work, and a desire for independence. In today's context, the software engineer who branches out on his own to indulge his creative skills and do his work the way he wants to, can be described as a craftsman entrepreneur. It seems intuitively probable that he would like technical jobs and dislike administrative ones, would rate comfort-survival higher than growth-profitability, and enjoy technically challenging work.

The managerial/administrative entrepreneur is likely to possess excellent conceptual skills and a welfare-growth orientation. Such an entrepreneur would be interested in growth and the opportunity to 'build' an organization. He is likely to be a non-technical administrator, preferring to expend his energies in planning and organizing. Growth orientation may be highest for organizations created by this kind of entrepreneur.

The opportunistic/promoter/risk entrepreneur would have strong networking/ opportunity skills and a profitability orientation. His reason for starting a business would be the ability to spot an attractive market or opportunity more easily than others. He would be likely to have a relatively shorter planning time frame, use marketing techniques rather than product innovations, and be oriented towards profits rather than growth.

From earlier research on skills (Katz, 1974, Pavett and Lau, 1983; Szilyagi and Schweiger, 1984, Herron and Robinson,1990; Baum,1995; Chandler and Jansen, 1992) and motivations of an entrepreneur (Cooper and Dunkelberg, 1986; Amit and Mueller, 1996; Birley and Westhead, 1994; Scheinberg and MacMillan,1988; Shane, Kolvereid and Westhead, 1991), the following patterns of entrepreneurial skills and motivations are proposed in Table 1.

Proposition 1: *A combination of skills and motivations of entrepreneurs will yield certain patterns of skill-motivation sets which will define a typology of entrepreneurs.*

As argued earlier, the strategic decisions taken by entrepreneurs are likely to be associated with entrepreneurial characteristics.

The craftsman entrepreneur is likely to have a high level of technical knowledge and skill in his focus area. A combination of high need for independence and technical skills is likely to make him break away from his previous employment to start a business in a closely related area. His high need for personal development, as well as his expertise would give him a strong technical orientation and product focus. He would be comfortable with using sophisticated tools and techniques to differentiate his product. Since he is not driven by growth or profit motivations, his business strategy would more likely be differentiation or focus and not an expansion oriented, undifferentiated one. He is unlikely to have strong human and conceptual skills and hence would be more product than marketing oriented. Using Carter et al.'s (1994) classification of new venture strategies, craftsman entrepreneurs could be associated with Technology Value strategies.

Table 1: Expected Combinations of Skills and Motivations

Skills	Technical / Functional	Admini-strative	Industry Knowledge	Inter-personal	Political/ Networking	Drive	Opportunity Recognition
Motivations							
Need for Approval			Opportunistic		Opportunistic		Opportunistic
Need for Independence	Craftsman					Craftsman	
Personal development	Craftsman					Craftsman	
Welfare		Managerial	Managerial	Managerial		Managerial	
Wealth		Managerial	Opportunistic	Managerial	Opportunistic	Managerial	Opportunistic
Follow role models	Craftsman					Craftsman	
Tax reduction			Opportunistic		Opportunistic		Opportunistic
Need for escape	Craftsman						

With a high level of conceptual and administration skills, a managerial entrepreneur would be most likely to pursue an undifferentiated strategy, driven by growth rather than profitability motivations. His strong conceptual skills and knowledge of the business and industry would allow him to have a product as well as a marketing focus. Hence managerial entrepreneurs may be associated with ventures following Quality Proponent / Super Achiever strategies (Carter et al., 1994).

An opportunistic entrepreneur would have the ability to take advantage of environmental opportunities. Therefore he is more likely to spot niche markets. He is also likely to use innovative marketing practices rather than product superiority. His strong networking skills would allow him to understand the needs of his target markets and tailor his product/service to these needs. Thus opportunistic entrepreneurs may be associated with Niche purveyor / Price Competitor strategies (Carter et al., 1994). Hence, the following proposition can be formulated regarding the association of entrepreneurial skill-motivation sets and competitive strategy of the venture.

Proposition 2: New ventures with dissimilar competitive strategies will be associated with founders possessing different skill-motivation sets.

Consistent with findings from earlier research (Smith, 1967; Filley and Aldag, 1978; Lafuente and Salas, 1989; Westhead and Wright, 1998), it can also be expected to find performance differences across types of entrepreneurs.

Craftsman entrepreneurs have been associated with comfort-survival motivations rather than growth and profitability (Smith, 1967; Smith and Miner, 1983). Opportunistic entrepreneurs, associated with desire for financial returns, are likely to be associated with higher profitability, and managerial entrepreneurs, who are associated with a desire to build, are likely to be associated with higher growth (Filley and Aldag, 1978; Smith, 1967). Hence we may expect to find different performance orientations among ventures formed by entrepreneurs with different skill-motivation sets

Proposition 3: Skill-motivation sets of entrepreneurs will be associated with different levels of performance.

Similarly, new venture strategy literature (Macmillan and Day, 1986; Sandberg and Hofer, 1987; Birley and Westhead, 1990) suggests that there may exist an association between new venture strategy and performance.

Proposition 4: New ventures with dissimilar competitive strategies will be associated with different levels of performance.

The argument for matching entrepreneurial characteristics with the requirements of the strategy for effectiveness of the venture has been presented earlier. A closer look at the strategy types established by Carter et al (1994) shows us that:

> Super achievers try to exploit all the competitive postures identified, by offering quality products and services at reasonable prices, and trying to retain flexibility and responsiveness to the market. Hence a broader view of the organization and its elements, or administrative skills may be required for this kind

of strategy. Skills like business and industry knowledge will be needed to identify customer needs and ensure quick responses to changes in the market. Internal skills like leadership and administrative skills will also be needed to integrate diverse areas of operation like production, customer service etc. Hence we can expect that a managerial/ administrative type of entrepreneur to be most successful in this kind of strategy.

Technology Value firms use innovative or new technology or a price competitive product as a differentiator. Carter et al (1994) suggest that this strategy seems likely for entrepreneur who have previously been employed in related industries and have hence been able to successfully transfer their knowledge and skills into the new venture. It seems fairly clear that technical knowledge of the product/service will be essential skills for this area in order to be able to offer leading edge technology. The craftsman entrepreneur who is motivated by technical work and uses his technical skills to excel at his work may be most likely to outperform others using this strategy.

Niche Purveyors emphasize unique products and services for their identified niche, and couple this with convenience value, locational advantages etc to create value for their customers. Since this type of strategy demands opportunity recognition skills, the opportunistic entrepreneur is likely to be a niche player. However, the craftsman entrepreneur could also be a niche player if his product/service is specialized and aimed at a narrow target market. This type of strategy would need a strong customer orientation and relationship management with the small market segment. Thus we expect opportunistic entrepreneurs to be more successful in this kind of strategy. Moreover, we also see that a lack of market responsiveness is also a feature of this kind of strategy. As opportunistic entrepreneurs are more likely to be responsive to changing market conditions than other types, we would expect them to perform better than the other types adopting this strategy.

Quality proponents rely on the quality of their products, superior service and better technology. The required skills would include both actual product/service skills as well as leadership and business skills to ensure that the organization as a whole is oriented towards quality. Moreover, there is a strong element of service in the value offering in this type of strategy. Craftsman entrepreneurs can be expected to be less service oriented and hence we may expect managerial entrepreneurs to perform better.

Price competitors use a combination of marketing/advertising, service and low price. This needs knowledge of the industry, and good networking skills. Moreover, a price competitive strategy by definition is a short term strategy. As the opportunistic entrepreneur is likely to be more marketing oriented than product oriented, and would be motivated by short term profits, we would expect this type to perform better.

Equivocators adopt ambiguous strategies where they fail to emphasize any of the strategy dimensions mentioned. Given the lack of a coherent strategic orientation, we expect opportunistic entrepreneurs, who are strongly motivated by short term results and personal achievement rather than long term growth plans, to perform best in this strategy type.

From the arguments above, we may expect that "fit" between the entrepreneur and the strategy of the new venture will have performance implications for the venture.

Proposition 5: *New ventures where the type of entrepreneur is aligned with the requirements of its strategy will perform better than ventures where such an alignment does not exist.*

Research Framework and Suggested Methodology

The model is of the form NVP = f (E, S, E x S), where

E = Type of Entrepreneur
S = Type of Strategy, and
E x S defines the interaction term.

The variables under consideration are the Entrepreneur (E), New Venture Strategy (S), and New Venture Performance (NVP). The entrepreneur as an empirical construct is operationalized by a combination of skills and motivations. Multidimensional scales can be used to measure skills and motivations. Clustering methods may be used to identify specific skill-motivation sets. This would empirically validate the craftsman-opportunistic-managerial typology. It is expected that personality, background, experience etc will not have direct effect on performance, but will be mediated by skills and motivations, and moderated by strategy.

The typology identified is expected to impact strategic decisions as well as the performance of new ventures. Moreover, the type of entrepreneur and strategy are expected to have weak direct effects on NVP, and the interaction term is expected to have a strong effect. Contextual variables like Environment and Industry Structure are assumed to be controlled for.

Analysis Plan

The first part of this study attempts an operationalization of the type of entrepreneur, based on skills and motivations. Skills and motivations can be identified from literature and operationalized into a multidimensional questionnaire. Since the initial objective is to reduce and summarize the data collected on skills and motivations to a smaller number of common dimensions, the first step in the process will be Factor Analysis. Skills and motivations can be factor analyzed separately using an R-mode Principal Components Analysis (PCA) to reduce the items into a smaller number of independent orthogonal components. PCA is to be used since the component scores are to be further used in a clustering technique which is sensitive to intercorrelations (Green and Tull, 1990). Although the dimensions of skills and motivations can be identified through factor analysis, the objective of the research is to examine the “combinations” of these that actually exist. As has already been argued, entrepreneurs are a heterogeneous group in terms of their skill-motivation sets, and the attempt here is to identify homogeneous subgroups within a heterogeneous sample. Everitt (1980) recommends the use of cluster analysis under these circumstances.

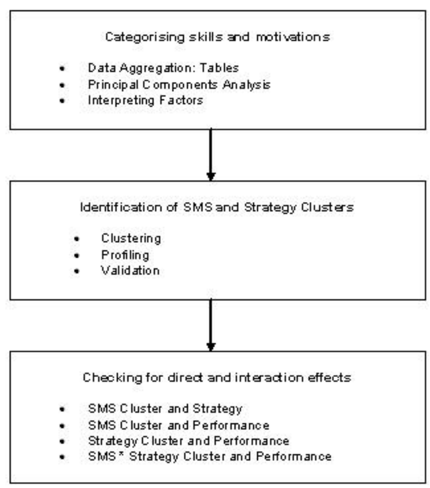
The factor scores obtained from the earlier factor analysis can be used as inputs for the subsequent cluster analysis to identify entrepreneurial "types". It is expected that the cluster analysis would yield clusters similar to the craftsman-opportunistic-administrative types defined in literature. The methodology has the disadvantage of a loss of detail, but makes up for it by helping generalization (Birley and Westhead, 1994). Moreover, given the exploratory nature of this research, the use of this method is useful in constructing “mid-range theories” (Pinder and Moore, 1979), which help in the process of theory building.

The study then proposes to test whether the competitive strategy choices made by the entrepreneur differ systematically with the "type" of entrepreneur. This is consistent with researchers in organization behavior who study associations between managers and strategy (Miller, Kets de Vries and Toulouse, 1982). Unlike in larger organizations, causality is not complicated by the possibility of executives being chosen for a particular position because of their personal and background characteristics (Hambrick and Mason, 1984), and any association between entrepreneurial characteristics and strategy can be assumed to be directional. Moreover, by using cluster analysis, strategy is treated as a multidimensional construct which reflects the differential emphasis that each firm places on each dimension of competitive strategy. The hypotheses can be tested using contingency coefficients, as both the data are category data, and hence nominal in nature. Other nonparametric tests available for association between nominal data eg. Phi and Cramer’s V can also be used.

The last part of the study then proposes to examine the performance implications of a strategy-entrepreneur matching relationship. Since the use of mediating and moderating variables is recommended rather than examining direct effects of variables, and models incorporating interaction terms have generally been found superior in explaining NVP(Sandberg and Hofer, 1987), it is expected that the interaction between type of entrepreneur and type of strategy would have performance implications.

Controlling for industry, it is proposed that NVP = f (E, S, E x S), where NVP = New venture performance, E = Type of entrepreneur, S = Type of strategy, E x S = Interaction term. It is proposed that E and S will have independent weak effects on performance, and the interaction term will have a strong effect. This can be tested by using a set of 'matching' hypotheses, which test the argument that "fit" between type of entrepreneur and type of strategy would have association with the performance of the new venture. These propositions could be tested using non-parametric statistical tools. The framework for the analysis is presented in Figure 2.

Figure 2: Analysis Plan



Implications of the Model

The model derived here has important implications for entrepreneurship researchers, practicing entrepreneurs, and venture capitalists.

The model derived in the paper integrates research on the individual entrepreneur and the performance of the venture in an attempt to find the elusive link between the two streams of research in this area.

Firstly, the operationalization of the entrepreneur as a combination of his skills and motivations has not been attempted earlier. Although the choice of variables for categorization is strongly grounded in theory, no empirical research has been carried out with this operationalization.

Since the derivation is strongly grounded in theory, empirical testing of the model will validate the existence of a typology that has been studied but not validated earlier.

The derivation of the model is based on strong theoretical antecedents deriving from areas like psychological job testing, behavioral theories of organization, and strategic management literature. It is supported by the fact that testing for direct effects of traits on outcomes has not yielded significant results. A model using mediation and moderation paths of the relevant variables is expected to have higher explanatory power. This could be a significant contribution to the area of research which has tried to identify which behavioral characteristics of the entrepreneur are associated with success.

The new operationalization of the entrepreneur could form the basis for a stable typology for further empirical research, This would help the process of theory building in the area of entrepreneurship, by allowing the comparison and generalizability of research findings.

Trying to determine which new ventures are likely to succeed has traditionally been a challenging problem for venture capitalists. When a venture capitalist is approached by an entrepreneur for financing his venture, he often faces the problem of adverse selection (Amit and Muller, 1996). Since venture capitalists do try to evaluate the ability of the entrepreneur by trying to assess certain traits and behavioral characteristics of the entrepreneur (Sandberg and Hofer, 1987; Amit and Muller, 1996), they are hampered in this evaluation by the absence of any clear theory which predicts which characteristics will increase chance of success. The subjective assessments and psychological or trait measures used by venture capitalists to assess entrepreneurial capabilities may be replaced by instruments measuring actual skills and motivations of the individual entrepreneur. As explained earlier, traits may not have direct effects on outcomes, but may rather be mediated by a combination of the entrepreneur's skill-motivation set, which capture the effects of personality traits as well as other commonly tested variables like education, background and work experience. Any government policy to encourage employment growth by encouraging new venture creation has to take into account differing attitudes, managerial styles, and hence, varying incubation needs of different types of entrepreneurs (Lafuente and Salas, 1989).

Finally, based on the finding that certain types of entrepreneurs outperform others, founders and potential founders should analyze their own skills and motivations. Knowing which behavioral aspects are linked to performance can help them either to supplement their skills in certain areas, or balance their own shortcomings with a complementary founding team.

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"WHO IS AN ENTREPRENEUR?" IS IT STILL THE WRONG QUESTION?

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ABSTRACT

William Gartner's 1988 article 'Who is an Entrepreneur?' Is the Wrong Question suggested that more productive research into entrepreneurship could result from shifting the unit of analysis from the individual level to the functional level. Eighteen years later, it does not appear that the research resulting from this shift has produced agreement on the most appropriate definition of entrepreneurship. This paper compares three definitions of entrepreneurship currently being discussed by scholars and offers a fourth definition, which brings the unit of analysis back to the level of the individual. The paper reviews the literature defining the domain of entrepreneurship including the proposed new definition, develops a number of scenarios, tests each scenario against competing domain statements and concludes that the time has come to re-visit the individual as entrepreneur.

INTRODUCTION

In 1988, Gartner, published an article in American Journal of Small Business titled *'Who Is an Entrepreneur?' Is the Wrong Question* (Gartner, 1988). The article called for a sea change in the direction of entrepreneurship research away from the study of entrepreneurial personality traits towards the study of organization emergence. Gartner (1988, p.21) claimed that previous indicative definitions of entrepreneurship led to disagreement about the nature of the phenomenon being studied and called for acceptance of a functional definition of entrepreneurship. Gartner (1988, p.26) proposed the definition: "Entrepreneurship is the creation of new organizations". The article has been widely cited in the entrepreneurship literature and a number of researchers have successfully used the Gartner definition to simplify and thus operationalize the constructs 'entrepreneur' and 'entrepreneurship' in empirical studies (Chrisman et al., 1990; Cooper et al., 1997; Gatewood et al., 1995).

However, Gartner's definition has been criticized for narrowing (Katz, 1992, p.31; Lumpkin & Dess, 1996, p.162) and de-contextualizing (Bruyat & Julien, 2001, p.171; Reynolds, 1991, p.47) entrepreneurship as a field of investigation. Van de Ven (1993, pp. 212-214) criticized both the study of personality traits and the study of entrepreneurial behaviors as inadequately covering the process of entrepreneurship in the context of its social, economic and political infrastructure. The last decade has extended the focus of entrepreneurship research to include entrepreneurial behavior, opportunity recognition, choice of organizational form and the importance of the social environment (Ucbasaran et al., 2001, p.69). However, the larger challenge of linking entrepreneurship research to the rest of the social sciences has largely been ignored. Low (2001) has suggested that:

> *Providing insight into the link between micro-level entrepreneurial action and macro-level economic progress is a potentially huge intellectual contribution of our field* (Low 2001, p.20).

Low (2001, p.24) is suggesting that entrepreneurship scholars need to absorb some of their own teaching (i.e. become entrepreneurial) so that entrepreneurship research can influence academics in other fields.

A more important criticism of Gartner's definition could be that it has not significantly changed the nature of entrepreneurship research. What entrepreneurship researchers have been doing, by and large, has been collecting survey information using questionnaires. This observation is confirmed by a number of state of the art of entrepreneurship research articles written between 1982 and 1997 (Aldrich, 1992; Aldrich & Baker, 1997; Churchill & Lewis, 1986; Paulin et al., 1982; Wortman, 1986) as well as by a similar study done in 2001 (Chandler, 2001). These studies classified research presented at the Babson Kauffman Entrepreneurship Research Conference (BKERC) and articles published in the top entrepreneurship journals by their subject matter and research methodologies. Brief comments on the prevailing methodology found in each of these studies are summarized in Table 1.

As Table 1 shows, these studies have all described the administration of questionnaires as the dominant method of data collection amongst entrepreneurship researchers. Research based upon questionnaire surveys faces the difficulty of concise measurement. Entrepreneurship, as it has been described in the literature, is about contingency (Sarasvathy, 2002, p.106), creation (Meyer et al., 2000), market pioneering (Covin et al., 2000, p.177), newness (Gartner & Brush, 1999, p.7) and organization initiation (Aldrich & Martinez, 2001, p.42). These constructs do not lend themselves to the linear measurement of surveys and questionnaires (Bygrave, 1989, p.28).

This paper investigates whether or not "Who is an entrepreneur?" is still the wrong question. The paper poses two research questions: (1) "Is entrepreneurship limited to the business context?" and (2) "Can concepts from the field of entrepreneurship be applied to other fields of endeavor such as the arts, science, social development?" In answering these questions, the author calls for adoption of a more inclusive definition of entrepreneurship, suggesting a broad definition: "Entrepreneurship involves individuals and groups of individuals seeking and exploiting economic opportunity."

The paper reviews the literature defining the domain of entrepreneurship including the proposed new definition. The paper develops a number of scenarios, tests each scenario against competing domain statements and discusses the contribution entrepreneurship literature could make to other disciplines.

Table 1: Summary of Entrepreneurship Research Design Studies

Article Title	n	Findings
"Entrepreneurship research: Methods and directions"	81	"Sample survey was by far the most common entrepreneurship research strategy, employed in 64 % of the sampled studies." (Paulin et al., 1982, 357)
"A unified framework, research typologies and research prospectuses for the interface between entrepreneurship and small business"	51	"Throughout these studies, the use of mail questionnaires and interviews with structured or non-structured schedules is the overwhelming type of research methods used by most researchers." (Wortman, 1986, 277)
"Entrepreneurship research: Directions and methods"	298	"An examination of the methodologies utilized in the research studies shows a preponderance (77%) of observational and contemplative theory building and surveys and few (less than 4%) field studies." (Churchill & Lewis, 1986, 345)
"Methods in our madness? Trends in entrepreneurship research"	322	"Investigators still relied heavily upon nonsystematic methods of data collection, and when they ventured out to collect data, they depended heavily upon surveys." (Aldrich, 1992, 199)
"Blinded by the cites? Has there been progress in entrepreneurship research?"	528	"Research design and sources of data have not changed very much over the past 15 years, other than a decisive break with journalistic and armchair methods by the journals after 1985."(Aldrich & Baker, 1997, 383)
"Issues of research design and construct measurement in entrepreneurship research: The past decade"	416	"Seventy five percent of the empirical papers used primary data. Of the studies using primary data, 66% used paper surveys, 25% used interview methodologies, 3% used phone interviews, 4% used experiments. Only four studies (2%) used participant observation." (Chandler & Lyon, 2001, 104).

LITERATURE REVIEW

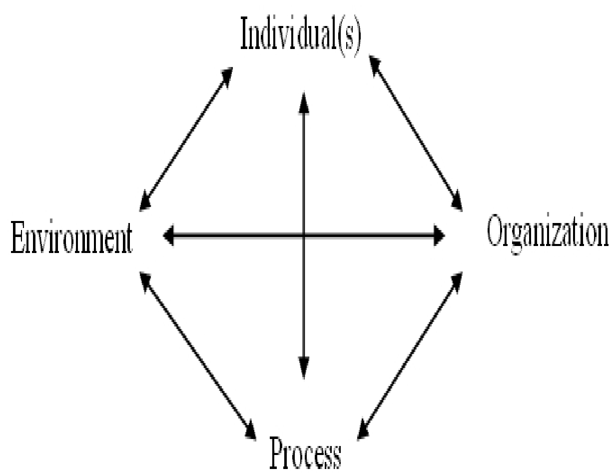
A constant in the nature of entrepreneurship research has been the fluidity of the boundaries of the domain. Entrepreneurship has welcomed studies from economics (Casson, 1982), sociology (Thornton, 1999), anthropology (Dana, 1995), psychology (Carsrud & Krueger, 1995), political science (T. Homer-Dixon, 1995) and the arts (Hoving, 1993). The field has been so inclusive as to be called a potpourri (Low, 2001, pp.20-21). The most frequently cited definitions of the domain of entrepreneurship are reviewed in this section.

Gartner (1988) Domain Definition

"Entrepreneurship is the creation of new organizations"

The research framework proposed by Gartner (1985) considered entrepreneurship within the perspective of four variables: individuals (the person(s) involved in starting new organizations), processes (the actions undertaken to start a venture), organizations (the kind of firm that is started) and environment (surrounding and influencing the new venture). This framework is depicted in Figure 1

Figure 3



Gartner's (2001) insistence that entrepreneurship is about organizing effectively limited the domain of entrepreneurship to activities that occur up to and including the launch of the new business. This organizing phase has been characterized as "elaborate fictions of proposed possible future states of existence" (Gartner et al., 1992, p.17); a characteristic which distinguishes it from other forms of organizational behavior or business management. In setting out this domain definition, it was Gartner's (1988, p.28) intent to limit and thus provide cohesion to the field of entrepreneurship research.

Venkataraman (1997) Domain Definition

> *Entrepreneurship as a scholarly field seeks to understand how opportunities to bring into existence 'future' goods and services are discovered, created and exploited, by whom, and with what consequences.*

Venkataramann (1997) attempted to establish the boundaries of entrepreneurship in an article titled *The Distinctive Domain of Entrepreneurship Research* by proposing the above definition. Venkataraman's discussion of this domain definition centered around two principal concepts: how individuals recognize opportunity and how they exploit opportunity (Shane & Venkataraman, 2000).

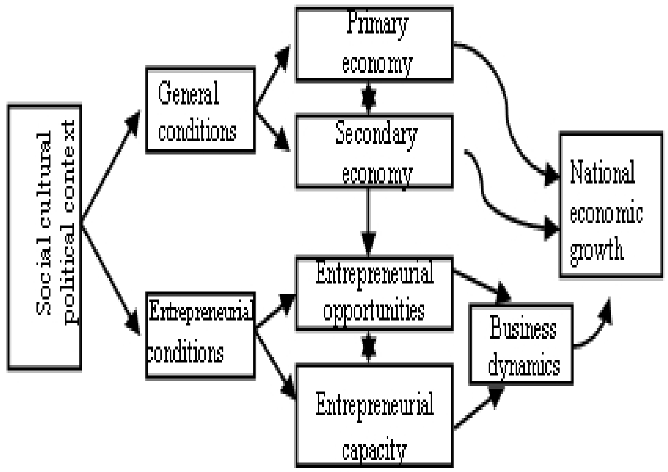
A research framework proposed by Reynolds, Hay and Camp (1999) parallels the Venkataraman domain definition. This framework was the result of a long-term multinational research initiative undertaken by Babson College and the London Business School beginning in 1997 (Reynolds et al., 1999, p.3). The project seeks to gain understanding of the complex relationship between entrepreneurship and economic growth. The Reynolds et al (1999) framework attempts to place entrepreneurial processes in the context of the economies of a number of nations. This framework is depicted in Figure 2.

The Reynolds et al (1999) framework contextualizes the capacity and the consequences of entrepreneurial activity and shows the relationship of this activity to the primary and secondary economies of a nation. The framework, however, can be criticized for only being inclusive of commercial activity. Non-commercial activity (barter, reciprocal exchange, domestic economics and social economics) is excluded from this framework.

Entrepreneurship Division (2002) Domain Definition

> *The Entrepreneurship Division's domain is the creation and management of new businesses, small businesses and family firms, as well as the characteristics and special problems of entrepreneurs. The Division's major topic areas include: new venture ideas and strategies, ecological influences on venture creation and demise, the acquisition and management of venture capital and venture teams, self-employment, the owner-manager, and the relationship between entrepreneurship and economic development.*

Figure 2



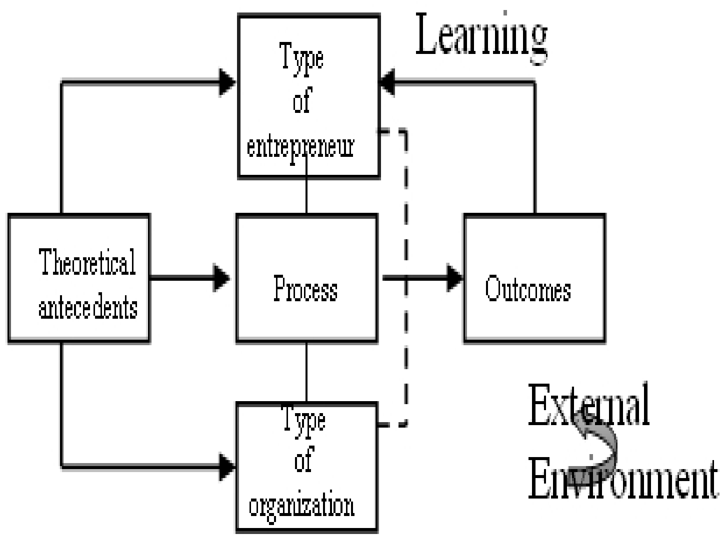
The Entrepreneurship Division of the Academy of Management has developed a domain statement that is a general reflection of the research definition proposed by Low and MacMillan (1988). At the 2000 mid-winter meeting of the Entrepreneurship Division, Dale Meyer proposed a domain statement more in line with the Venkatamaran domain definition (Meyer et al., 2000). However, Meyer's proposal was not adopted. A research framework created by Ucbasaran, Westhead and Wright (2001, pp.58-59) graphically depicts the current Entrepreneurship Division domain. This framework is shown in Figure 3.

Gartner (2001, p. 30) has criticized the Entrepreneurship Division's definition as being too broad to allow an encompassing theory. However, Entrepreneurship Division's domain statement restricts entrepreneurship to commercial activity; the only non-commercial reference in the statement is the application of entrepreneurship to economic development.

The Ucbasaran et al (2001) framework centralizes the process of entrepreneurship (opportunity recognition and information search) within the context of its internal and external environment (Ucbasaran et al., 2001, p.61). The internal environment is divided on a social organization scale (types of entrepreneurs and types of organizations) and a temporal scale (antecedents and outcomes). Ucbasaran et al (2001, pp.63-66) noted that corporate entrepreneurship, franchising, family business and the purchase of existing organizations all are included in types of organizational forms. Ucbasaran et al (2001, p.67) addressed Van de Ven's

(1993, pp. 212-214) criticism that entrepreneurship research inadequately covers the context of entrepreneurship's social, economic and political infrastructure by including the external environment for entrepreneurship.

Figure 3



Proposed Framework

> *Entrepreneurship involves individuals and groups of individuals seeking and exploiting economic opportunity.*

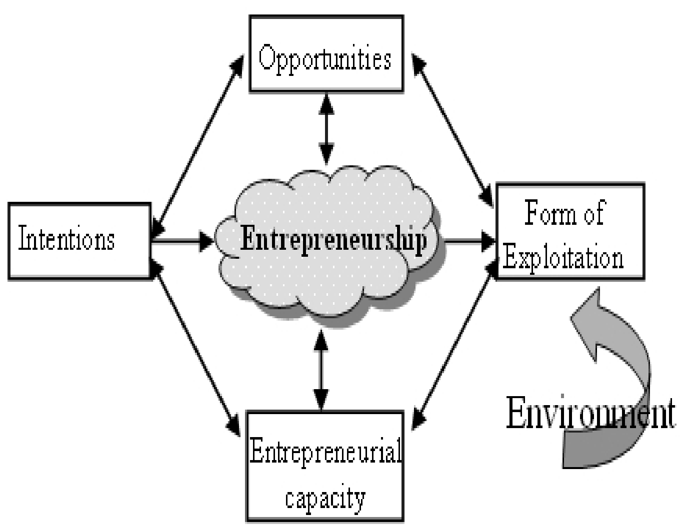
This paper proposes an alternative framework which positions the process of entrepreneurship as economic acts of individuals within the broad context of the social, political and economic environment.

Cuff (2002) has described the organizational turn of entrepreneurship. This turn involves a shift in the emphasis of entrepreneurship study away from the study of individual artists to the study of organizations (Cuff, 2002, pp.124-125). This shift is particularly apparent in the two views that Shumpeter held of entrepreneurship. Shumpeter's (1934) first view of entrepreneurship was that of an individualist occupation. However, his later (Schumpeter, 1975) work embedded entrepreneurship within the context of organizational change.

This paper suggests that a definition centered on the actions of the individual be used as a contrast to organization-based definitions set out by Gartner, Venkataraman and the current Academy of Management, Entrepreneurship Division domain statements. The definition suggested in this paper is: "Entrepreneurship involves individuals and groups of individuals seeking and exploiting economic opportunity." This definition sees entrepreneurship as a process is influenced by opportunities in the environment as well as by the intentions and capacity of the individuals or groups seeking to exploit opportunities. Entrepreneurial capacity both influences and is influenced by the intentions of the actors, the process of entrepreneurship and the form of exploitation exhibited. Entrepreneurial capacity refers to a kind of human capital (Otani, 1996) which comprises the set of knowledge resources (Alvarez and Busenitz, 2001) and skills (Hindle, 2005) that are essential for an opportunity to be realized (Lumpkin and Dess, 1996), combined with the motivation do so (Reynolds et al., 1999, p. 21; Hindle, 2005).

Similarly, the nature of opportunities both influences and is influenced by the intentions of the actors, the process of entrepreneurship and the form of exploitation exhibited. The framework associated with this definition is set out in Figure 4.

Figure 6



METHODOLOGY

This paper utilizes multiple scenario analysis to examine the viability of each of the definitions presented in the previous section. Multiple scenario analysis is a useful heuristic for examining fundamental uncertainties (Schoemaker, 1993, p.194). Good scenarios have been shown to be useful in providing insight into complex phenomenon such as the analysis of future trends (Wack, 1985, p.2) and the resolution of uncertainty (Wack, 1985, p.73). Scenarios provide a consistent storyline for the analysis of the underlying reality (Van der Heijden, 1996, pp.212-213) and a way of testing concepts in new situations (Kolb, 1984, p.21). This paper develops seven scenarios that contain qualities, which could be generally described as entrepreneurial, and tests them to see if each scenario falls within each of the domain statements outlined in the previous section. The purpose of this testing is to gain understanding of the limitations imposed by each of the domain statements.

Scenario 1: Starbucks Coffee

In early 1971, Gordon Bowker, Jerry Baldwin and Zev Siegl opened a store near Seattle's Pike Place Market that roasted and sold quality specialty coffee as well as bulk tea, spices and supplies. The company was named Starbucks Coffee, Tea and Spice. By 1981, the company had expanded to 5 retail locations, and had 85 employees. Howard Schultz, sales manager of Hammerplast, a company which distributed Melitta coffee filters, visited Starbucks curious to see why this little Seattle company was his largest client. In 1982, Schultz joined the firm as Director of Operations and Marketing. By September 30, 2001 Starbucks Corporation had 4900 locations worldwide, and revenues exceeding $4 billion dollars. (Koehn, 2001; Schultz, 2001).

Scenario 2: Howard Head

In 1947, an aircraft designer named Howard Head applied aircraft construction techniques developed during World War II to develop a ski that did not break. In 1948 Head asked professional skiers at Stowe, Vermont to test six pairs of hand-made prototype metal skis. All six pairs broke. Head persevered, and produced a metal ski that not only was durable, but proved to have superior turning and tracking properties. The start-up of Head Ski Company in 1950 was financed with $6,000 of Howard Head's own money. Head skis initially sold for $75, more than three times the price of competing wood skis. However, new skiers were attracted to the way Head skis improved their skiing. By 1954, the output of the Head Ski Company was 8,000 skis. By 1960, when the company went public, sales were over $3 million dollars (Christensen & Stevenson, 1967).

Scenario 3: Westwind Hardwoods

In 1978, cabinetmaker Ove Nielsen and his son Jan Nielsen began a business in Victoria, B.C. manufacturing teak, mahogany and oak marine furnishings such as bookshelves and binocular holders. Westwind Woodwork proved to be a marginal business and the Nielsens supplemented their income by re-selling lumber from their inventory. In 1984, when Ove's other son, Lars, joined the company, a decision was made to sell the manufacturing business and concentrate on marketing quality lumber. Funds from the sale of the manufacturing operations were invested in the new company, re-named Westwind Hardwoods Inc. In 1994, Ove retired from the company, leaving the two sons as partners in this family venture. The company provides stable income for the two brothers and an additional four part-time employees (Nielson, 2001).

Scenario 4: Harley Davidson

In 1902, William S. Harley and Arthur Davidson built a motor-driven bicycle for their own personal use and discovered a demand for the product. In 1907, the Harley-Davidson Motor Company was incorporated. By 1920, it had become the largest motorcycle manufacturer in the world. In the 1960's, Harley-Davidson diversified into the production of boats and golf carts but was unprepared for the invasion of the American motorcycle market by price competitive Japanese manufacturers. In 1967, the company was purchased by Bangor-Punta. In 1969, Bangor-Punta sold Harley-Davidson to American Metal Foundries (AMF). In 1981, a group of thirteen Harley-Davidson executives purchased the assets of the now unprofitable Harley-Davidson Motor Company and began the difficult process of turning the builder of American icons into a profitable venture in the face of stiff competition from Honda and Yamaha. Vaughn Beals, the new CEO cut the workforce by 40% to reduce manufacturing costs, and developed new products to increase volume. However, his most important decision was to align the company with its loyal customers. In 1983 the Harley Owners Group (HOG) was formed as a way to exploit the patronage value of its customers. Five years later, Harley-Davidson took its stock public, a profitable re-vitalized company. By 1999 HOG had a membership of half a million riders, half of whom participate in at least one HOG event each year. Harley-Davidson currently estimates the annual value of each active HOG member at $9000 based on new vehicle purchases, parts, accessories and general merchandise (Fournier et al., 2000; Teerlink, 2000).

Scenario 5: Rylstone and District Women's Institute Calendar

The National Federation of Women's Institutes is the largest women's organization in the UK. Each year, the head office asks for photographs from members for the traditional WI calendar. In 1998, the Rylestone and District WI's members decided to create an alternative WI calendar, one which depicted the crafts of the Women's Institute with the middle-aged Rylstone and District members posing in the nude. The funds from this non-traditional calendar went to the Leukaemia Research Fund in support of one of the member's husband, who was dying of non-Hodgkins lymphoma. The 1999 calendar raised over $1 million. Media coverage and a film by Disney have greatly heightened awareness of the Leukaemia Research Fund. The success of this project, and media attention surrounding it has spawned a number of similar projects among social organizations (Barton, 2001).

Scenario 6: RVing Seniors

In 1978, the husband and wife anthropology team, Dorothy and David Counts, had a chance encounter with an elderly couple who lived full time in a motor home. Twelve years later, the Counts were forced to abandon their fieldwork in Papua New Guinea due to the unstable political situation in that country. As they looked for a new research site, they thought about elderly people living in Recreation Vehicles (RVs). The result was an ethnographic study of RVing seniors in North America, and an eight-year commitment to winter RVing (Counts & Counts, 2001).

Scenario 7: Recording in Extraordinary Places

In 1966 Paul Horn was a jazz musician without a hook. His talent was obvious: he had played with Miles Davis, 'Cannonball' Adderly, and Tony Bennett. His training was superb: Washington College of Music, Oberlin Conservatory and a Masters degree from the Manhattan School of Music. Nevertheless, Horn felt his 'star' potential was unfulfilled. In 1966, Horn became involved with Transcendental Meditation and, while studying in India, made a solo flute recording in the Taj Mahal. Inside the Taj Mahal sold over a million copies. Horn followed up with recordings from the Great Pyramid of Giza, the Temple of Heaven in Beijing and Kazamieras Cathedral in Lithuania. The 'sound' of each of these great sites provided the hook Paul horn needed to launch his solo career (Horn & Underwood, 1990).

DATA ANALYSIS

Each of the seven scenarios is examined against each of the research frameworks to determine its acceptability as entrepreneurial activity. Acceptability is rated "yes", "no" or "maybe" for each scenario.

1. Starbucks represents a classic version of new entry. The specialty coffee market had already been established by companies such as Alfred Peetz's (Koehn, 2001, p.5), and competition

existed in Seattle at the time. However, Starbuck's founders, Bowker, Baldwin and Siegl recognized the disequilibrium between supply and demand in the economy, and used this opportunity as the basis of a new venture. The scenario would be acceptable as entrepreneurship in all frameworks.

2. Howard Head represents the archetype of the entrepreneur as innovator. He invents a new product, and successfully brings it to market. Again, this scenario would be acceptable as entrepreneurship in all scenarios.
3. Westwind Hardwoods is representative of a small, family business. While the initial development of this business would qualify as entrepreneurial under the Gartner (1985) framework, the re-organization and ongoing operations would not be considered entrepreneurial. All the other frameworks would consider all aspects of this scenario acceptable as entrepreneurial activity.
4. Harley-Davidson through the second half of the twentieth century is representative of corporate entrepreneurship. The company in all of its forms would be considered a part of the primary economy, and thus the turn-around would not be considered entrepreneurship in the Reynolds et al. (1999) framework. The Gartner (1985) framework would also reject this scenario, since the turn-around does not involve the organization of a new venture. The other two frameworks would consider this scenario acceptable as entrepreneurial activity.
5. Rylstone and District Women's Institute Calendar is representative of social entrepreneurship. Again, the Gartner (1985) framework would also reject this scenario, since the turn-around does not involve the organization of a new venture. The Reynolds et al. (1999) framework would call the fund-raising portion of the venture entrepreneurial, but would discount the awareness-raising outcome as non-entrepreneurial, since it was not commercial in nature. The other two frameworks would consider this scenario acceptable as entrepreneurial activity.
6. RVing Seniors is meant to be representative of entrepreneurship in the process of scientific inquiry. The Gartner (1985) framework would reject this scenario as entrepreneurial since it does not involve the organization of a new venture. The Ucbasaran et al. (2001) framework might accept this as a variant of social entrepreneurship. The Reynolds et al. (1999) framework would reject this scenario since it was not commercial in nature. The proposed framework would accept this scenario because it involves the exploitation of economic opportunity. Economic activity, in this definition traces back to the root of the word economy: the management of household or private affairs.
7. Recording in Extraordinary Places is representative of artistic innovation. Again, the Gartner (1985) framework would reject this scenario since it does not involve the organization of a new venture. The Ucbasaran et al. (2001) framework would also reject this scenario since the business aspect of this artistic discovery is secondary. The Reynolds et

al. (1999) framework would accept only the part of this scenario that is commercial in nature. The proposed framework would accept this scenario.

The results of the scenario testing of each domain definition are summarized in Table 2. These results provide evidence that the proposed definition is more encompassing than the Gartner (1988) domain, the Venkataraman (1997) domain or the Entrepreneurship Division (2002) domain. Further testing is recommended to confirm this initial finding, and to determine the boundaries of this definition.

Table 2: Summary of Scenario Testing

	Gartner (1988) Domain	Venkataraman (1997) Domain	Ent. Division (2002) Domain	Proposed Domain
	Gartner (1985) Framework	Reynolds et al. (1999) Framework	Ucbasaran et al. (2001) Framework	Proposed Framework
Starbucks Coffee	Yes	Yes	Yes	Yes
Howard Head	Yes	Yes	Yes	Yes
Westwind Hardwoods	Maybe	Yes	Yes	Yes
Harley Davidson	No	No	Yes	Yes
Rylstone and District Women's Institute Calendar	No	Maybe	Yes	Yes
RVing Seniors	No	No	Maybe	Yes
Recording in Extraordinary Places	No	No	Maybe	Yes

DISCUSSION

The primary advantage that adoption of an encompassing definition, such as the one proposed in this paper, would bring to the current field of entrepreneurship is the inclusion of a multitude of forms of opportunity exploitation. This inclusiveness is likely to bring new insights into the process of entrepreneurial discovery and exploitation. Acceptance of the proposed domain definition would allow the field to grow beyond the bounds of a branch of business management. However, these advantages come at a price. The potential disadvantage of such an encompassing definition could be a return to the earlier criticism of entrepreneurship as "a broad label under which a hodgepodge of research is housed" (Shane & Venkataraman, 2000, p.217).

In spite of its potential disadvantage, adopting an encompassing definition would assist other fields of endeavor such as the arts, science and social development, which seek to apply concepts from the field of entrepreneurship. A few of these applications include intentions, opportunities and entrepreneurial capacity and are discussed in the following paragraphs.

Intentions

Since entrepreneurs enact, in Gartner's (1992, p. 17) words "elaborate fictions of proposed possible future states of existence", the study of entrepreneurship has developed a strong literature on the nature of entrepreneurial intentions (Bird, 1988; Boyd & Vozikis, 1994; Krueger et al., 2000) and how these intentions are operationalized (Bird, 1988; Chrisman, 1997; Krueger, 1993). This research has developed models explaining the determination of feasibility and desirability to act in situations of opportunity (Krueger, 1993, p.15) and the effects of self-efficacy on perceptions of opportunity (Krueger & Dickson, 1994, p.392).

Understanding the influence intentions have on entrepreneurial behavior is important in any field that engages in social change. Dana (1995, pp.68-69) found evidence of links between opportunity perception and culture in a sub-Arctic community, suggesting that entrepreneurship is not a function of opportunity but rather is a function of the perception of opportunity. It follows that increasing the perception of opportunity in a community will increase the level of entrepreneurship in that community. The relationship between entrepreneurship and economic development is well developed in the economic literature (Casson, 1982; McClelland, 1961; Schumpeter, 1934). Entrepreneurial profits accruing to individuals tend to be short-term, while the economic gains accruing to society from entrepreneurial activity tend to be long-term (Rumelt, 1987). Increased understanding of entrepreneurial intentions can strengthen the benefits of entrepreneurship accruing to society while serving individual self-interests (Cornwall, 1998, p.144). The practical application of this strategy can be seen in the success of community micro-credit programs (Servon, 1999, pp.10-13).

Opportunities

A number of studies in the field of entrepreneurship have focused on the nature (Aldrich & Waldinger, 1990; Hills & Shrader, 1998; Krueger et al., 2000), process (Singh et al., 1999) and timing (Ropo & Hunt, 1995; Shane, 2000) of opportunities. These studies have shed light on opportunity recognition, a process that previously was considered embedded in the nature of gifted individuals (Granovetter, 1985). A clear understanding of what constitutes an opportunity is fundamental to the process of entrepreneurship. Mark Casson (1982, pp.57-58) has characterized opportunities as dissimilarities of information that cause misallocation of resources. Entrepreneurs discover opportunities because they have superior information processing ability or scanning techniques than other people (Shaver & Scott, 1991, p.33).

Understanding of the process of opportunity identification is useful in shedding light on ethical problems associated with the acceptance of innovation (Dees & Starr, 1992, p.100) and understanding the use of powers of persuasion to overcome the resistance to change (Rogers, 1995, pp.272-274). Similarly, an understanding of the process of adoption of new technology (C. M. Christensen, 1997; von Hippel, 1988) is essential to the process of commercialization of scientific discovery (Samsom, 1990, p.4). Understanding the nature of opportunities can serve scientific development by uncovering ethical, process and societal issues surrounding the adoption of new technology.

Entrepreneurial Capacity

Fundamental to research into the process of entrepreneurship is a desire to increase entrepreneurial capacity. Increased entrepreneurial capacity has been found to be associated with a focus on the future (Baron, 1998, p.286), parsimonious planning and analysis (Bhide, 1994, pp.157-159; Lumpkin et al., 1998, p.6), and the maintenance of a positive attitude through avoidance of counterfactual thinking (Baron, 1999, p.86). Techniques from a number of business management areas have been adapted to increase entrepreneurial capacity: business planning (Covello & Hazelgren, 1995; Touchie, 1989), risk management (Brockhaus, 1980; Dickson & Giglierano, 1986; McGrath, 1999) and networking (H. Aldrich & Zimmer, 1986; Stewart, 1989).

Political scientist, Thomas Homer-Dixon (1995), claims increasing entrepreneurial capacity is an important challenge facing today's society. Homer-Dixon (2000, pp.101-120) has called for increased social ingenuity to solve the increasing complexity and inter-dependency of the global political climate. Homer-Dixon's (2000, p.21) definition of ingenuity: "ideas applied to solve practical technical and social problems", is a construct parallel, if not identical to, the broad definition of entrepreneurship developed in this paper. Understanding of entrepreneurial capacity can serve political institutions by developing new and practical solutions to social problems.

CONCLUSION

This paper addressed two basic questions: Is entrepreneurship limited to the business context? Can concepts from the field of entrepreneurship be applied to other fields of endeavor such as the arts, science, and social development? Based on the alternative framework of entrepreneurship we have presented and tested using multiple scenario analyses, we suggest that entrepreneurship should not be viewed exclusively to business contexts. Further, we suggest that entrepreneurship concepts can be used to study phenomena in other disciplines.

A maxim from the practice of entrepreneurship is that it is better to have a small piece of a large pie than to hold on to a large piece of a small pie (Timmons, 1999, p.229). This paper suggests that the time has come for entrepreneurship scholars to follow this maxim by increasing the size of the entrepreneurship research 'pie'. The advantage of doing so is the opportunity to make a significant intellectual contribution to other fields of endeavor such as the arts, science and social development. To accomplish this, entrepreneurship researchers must be prepared to share custody of the domain of entrepreneurship research. Perhaps '*Who is the entrepreneur*?' is no longer the wrong question.

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BUSINESS FAILURE RATES: A LOOK AT SEX AND LOCATION

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ABSTRACT

Business failure rates can be difficult to analyze due to the variety of reasons a small business owner may terminate his or her business (retirement, sold business, bankruptcy, etc.).

This study provides further insight into business failure rates by examining data from the US Census Bureau, which investigated survey participants' business ownership over time. In particular, men's and women's rates for bankrupty/business failure are compared. Chi-square analyses performed on the data show that men were more likely to have remained in their businesses. However, among those who had separated from their businesses, women were less likely to name bankruptcy or business failure as the reason for termination.

INTRODUCTION

Business failures are an important aspect of the economy to study, but they are difficult to analyze due to varying definitions of business failure, varying causes business termination, and the lack of comprehensive data. These problems are likely one reason that some studies (Boden & Nucci, 2000; Du Rietz & Henrekson, 2000, Watson, 2003) have determined that women-owned businesses are more likely to be discontinued, while others (Cooper, Gimeno-Gascon, & Woo, 1994; Kalleberg & Leicht, 1991) have not found significant sex-based differences in failure rates.

This study attempts to provide additional insight into business failures by using the U.S. Census Bureau's Survey of Income and Program Participation (SIPP) to compare the rates at which women and men discontinued their businesses during a series of four-month periods and the proportion of business owners whose businesses were terminations due to bankruptcy. The data are then further examined to determine if these rates vary based on location (metropolitan versus non-metropolitan). The following section briefly reviews the literature on rural business issues and business failures, especially in regard to women-owned businesses. The methodology, results and analysis are then presented.

BUSINESS FAILURE AND BANKRUPTCY

Business failure rates are difficult to study because of the variety of factors that influence business owners to discontinue their operations, such as retirement, sale of the business, bankruptcy, etc. Further complicating the issue is the question of how to define business failure (see Watson & Everett, 1993, 1996). While a business that ends in bankruptcy is no doubt a business failure, other unprofitable businesses may be terminated before bankruptcy, but would probably be best categorized as a failure. In contrast, a highly profitable business that is sold may be counted among business failures as would business that stopped because the owner sold the business, retired, started school full time, etc., if all businesses that do not continue with the same owner are counted among business failures.

Some studies (Boden & Nucci, 2000; Du Rietz & Henrekson, 2000, Watson, 2003) have determined that women-owned business have higher discontinuance rates. One suggested reason for this is that women tend to have a higher proportion of the businesses in industries with lower return rates, such as services and retailing (Watson, 2003). Another reason is that women tend to have younger businesses, while older, more established businesses are more likely to have lower termination rates (Rosa, Carter, & Hamilton, 1996). Multiple demands on many women's time reduce the time they can devote to business (Fasci & Valdez, 1998, Birley, 1989). Women may also, on average, be more risk averse (Anna, Chandler, Jansen & Mero, 1999; Cooper, 1993) and less concerned with financial gain (Rosa, Daphne, & Helen, 1994; Brush, 1992).

Another factor that could be related to business failures is location. A variety of studies (Beggs, Haines & Hurlbert, 1996; Frazier & Niehm, 2004; Fendley & Christenson, 1989; Kale, 1989; MacKenzie, 1992; Mueller, 1988; Small Business Administration [SBA], 2001; Tigges & Green, 1994; Trucker & Lockhart, 1989) have found that rural areas are economically disadvantaged due factors such as low levels of business development and limited work opportunities. The scarcity of affordable professional services combined with smaller, poorer markets make non-metropolitan areas especially challenging to entrepreneurs (Chrisman, Gatewood, & Donlevy, 2002; Fendley & Christenson, 1989; Kale, 1989; Lin, Buss, & Popovich, 1990; SBA, 2001; Tigges & Green, 1994; Trucker & Lockhart, 1989). Such difficulties could lead to higher business discontinuance rates.

Another issue is financing. The mergers of small banks with larger ones, a common phenomenon now, can make it more difficult for small rural businesses to gain financing (Chrisman et al., 2002; Green & McNamara, 1987; SBA, 2001). As with women who experience difficulty in obtaining financing, rural business owners may have lower bankruptcy rates when the business is terminated if the business owner did not have a high level of debt, although this lack of financing may have contributed to the discontinuance.

Other factors associated with rural areas such as the strong social networks, low costs, and a unique way of life, could, in contrast, translate into fewer business terminations. In studies (Robinson, 2002; Robinson & Janoski, 2005) restricted to individual states, non-metropolitan counties were found to have business separation rates that were equal to or lower than metropolitan counties. Studying business owners in South Dakota, Tosterud and Habbershon (1992) found that many of those people were born in the vicinity and had started businesses in order to remain there. It is possible that such business owners would have lower business termination rates as they might be willing to endure greater hardships to stay in business. However, if the economic challenges of starting and succeeding in a rural business outweigh the benefits, business separations rates could be higher.

This study further examines business failure rates by comparing the rates at which men and women stay in business during a given period, and the proportion of business terminations that are due to bankruptcy. For the purposes of this study, the fact that a person previously had, but no longer has, a given business shall be referred to as a business separation, termination or discontinuance. Only those businesses that ended in bankruptcy will be referred to as business failures.

METHODOLOGY, RESULTS AND ANALYSIS

This study used data from the US Census Bureau's 2001 Supplemental Income and Program Participation (SIPP) survey, in which participants were interviewed by phone or personal visit every four months from February 2001 to June 2003. Approximately 36,000 households were included in the study, with everyone over age 15 being interviewed each time. Over 360,000 people were included in the first wave (round of interviews).

During each wave respondents were asked a variety of questions pertaining only to the previous four month period. Questions included, "Do you still own your business?" This question was asked of those who initially indicated they were business owners and only people who owned a business sometime during the course of the survey were included in this study. In the first wave, this included 21,432 people, 412 of whom had discontinued their businesses in the previous four months. The total number of respondents decreased in each wave as respondents could not be interviewed or had become ineligible for the survey (had joined the service, had become institutionalized, or no longer lived with a core respondent). In wave nine, 705 out of 17,161 who had had a business during that wave’s time period had terminated their businesses. However, this is not to say that 16,456 people kept their businesses for the duration of the entire study because each wave asked only about the last four months.

Those who stated that they no longer owned their businesses were asked the reason for the separation from their businesses. An advantage of the SIPP is this ability to distinguish bankruptcies from businesses separations that were attributable to other causes. A limitation of this current study is that it does not link the nine waves and therefore cannot present data regarding the number of businesses that survived during the entire nine waves of the SIPP survey. Future research will address this issue. In addition, business size was not determined. However, given that 99% of all businesses are small, the study will refer to the respondents as small business owners. Because the unit of analysis is the individual, a family business could count more than one time as each person who was involved in a business would be included in the sample.

In Table 1, the percentages of businesses that were discontinued during the four months of each wave are presented. Table 2 shows the percentage of those with discontinued businesses who experienced bankruptcy (bankruptcies divided by discontinued businesses). Chi-square analyses were conducted to determine if there was an association between sex and business separation or bankruptcy, and means tests (Mann-Whitney U) were performed to compare the averages.

Table 1: Proportions of Discontinued Businesses

All Respondents					
Wave	Total	Men	Women	Chi-sq/M-WU	Sig.
1	1.9%	1.7%	2.3%	8.37	.004**
2	3.3%	2.3%	5.1%	100.63	.000***
3	4.6%	3.8%	5.9%	44.18	.000***
4	3.9%	3.2%	5.1%	39.51	.000***
5	4.4%	3.5%	5.9%	54.82	.000***
6	4.4%	3.3%	5.5%	54.72	.000***
7	3.8%	3.6%	4.0%	1.32	.250
8	3.2%	2.6%	4.2%	8.34	.004**
9	4.1%	3.4%	5.4%	42.25	.000***
Ave.	3.7%	3.0%	5.0%	36.5	.000***
* sig. p<.05; ** sig. p<.01; *** sig. p<.001					
Metropolitan					
Wave	Total	Men	Women	Chi-sq/M-WU	Sig.
1	2.0%	1.8%	2.4%	5.92	.015*
2	3.2%	2.3%	4.9%	10.20	.001***
3	4.8%	3.9%	6.4%	67.58	.000***
4	3.8%	3.1%	5.1%	46.52	.000***
5	4.2%	3.4%	5.6%	33.18	.000***
6	4.0%	3.1%	5.6%	38.33	.000***
7	4.0%	4.2%	3.6%	47.95	.000***
8	3.1%	2.7%	3.9%	23.91	.122
9	4.5%	4.0%	5.3%	3.54	.060
Ave.	3.7%	3.2%	4.8%	12.50	.013*
* sig. p<.05; ** sig. p<.01; *** sig. p<.001					

Table 1: Proportions of Discontinued Businesses					
Non-metropolitan					
Wave	Total	Men	Women	Chi-sq/M-WU	Sig.
1	1.8%	1.6%	2.2%	2.36	.124
2	3.6%	2.5%	5.8%	34.30	.000***
3	3.9%	3.7%	4.4%	1.38	.240
4	4.1%	3.6%	5.3%	7.23	.007**
5	4.8%	3.9%	6.6%	17.39	.000***
6	4.3%	3.7%	5.5%	8.47	.004**
7	3.2%	2.2%	5.1%	27.49	.000***
8	3.4%	2.4%	5.2%	1.14	.012*
9	3.3%	1.7%	7.0%	74.02	.000***
Ave.	3.6%	2.8%	5.2%	6.50	.003**
* sig. p<.05; ** sig. p<.01; *** sig. p<.001					

Analysis of the data clearly shows a difference in the rates at which men and women remain in their businesses. In 8 of the 9 waves, men had significantly lower rates of business separation, which also resulted in a lower average discontinuance rate. However, the men who terminated their businesses were significantly more likely to do so due to bankruptcy. Women's rates of bankruptcy where significantly lower in one-third of the waves, with the overall average also being significantly lower. Taken together, these results suggest that although women were less likely to continue on with their businesses, their businesses were less likely to end in bankruptcy.

One explanation for this phenomenon is that women, in general, tend to be more risk averse (Anna, Chandler, Jansen & Mero, 1999; Cooper, 1993). People who want to minimize risk are less likely to take on debt, which could logically lead to a reduced problem in repaying loans (i.e. bankruptcy). On the other hand, women may find it more difficult to obtain desired financing. In addition, if women start smaller businesses in industries that require little capital, they may be more likely to discontinue their businesses (Brush & Chaganti, 1999) given the fact that businesses requiring less capital have higher termination rates (Bruderl, Preisendorfer, & Ziegler, 1992; Hutchinson, Hutchinson, & Newcomer, 1938; Watson & Everett, 1996).

Anther potential explanation comes from researchers (Rosa, Daphne, & Helen, 1994; Brush, 1992) who have found that many women are less concerned with financial gain than are their male counterparts. If women started their businesses for reasons that were not primarily financial, they may also terminate them for non-financial reasons. For example, a business could be profitable without fulfilling the owner's primary goals, thus influencing the owner to discontinue the business.

To further investigate this issue, the data were broken down into two categories by location--metropolitan or residual (non-metropolitan or rural). Analysis of the data by location shows that the sex differences in the overall sample not only exist in each location, but also seem to be somewhat greater in the rural areas (Tables 3 and 4). While the non-metro men had the lowest average discontinuance rate of all groups, the non-metro women had the highest rates. While the smallest difference between men and women in both groups was 0.6 of a percentage point, the largest difference in the non-metro group was 5.3 whereas it was only 2.6 for the metro group.

Table 2: Proportion of (Former) Business Owners Whose Businesses Failed (Bankruptcy)

All Respondents					
Wave	Total	Men	Women	Chi-sq/M-WU	Sig.
1	6.2%	10.2%	0%	19.01	.000***
2	6.0%	5.7%	6.2%	0.08	.779
3	8.5%	7.9%	9.2%	0.40	.528
4	10.3%	15.2%	4.8%	20.34	.000***
5	11.2%	12.9%	9.5%	2.27	.132
6	7.2%	8.6%	5.7%	2.31	.128
7	9.7%	9.9%	9.5%	1.32	.250
8	9.4%	9.6%	9.1%	0.01	.920
9	8.5%	10.9%	5.9%	5.61	.018**
Ave.	8.5%	10.6%	6.3%	89.0	.021*
* sig. p<.05; ** sig. p<.01; *** sig. p<.001					
Metropolitan					
Wave	Total	Men	Women	Chi-sq/M-WU	Sig.
1	5.1%	8.9%	0%	10.20	.001***
2	5.4%	4.0%	6.6%	1.49	.222
3	9.1%	8.4%	9.9%	0.50	.482
4	10.4%	14.1%	6.5%	7.64	.006**
5	10.8%	12.7%	8.8%	2.27	.132
6	7.5%	10.5%	4.5%	6.94	.008**
7	11.0%	10.7%	11.6%	0.10	.755
8	11.9%	10.9%	13.0%	0.11	.741
9	5.9%	6.3%	8.9%	7.64	.006**
Ave.	8.6%	9.9%	7.1%	24.0	.145
* sig. p<.05; ** sig. p<.01; *** sig. p<.001					

Table 2: Proportion of (Former) Business Owners Whose Businesses Failed (Bankruptcy)					
Non-metropolitan					
Wave	Total	Men	Women	Chi-sq/M-WU	Sig.
1	8.3%	14.3%	0%	6.23	.013*
2	6.9%	10.1%	4.3%	2.29	.130
3	6.3%	6.8%	5.6%	0.10	.754
4	10.0%	17.7%	0%	17.11	.000***
5	12.3%	13.2%	11.3%	0.19	.664
6	6.5%	4.3%	9.4%	2.11	.146
7	5.4%	5.9%	5.1%	0.05	.827
8	2.6%	5.6%	0%	1.14	.285
9	17.5%	23.5%	14.0%	2.03	.154
Ave.	8.4%	11.3%	5.5%	18.0	.046*
* sig. p<.05; ** sig. p<.01; *** sig. p<.001					

Table 3: Same-Sex Comparisons by Location: Discontinued Businesses				
Men				
Wave	Metro	Non-metro	Chi-sq/M-WU	Sig.
1	1.8%	1.6%	0.72	.396
2	2.3%	2.5%	0.43	.513
3	3.9%	3.7%	0.19	.586
4	3.1%	3.6%	2.19	.369
5	3.4%	3.9%	1.82	.177
6	3.1%	3.7%	2.36	.047*
7	4.2%	2.2%	23.81	.000***
8	2.7%	2.4%	0.19	.503
9	4.0%	1.7%	31.90	.002**
Ave.	3.2%	2.8%	29.5	.331
* sig. p<.05; ** sig. p<.01; *** sig. p<.001				

Table 3: Same-Sex Comparisons by Location: Discontinued Businesses				
Women				
Wave	Metro	Non-metro	Chi-sq/M-WU	Sig.
1	0%	2.2%	0.24	.623
2	6.6%	5.8%	2.46	.117
3	9.9%	4.4%	9.34	.002**
4	6.5%	5.3%	0.10	.757
5	8.8%	6.6%	2.37	.124
6	4.5%	5.5%	0.01	.987
7	11.6%	5.1%	2.12	.145
8	13.0%	5.2%	6.77	.009**
9	8.9%	7.0%	4.81	.028*
Ave.	7.1%	5.2%	31.0	.401
* sig. p<.05; ** sig. p<.01; *** sig. p<.001				

Table 4: Same-Sex Comparisons by Location: Business Failure (Bankruptcy)				
Men				
Wave	Metro	Non-metro	Chi-sq/M-WU	Sig.
1	8.9%	14.3%	1.36	.243
2	4.0%	10.1%	4.02	.045*
3	8.4%	6.8%	0.30	.586
4	14.1%	17.7%	0.81	.369
5	12.7%	13.2%	1.82	.890
6	10.5%	4.3%	3.95	.047*
7	10.7%	5.9%	1.45	.229
8	10.9%	5.6%	0.45	.503
9	6.3%	23.5%	9.73	.002**
Ave.	9.9%	11.3%	38.0	.825
* sig. p<.05; ** sig. p<.01; *** sig. p<.001				

Table 4: Same-Sex Comparisons by Location: Business Failure (Bankruptcy)				
Women				
Wave	Metro	Non-metro	Chi-sq/M-WU	Sig.
1	0%	0%		
2	6.6%	4.3%	0.66	.417
3	9.9%	5.6%	1.30	.255
4	6.5%	0%	5.97	.015*
5	8.8%	11.3%	0.59	.444
6	4.5%	9.4%	2.91	.008**
7	11.6%	5.1%	2.66	.103
8	13.0%	0%	2.87	.090
9	8.9%	14.0%	13.38	.000***
Ave.	7.1%	5.5%	31.5	.424
* sig. p<.05; ** sig. p<.01; *** sig. p<.001				

In comparing same-sex respondents by location, the overall averages were not significantly different, although there were location-based differences among men in Waves 7 and 9, and among women in Waves 3, 7 and 9. During Waves 7 and 9, rural men had lower rates of business discontinuance than metro men, while rural women had higher rates than metro women. Similarly, fewer differences were evident among the bankruptcy rates when women were compared against women and men against men (Table 4). However, the differences were both greater and more frequent among men, with metro men showing generally lower rates of bankruptcy. Women's bankruptcy rates were significantly different in only two waves, with metro women higher in one wave and lower in the other. What is most unusual among women's rates is the number of times that the bankruptcy rate was 0%, especially among non-metro women. This could indicate truly low bankruptcy rates, a reluctance to admit bankruptcy, or the fairly small sample size once the data were broken down into such detailed categories. A limitation to this study was that despite the large overall sample size, the number of women who went bankrupt ranged from 0 to 36, while the number that discontinued their businesses for other reasons ranged from 176 to 357. Clearly, further research should be done with larger pools of people in these small detailed categories.

CONCLUSION

The results of this study confirm those of researchers (Boden & Nucci, 2000; Du Rietz & Henrekson, 2000, Watson, 2003) who determined that women were more likely to discontinue their businesses. However, the finding that women were less likely to discontinue their business because of bankruptcy or business failure is even more significant. Financial backers could be exposed to less risk when providing funds to women-owned businesses if they are more likely to pay off outstanding loans, although equity investing may be riskier due to a higher level of business termination. Organizations that provide assistance to business owners may find this information useful if they can tailor their services more to the market.

The reason a business is discontinued is vitally important not only to the business owner, but also to society. The overall proportion of businesses that ended in bankruptcy is relatively small, given that approximately 9 out of 10 businesses were discontinued for a reason other than business failure. Brush (1992) has suggested that women evaluate the performance of their businesses not only in financial terms, but also in social terms such as employee satisfaction, and social contribution. Future research should continue to investigate this issue by examining the reasons women terminate their business and seek to find ways to help them achieve their overall goals, which may not be strictly financial in nature.

Future research should also continue to examine any differences between rural and metropolitan business failure rates as the sex-based differences in this study were found to be emphasized in non-metro areas. In addition, the lack of significant differences between same-sex groups in meto and non-metro locations suggests that rural business are not more likely to end in failure, despite the generally perceived economic disadvantages of less-populated and developed areas.

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EXPLAINING ENTREPRENEURIAL SUCCESS: A CONCEPTUAL MODEL

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ABSTRACT

Explaining entrepreneurial success has long remained a contentious issue. Failures on this front have been attributed to extra emphasis on individual or environment and plethora of constructs. The paper proposes new constructs that are parsimonious and holistic in nature. These constructs are cognitive complexity, threat to identity, status inconsistency. The constructs assume that entrepreneurship is consequence of interaction between individual and environment.

INTRODUCTION

Despite considerable work in the field of entrepreneurship, efforts to arrive at explanation and theory of entrepreneurial success have not produced desired results (Phan, 2004; Wortman, 1987; Shane and Venkataraman, 2000). The Inability of scholars to arrive at distinct theory is attributed to a number of factors that include disagreement on definition of entrepreneurship, (By grave and Hofer, 1991; Brazeal et al, 1999; Gartner,1989), inability to look beyond their disciplines (Hornaday et al, 1987), inability to apply multilevel analysis and new constructs (Phan, 2004), development and measurement of constructs used (Smith et al., 1989; Vanderwerf and Brush, 1989), lack of dynamism in theories (Bygrave and Hofer, 1991) and lack of parsimony in model development (Phan, 2004). If a distinct theory of entrepreneurship is to developed, field has to pay attention to interactions among cognition, organization and industry level analysis. Further, analysis at every level should be connected to provide holistic picture. This is obviously a tall order to achieve (Phan 2004).

This paper aims to build a conceptual framework which explains entrepreneurial process using psycho-social processes. It attempts to answer some of the above mentioned problems, by using new concepts like cognitive complexity, threat to identity and status inconsistency. The framework presented in this paper is based on psychological and sociological theories of information processing and emotions as basis for describing enterprise creation. It assumes that information creation and management along with emotions are the heart of entrepreneurial decision-making.

The paper first defines entrepreneurship and its implication for explaining the process. It then presents concepts that would be used to build the model. Towards the end, the paper describes the conceptual framework, which explains entrepreneurial process and why model claims acceptability.

ENTREPRENEURSHIP: DEFINITIONAL AND METHODOLOGICAL PROBLEMS

A good science has to begin with a good definition (Bygrave and Hofer, 1991). If the field of entrepreneurship is to claim scientific accreditations, there has to be sharp and unanimous definitions. But sadly, there is no consensus on definition of entrepreneurship (Bruyat and Julien, 2001; Lumpkin and Dess, 1996). The number of definitions is almost equal to the number of scholars. Another problem with development of distinct theory of entrepreneurship is lack of reliability and validity of constructs developed to measure a phenomenon (Smith et al, 1998). This makes measurement of different constructs, developed in entrepreneurship, inconsistent. It renders comparison across different works difficult and in some cases even futile, hindering progress of research inquiry (Brazeal, 1999).

Given multiplicity of definitions, the author concurs with Misra and Kumar (2000) that there is no point in proposing another definition. However, without definition, research inquiry becomes difficult. For this very reason, the author adopted a definition from the existing literature. The Definition adopted is: "*Entrepreneurship is* the *process that involves innovative action towards organization creation*." The definition has elements of Gartner's (1988) definition which say's that entrepreneurship involves organizational creation and Drucker's (1985) definitions which say's entrepreneurship involves innovation. The definition is close though not same as Shumpeterian (Schumpeter, 2000) notion of "Creative Destruction".

Entrepreneurial Process

Consistent with the definition adopted- innovation and organization creation, the author is of the opinion that the explanation of enterprise creation cannot be separated from volition of entrepreneur. Assumption is that entrepreneur is at the heart of entrepreneurship though not the sole explanatory force. Given these assumptions, paper adopts Baron's (2004) framework for explaining entrepreneurial process. It states that "*Willingness to start enterprise', 'Identifying opportunities' and 'Success of the enterprise'* "are the three stages of the process.

LITERATURE

As already emphasised, entrepreneur is at heart of organization creation. The decision to become an entrepreneur is volitional (Carland, 1988; Baron, 2000). Entrepreneurship literature abounds with studies probing propensity of an individual towards enterprise creation. This literature could be divided into two categories.

First category of research is on personality traits. Some of scholars, mainly psychologists, working in this field have developed useful insights towards this. Some of important concepts that have been explored by these scholars to explain entrepreneurship are: Need for Achievement (McClelland; 1961), Need for power (McClelland, 1975), Internal locus of control (Rotter; 1966), Risk taking propensity (Brockhaus, 1982), Tolerance for ambiguity (Begley and Boyd, 1987) etc. However, the research on trait theories has yielded, at best, moderate results (Gartner, 1988, Baron, 2000). The reasons for failure are twofold. Firstly there has been problem in measuring the various concepts (Chell, 1989) and secondly these concepts may not be good indicators of entrepreneurship (Robinson et. al: 1991).

The second line of inquiry is by sociologist, who have analysed background and demographical factors as reasons for successful enterprise creation. This emphasis led to finding out conditions that are responsible for emergence of entrepreneurship (Gnyawali and Fogel, 1994) The result of these findings have highlighted factors such as dissatisfaction with previous job or life experiences (Brockhaus, 1982), immigration (Borjas, 1986), ability to form social networks and social capital (Aldrich, 2000; Reynolds, Storey and Westhead, 1994), minority status (Hisrich and Brush, 1986; Turner and Bonacich, 1980) and host of other factors. However, like trait factors, sociological factors have also received lukewarm success.

What are the reasons for failure of these factors? Two kinds of explanations are possible for this question. First, it can be argued that homogenous characteristics, like background factors, cannot explain success of entrepreneurs, who are outliers. It is not the conditions (or background factors), per se, that are important but what are the impact on individuals of the conditions. Hence mere demographic variables should be abhorred in favour of consequences of these variables on individuals. This author is of the opinion that some scholars have not been able to focus on effect of demographic conditions on individual. Such analysis could have yielded better insights.

After these failures, research inquiry in entrepreneurship diverted from individual and social variables to development of models, which contained both individual and social factors. This approach was predominant in entrepreneurship literature in early 90's to mid 90's (Learned, 1992; Hornsby et al., 1994). However, these models also failed to account for the success of the process of entrepreneurship. This failure could be attributed to too many variables and hence lack of parsimony. Too many variables, leading to overlap and hence redundancy. For example, there is significant overlap in 'Need for achievement', 'Internal locus of control', 'Risk taking propensity', 'Dissatisfaction', 'and Immigration and Minority status'. An individual who has high need for achievement is likely to be moderate risk taker. Also, S/he is likely to have internal locus of control (Pandey and Tewary, 1979; Diaz and Rodrigues, 2003 and many others). Similarly, the person who migrates to different land might land up in a situation where S/he is denied upward mobility through normal channels. The individual may end up with dissatisfaction, leading to higher efforts.

Does it mean that research on individual variables, both trait and situational, which has yielded at best mediocre results (Chell et al, 1989, p44), should be discarded? Gartner (1988) went to the extent that results on individual personality characteristics have not yielded any result and hence question - “Who is a successful Entrepreneur?” should be discarded altogether. However, Carland (1988) and Baron (2004) have argued that entrepreneurship, as an act cannot be separated from entrepreneurs. Hence, it would be foolish to discard this research as there are some very useful insights that could direct the future research in achieving better results.

What are these useful insights and lessons? The first lesson is that these factors are may need to be improved upon. The second lesson that could be learnt from these results is- any explanation for entrepreneurial behaviour should include minimum number of factors. It requires building of minimum and valid constructs. Is this task achievable?

It is achievable if the new concepts can be thought of, which can encompass two or more earlier concepts. It would reduce duplicity of same phenomenon being explained through different concepts. This is a huge task. But an effort has been made in this paper, though conceptually. The following section discusses constructs that have been used in this paper to build the conceptual framework.

CONSTRUCTS FOR FRAMEWORK BUILDING

Consistent with Baron (2004) requirements of explaining entrepreneurial success, the author presents important concepts, which would act as a raw material for framework building, As pointed earlier, conceptual model will try and find answers to the three questions.

Threat to Identity

The Author feels that ‘Perception of threat to Identity’ could be one of the factors, which can encompass some of the inter-related concepts, if not all. It is a negative emotion which forces an individual to quit and start a fresh action. Individual is gripped by fear. He/she starts to think: “What would happen to me if I’m not able to achieve a particular goal. The fear leads to tension. Perception of threat to identity and hence fear can lead an individual to put extra efforts to search for identity. There are many scholars, who have highlighted importance of fear in enhanced information seeking. Minniti (2004) says that the need to prove leads to enhanced alertness (Gaglio and Katz, 2001). Negative emotions like fear, could lead to enhanced information seeking (Muramatsu and Hanoch, 2005). Information seeking may lead to information asymmetry. Hindle (2004) has also highlighted importance of studying fear of failure as a possible cause for decision to start enterprise.

Self Efficacy

Self-efficacy as concept has been found to have an effect on intentions of individuals to start enterprise. Albert Bandura (1986) defined "Self efficacy as a belief in one's capability to organize and execute the resources for actions required—"Manage Prospective Situation". It is related to intensity of efforts an individual would put in a particular task, how long would individual persist with the task and the nature of task an individual would choose. Boyd and Vozikis (1994) co-related entrepreneurship with self efficacy. They cleared the confusion between concepts such as 'self efficacy' and 'locus of control', 'self efficacy' and 'belief that an effort to lead to desired performance' and 'self efficacy' and 'outcome expectations'. They argued that self-efficacy is a broader concept that includes such factors as moods and coping abilities under stress.

Boyd and Vozikis (1994) have argued that a person's self-efficacy can be improved through four methods. These methods in decreasing order of effectiveness are 1. Mastery experiences or Enactive mastery 2. Modelling or Observational learning, 3. Social Persuasion and 4. Judgement of own Physiological states.

Boyd and Vozikis (1994), while further developing Bird's (1988) model of intentions claimed that entrepreneurial intentions are best predictors of entrepreneurial behaviour as compared to other factors like past experience. Similarly, Krueger, Reilly and Carsrud, (2000), while testing models of entrepreneurial intentions, proved that perceived self efficacy of an individual leads to perceived feasibility, which is a better predictor of intention. Noble, Jung and Ehrlich (1999) found that two dimensions of self-efficacy namely, developing new opportunities and meeting unexpected challenges, distinguish students who major in entrepreneurship against students with non-entrepreneurship subjects as majors.

Cognitive Complexity

Bieri (1955) was first to develop the idea of cognitive complexity. However, his concept could not hold ground; subsequently Crockett (1965) modified it. His concept of cognitive complexity is amalgamation of two concepts. The first concept is "Personal constructs" from Personal construct theory of George Kelly (1955). The second concept is taken from structural development theory of Heinz Werner (1957). According to Kelly (1955) every individual has his ways of knowing and dealing with the world through 'Constructs'. These constructs are bipolar in nature. Kelly said that all individuals are like scientists, who continuously apply their constructs to deal with different situations in day-to-day world. Individuals improve and change these constructs with experience. We interpret world through these constructs as per Kelly. He argued that all constructs that fall within same domain constitute specific subsystem. The constructs are organized in hierarchical fashion, such that some elements in the subsystem subsume or imply other elements.

Werner's (1957) theory of structural development states that development takes place from the state of little differentiation to high differentiation, low complexity to high complexity, little articulation to better articulation and hierarchical integration. Werner referred to this as orthogenetic principle of development.

Crockett (1965) combined the theories of Werner and Kelly to arrive at cognitive complexity. Applied to personal constructs, the orthogenetic principle suggests that more developed systems of constructs will be more differentiated (contain greater numbers of constructs), articulated (consist of more refined elements), abstract and integrated (organized and interconnected). These developed systems of constructs are relatively complex. That is, individuals with more differentiated, abstract, and organized systems of constructs, in a particular domain, are considered to possess higher cognitively complexity in the domain. Thus, someone with a relatively differentiated, abstract, and organized system of interpersonal constructs can be regarded as having a higher level of interpersonal cognitive complexity.

As per concept of cognitive complexity, two kinds of development can occur. First is development in a specific domain. This is similar to Sarasvathy's (2004) concept of Expertise and Intuition. Second is, development in general domain which Mitchell (2000) refers to as 'Arrangement Cognitions'. General development is not likely to be complex and its range would also be limited. Development in specific domain is likely to be highly differentiated and complex. Hence it is possible that an individual will have highly differentiated construct in one field and not in others. (Crockett, 1965).

Crockett (1965) related cognitive complexity to impression formation, which is a potential area that could contribute to the entrepreneurship literature (Downing, 2005). Cognitive complex persons were found to be related to better at judging impression of others when they are exposed to contradictory information (Delia and Crockett, 1973; Press, Crockett and Rosenkrantz, 1969). These people have the quality to differentiate and integrate information better than others. Streufert and Swezey (1986, p 61-90) have shown that more cognitively complex individuals gather and process information better, are flexible in their thinking, They change their attitude very quickly in response to the change in the environment and are better strategic planners.

Cognitive complexity of individual increases with age up to late twenty's and early thirties and then decreases with age. It is related positively to formal education. Cognitive complexity of an individual is also influenced by amount and variety of social interactions. Variety of social interactions and education would result in more constructs, whereas the amount of social interaction and education would result in differentiation of constructs. To put it differently, the breadth and depth of social interaction would influence the cognitive complexity. The experiences that an individual has are converted into cognitive constructs through learning. These constructs are used as data for making decisions.

Cognitive Complexity has been related to social perception skills like; identifying others' states and inferring in their dispositions, impression organization, information integration, social evaluation and reliance on evaluative consistency principles, social perspective-taking ability, production of person-centred messages (Crockett et. al, 1975). It is also related to message production forms, communication effectiveness, individual differences in listening, comprehension and conversational memory, differential responses of low and high complexity judges to person-centred, behaviourally complex messages, representations of conversational interaction, topic management during conversation, planning processes during conversation (Burleson and Caplan, 1998). All these skills are very important for entrepreneurs. Baron and Ward (2004) cite a few researches where more cognitively complex person has been found better at picking taxonomical categories.

Cultural Aspirations

Every culture can be conceptualised as a complex system of subcultures. These subcultures can, sometimes be in opposition to the dominant culture in a society. Such subcultures are referred to as contra-cultures. Subcultures are like Kelly's constructs which are integrated and differentiated in a hierarchy. Every subculture has a prescriptive element in it and is unique to the subculture. Subculture/culture transfers its aspirations to individuals through various modes of socialisation. Hence, every individual wants to live up to these aspirations that have been internalised through socialisation. Prescriptive element of culture have performance requirement from individuals if theses individuals have to live up to cultural aspirations and gain identity. These could be termed as "Construct of Performance Requirement". The requirements become standards against which the performance of an individual is measured. Entrepreneurship aspires to fulfil these requirements which would depend on his capability to gauge them properly.

THE CONCEPTUAL MODEL

As already said, the Author accepts Baron's (2004) position that explaining entrepreneurial success would require explaining three phenomena- *'Willingness to start enterprise', 'Identifying opportunities' and 'Success of the enterprise'*. In the next section, explanations for these phenomena would be developed with the help of concepts mentioned in the previous section.

Willingness to Start an Enterprise

Why would a person like to start an enterprise, especially when entrepreneurship is not preferred career option? The willingness is determined by the pulls and pushes that an individual faces while starting an enterprise (Clark and Drinkwater, 2001; Olomi et al., 2000). Pushes and pulls arise from positive or negative emotions that a person experiences. Push is negative emotion that forces a person to leave the status quo whereas Pull is a positive force that attracts person towards new path, which can be enterprise formation. In other words, a person finds his current status to be unsatisfactory and alternatives like enterprise formation become attractive.

The push factors are: job dissatisfaction, job loss, unemployment, career setbacks, saturation in the existing market, language, immigrant status, deprivation, low family income and lack of flexibility in the previous job. The Author proposes that the perceived threat to identity, mentioned in previous section, can be used to explain as to why individuals are pushed into entrepreneurship. When an individual fears that his identity is threatened he is likely to indulge in actions, which would re-establish his identity or give him a new identity. Entrepreneurship could be a means towards that. However, fear of threat to identity is not enough to make him look for alternatives. Everyone with threatened identity does not start enterprise even if the entrepreneurial career is a preferred choice in the culture/subculture. Some individuals may perceive irreparable damage to their identity to the extent that they lose initiative for alternative action.

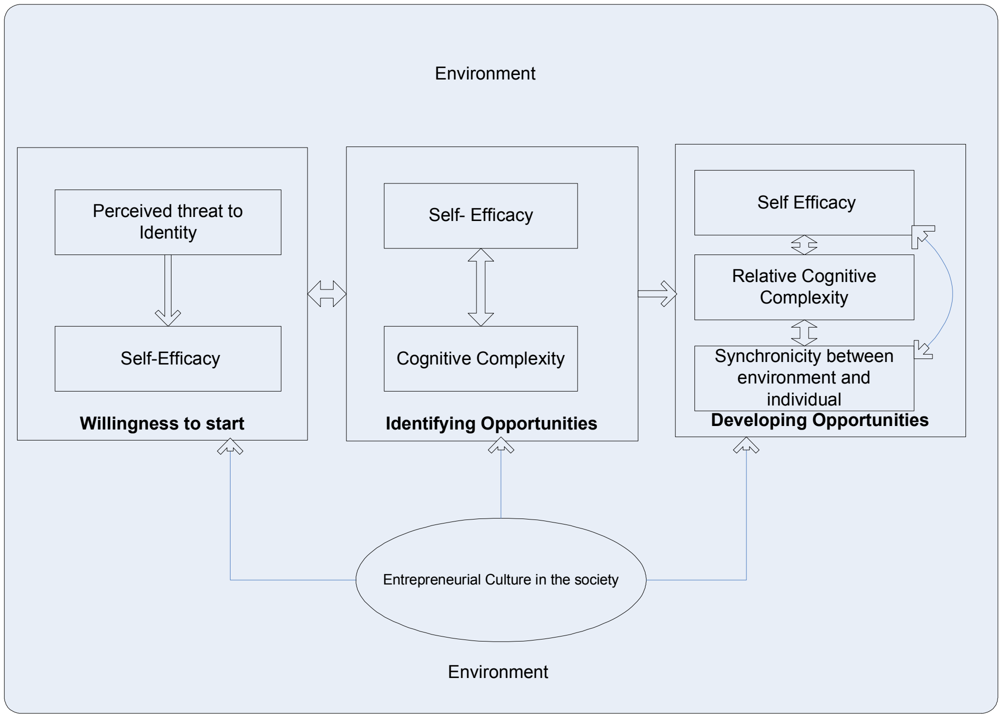
In addition to the push, pull is also required to initiate action to regain identity. Various pull factors described in literature are: Need for achievement, Internal locus of control, Intentionality, Practical purpose of individual action, Demand, Common culture, Language, Self sustaining economic environment, Good policy, Infrastructure and Profit. If we have to look for parsimonious model, then it is important that a new concept which encompasses the existing concept should be developed.

The Author proposes perceived self-efficacy as a concept, as described previously, can fulfil the role of providing positive energy to an entrepreneur. Carsrud et al (2000) have shown that self-efficacy is better predictor of entrepreneurial intentions. Chen, Greene, and Crick (1998) reported that self-efficacy is positively related to an individual's starting an enterprise. Self-efficacy provides individuals with the pull and can be a result of both personal and environmental factor, as Boyd and Vozikis (1994) highlighted. It can be used to explain entrepreneurship at culture and structural level of societies. Population in the lower strata in hierarchical societies would have low self efficacy because of high power distance and domination by higher ups. The high power distance leads to "Poor Modelling",' Social Persuasion 'and Mastery skills. On the other hand population in the upper strata would find it relatively easy to hold on to power. This would mean entrepreneurship is likely to remain low in that culture as opportunities for change are non-existent.

Self-Efficacy provides positive emotions and a belief that an individual can make a difference. The difference comes from ability to effectuate. Mere emotions can only lead to propensity and not action.

The Author proposes that decision towards enterprise creation could be explained by combining concepts of "Self Efficacy and Threat to Identity"

Figure1: A Conceptual model of entrepreneurial Success



Conceptual Model: Explaining Entrepreneurial Success

Identification of Opportunity

Author proposes that identification of an opportunity can be explained through cognitive complexity and perceived positive self-efficacy. How is it possible? An individual can have high cognitive complexity in both specific and general domain. Higher cognitive complexity in specific domain leads to differentiated constructs. For example, Bill Gate's would have high cognitive complexity in software. Similarly higher cognitive complexity, in general field, would lead to better connectivity with constructs from other field. Continuing with example of Bill Gates, this would mean that he would be able to connect his constructs in software to that of constructs in market. Cognitive complexity in a particular field makes individual expert and general cognitive complexity connectivity in related fields. Hence, a more cognitive complex individual is likely to generate more ideas through differentiation and integration. Hence an individual with high cognitive complexity is likely to be more creative.

Baron and Ward (2004) argue that creativity is related to opportunity identification. They hint towards the possibility that entrepreneurs use different, integrated knowledge structure. Creativity leads to better identification of opportunities through process of conceptual combination, analogical reasoning and abstraction.

A more cognitively complex person is likely to be more creative than less cognitively complex person (Streufert and Swezey, 1986, 73-74). A cognitive complex individual would have better information creating, handling, managing and manipulability capabilities leading to creativity. The more differentiated and integrated constructs an individual has better would be the capability to generate alternatives.

Innovation and creativity are nothing but ability to create new and additional constructs, different from existing constructs. A person with multiple constructs is likely to produce better integration and differentiation of his present constructs to produce newer constructs. To illustrate, we would take an example: Say there are two boys, A and B. Suppose A has vocabulary of 4 words and B has vocabulary of 6 words. If we replace "construct" for "word" then, A has four constructs and B has six constructs. Who has capability to create more number of sentences given this limitation? Obvious answer to this is B. Hence person with higher cognitive complexity would, under normal circumstances, generate more alternatives. After alternatives generation, next task is that of alternatives evaluation to decide upon the most feasible. This requires a good judgement. Cognitively complex makes better individual judgements (Tripodi and Bieri, 1964, 1966) especially when environment is dynamic and complex. The Entrepreneurs operate in a complex and dynamic environment. Hence Cognitive complex entrepreneur would do a better job of evaluation in dynamic environment.

A person with higher cognitive complexity would also be receptive to cultural aspirations. He is more capable at comprehending trends. She/he is likely to be more empathetic to environment. Empathy level can be defined "As overlap of individual constructs and environmental constructs". Higher cognitive complexity would result in identification of appropriate opportunities, as most of viable ideas come from aspirational culture.

Similarly, a persons need to have positive and affirmative outlook while generating and evaluating ideas. Person with higher self efficacy can do such. Kasouf (1997) showed that self-efficacy helps an individual in opportunity assessment and opportunities recognition. Krueger and Dickson (1993) also related self-efficacy to opportunity recognition. This is because self-efficacy could be the difference between something being termed as "opportunity" or "threat". An individual with higher self-efficacy may view a particular situation as opportunity whereas another individual with lower self-efficacy may end up viewing the same situation as a threat.

Hence, identification of opportunity could be explained by combining cognitive complexity and self efficacy. Some scholars have proved that cognitive complexity decreases with age. These results give support for the findings that people are less likely to form ventures as their age increases (Mayr, Ulrich; Kliegl, Reinhold, 1993).

Developing Opportunities/ Creation of an enterprise

Once an individual decides to start an enterprise after identification of opportunity the next stage is developing the opportunity to create organization. The success of an enterprise creation would depend on the ability of an entrepreneur to generate resources for running the organization. Self efficacy has been related to resource acquisition capacity (Brown and Kirchoff, 1997), though the relation was not strong. Cognitive complexity has been linked to higher level of empathy and understanding towards others, leadership skills, ability to attract people and problem solving (Streufert and Swezey, 1986). An entrepreneur is dependent upon all the stakeholders of an organization for success. The stakeholders have differing expectations from entrepreneur. Sometimes these expectations sometimes can be convergent while most times these are divergent. Managing this situation can be rattling to most individuals. For example; the expectations of customers might be different from those of venture capitalists, financiers, employees, shareholders and suppliers. In order to satisfy these divergent expectations, an entrepreneur has to be aware and sensitive to these divergent needs. A cognitively complex person, both in a specific domain and general domain is likely to be aware about the expectations and standards of performance that culture expects if an individual wants to be successful. Baron and Ward (2004) do not deny the possibility that entrepreneurs might possess ability to recognise complex pattern, which other persons do not possess. It helps in better resource acquisition from environment. As per Sternberg (2004) "Entrepreneurs are successful because they have better 'Successful Intelligence' which is different from intelligence measured through different IQ instruments". He says that the successful intelligence is combination of practical, analytical and creative intelligence. This relationship when combined with cognitive complexity can have better relation with successful running of an enterprise. Practical intelligence is combination of effectuation and ability to gauge environment.

Contingency in Model

An industry can be thought of as a dynamic environment. Every environment has certain performance requirements from individuals if individuals have to survive and grow in the same. The Environment is dynamic and competitive with many players in a particular field at a point of time. Hence one way of looking at success is synchronization between individual environments. Suppose in the earlier hypothetical example of A and B. A and B both study in school and they would be evaluated by school on the basis their ability to create more sentences. Suppose, out of six words that B has, three are slang and cannot be used in examination. Effectively, B has only three words, as other three are defunct. On other hand, all four words of A are valid. Effectively, A has more constructs than B. Hence despite B having more constructs, overall, but less constructs compatible with relevant environment, would be out competed by A. Entrepreneurs are more cognitively complex in a particular domain and out-compete others in the domain.

It is realized that success of an entrepreneur/enterprise will depend on his/its relative position to others with respect to framework established in the model vis-à-vis. other players in and out of industry. The survival and growth of these players would be dependent on the relative strength of cognitive complexity of players in the industry. The more cognitively complex person would be able to drive out the players who are less cognitively complex (industry). The assumption that the author has made is that a person who has higher cognitive complexity, is not only likely to assess the environment better than others but has more capability to generate more information and resources which are crucial for growth and survival of an enterprise.

On the other hand, self efficacy and threat to identity are likely to provide individual with emotional energy that acts as motivator to indulge in action of enterprise creation.

A Contradiction in Model

A first look at the model would suggest a contradiction in form of use of two constructs – "Threat to identity and Self-efficacy". A question can be raised as to how it is possible for a person to have both? This could be explained in terms of status inconsistency (Lenski, 1954, 1956), across time and space. An individual occupy more than one status in day-to-day life. It might so happen that he derives self-efficacy from one status (higher one) and he fears threat to his identity from the other status (lower one). The Fear of loss of identity and confidence of self-efficacy might lead to a balance or what Brockner (2004) called promotional and preventive focus in regulatory focus theory of enterprise opportunity identification and evaluation. The Author believes that in order for a person to be successful entrepreneur, it is important that he should have balance of negative and positive attitudes. This helps to avoid excessive optimism or pessimism and leads to better judgement. Brockner says that promotional focus is helpful during idea generation times and prevention focus is helpful during idea evaluation and day-to-day running of the organization. A desirability of both optimistic as well as pessimistic outlook explains why successful entrepreneurship is difficult and a rare phenomenon. Gaglio (2004) also refers to finding of Galinsky et al in his paper which states that, individual who indulges in both "Counterfactual Thinking" and "Mental Simulation" is less prone to biases. The two phenomena are almost opposite to each other but can co-exist.

HOW IS FRAMEWORK DIFFERENT FROM OTHER MODELS?

If entrepreneurial process has to be successfully predicted, the field of entrepreneurship needs a comprehensive model (Bygrave and Hofer, 1991). The model should not only take individual level factors into consideration but also changing environmental conditions (Gartner, 1989). The model has to be dynamic in its relation between individual and environmental factors (Phan, 2004). The second property that a model should possess is that it should be parsimonious.

It is non-productive to produce a model, which has numerous explanatory factors. Also, different constructs constituting model should also be measurable with fair degree of reliability and validity (Vanderwerf and Brush, 1989). These are some of the standards that have been set for successful development of the model.

There have been several models; some of them are moderately successful, proposed in the past to explain entrepreneurial behaviour (Chandler and Hanks, 2004; Hornsby and Nafziger, 1994; Lumpkin and Dess, 1996; Krueger and Brazeal 1994, Gnyawali and Fogel, 1994; Katz, 1994, Covin and Slevin, 1991; Misra and Kumar, 2001). Some of the models developed based on the cognitive theory. For example; models proposed by Bird (1988), Ajzen's and Shapero's model (Krueger, Reilly and Carsrud, 2001) have been good predictors of entrepreneurial intentions. However But these models have been at best moderately successful in explaining entrepreneurial behaviour.

Whereas other models, like this model, have been conceptually proposed are yet to be empirically tested. The Author does not claim the superiority of the model over other models that have been proposed in the past because it has not been empirically validated. However, author believes that model provides a fresh perspective. It claims novelty because of following reasons:

1. A number of constructs that are used to build a model is limited. Hence, the model can be called parsimonious.
2. Some fresh concepts like "Threat to identity" (though not entirely new), "Cognitive complexity" and "Status inconsistency" are used to explain the success of enterprise creation. These are scarcely used in the existing literature.
3. The model is built around core concept of cognitive complexity with respect to information creating, handling, managing and manipulating capability for an individual. Phan (2004) says that an ideal theory of entrepreneurship should predict the origin of firm, their density, survival and death. This model can be extended to the level of the firm and industrial level. The analysis of the firm and industry level can be done with the help of similar model, where firm and industry in the model replace individual. The analysis at this level can accomplish the above-mentioned requirements of a good model. For example; Survival, Growth and Death rates of firms can be explained using notion of competition and co-operation for generating information (or knowledge management) among various players in the industry. The efforts in this direction could be seen as theories like complexity theory, which are becoming important tools for organization analysis Streufert and Swezey, 1986). Looking from this perspective, a comprehensive theory, based on the information processing ability of units at various levels from individual to firm to industry level, can be thought off.

4. The model is dynamic as it makes entrepreneurial success as interplay between individual capabilities and environmental requirements. Synchronization between cognitive complexity and environmental requirement can explain as to how an entrepreneur would be successful under some condition while fails under others. As environment changes its requirement from entrepreneurs, also changes, hence creating a mismatch. Use of self-efficacy, in the model, makes it dynamic. Success under some conditions can lead to excessive level of self-efficacy which can make entrepreneurs blind to new aspirational requirements of stakeholders. For example, a successful entrepreneur can develop habit of applying heuristics, which were successful in past. This heuristics might not be ecological rational in new environment. Similarly, if a person fails, his self efficacy might come down to the level where his identity can be affected beyond repair. Similarly, an entrepreneur who is successful in one industry can be a failure in others because there is no synchronicity between his cognitive complexity and environment requirements.
5. Though model has been developed from psychological and sociological concepts it also has elements of economic (information asymmetry, Austrian school). Hence, the model has multi-disciplinary approach.
6. Inclusion of the concepts like status inconsistency, cognitive complexity, threat to identity make this model a strong contender to connect mainstream "Entrepreneurship Research" with what Jennings, Perrings and Carter (2005) called "Alternative Perspective" in entrepreneurship.

LIMITATIONS OF THE CONCEPTUAL FRAMEWORK

The first problem with model presented above framework is lack of empirical proof. Unless empirical proof is found out the model cannot claim acceptability. Secondly, the more serious problem can be that the concepts developed in this paper can turn out to be difficult to measure in reliably and validly. In fact, many scholars feel that inability of scholars to develop a distinct theory of entrepreneurship is because of problem in measuring different concepts (Chandler and Lyon, 2001). The concepts in the model like competition and cultural requirements are difficult to measure exactly because of their highly qualitative nature. Even concepts like cognitive complexity are difficult to capture because of specific domains involved.

CONCLUSION

The paper has been written to explain the process of organization creation right from the beginning to the stage when enterprise reaches self sustaining stage (Hofer et. al, 1998). The paper is an attempt to challenge established thinking in entrepreneurship literature. These are: First, the paper highlights the importance of both negative emotions and positive emotions as reasons why entrepreneurs take decisions to create their organizations. This is contrary to current notion that decision to start an enterprise may be because of only one or sometimes two factors. The search for identity is manifestation of some kind of negative emotion being driver of action towards organization creation. Self efficacy and cognitive complexity provide individual with positive emotions towards action. The paper challenges the accepted belief that some entrepreneurs are driven by "necessity/ push (negative)" whereas others are "opportunity/pull (positive)" force. It proposes that both forces are involved in decision to start enterprise. The support for this argument could be mustered from the fact that many researchers have proved that one's ability to look for opportunity or information alertness (pull) is result of fear of negative outcome (Muramatsu and Hanoch, 2005). Threat to identity and cognitive complexity are new and different constructs proposed in this direction. Cognitive complexity in a particular field is a better way of representing previously used constructs like education, skills, competence, market knowledge etc. The various constructs are the measures of two fundamental requisite for organization creation- Emotions and Information. The framework in the paper has been developed considering the individual in synchronization with environment. It assumes that all the constructs are dynamic in nature. For example, if there is change in technology the cognitive complexity might reduce for an individual in new settings. Similarly, a person's self efficacy and threat to identity would change depending on perception of environment.

FUTURE DIRECTIONS:

The lessons that can be learnt from this model are summarized as follows.

1. The model can be empirically tested in future. The three questions- "Why a person becomes entrepreneur, How opportunity is identified and how is success created- could be taken as three independent stages". The constructs of self efficacy and threat to identity could be measured using instruments that are available. Instruments are also available for measuring cognitive complexity. However, cognitive complexity as construct poses important challenge if it has to be used in explaining entrepreneurial success. The available instruments cannot be used. An important bottleneck is that cognitive complexity is to a large extent is domain specific. It implies that if

entrepreneurs have to be compared in a particular domain for cognitive complexity, it would require domain specific instrument for cognitive complexity. A related challenge is - What is going to be the domain? Is it going to be an industry or function(s) - Production, Marketing, Finance, etc.?The Author feels that instruments of cognitive complexity of entrepreneurs could be designed; taking industry to be domain. The weakness of this method is that it would require development of different instruments for measuring cognitive complexity in different industries that would render cross industry comparison redundant. However, work in this direction could give further insights to overcome above weakness.

2. The model can be extended to firm and industry level analysis where entrepreneur can be replaced by firm and industry in existing framework.
3. Alternative perspectives of looking at entrepreneurship could also be developed from the framework.

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TRIGGERS OF DECISIONS TO LAUNCH A NEW VENTURE – IS THERE ANY DIFFERENCE BETWEEN PRE-BUSINESS AND IN-BUSINESS ENTREPRENEURS?

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ABSTRACT

This paper describes the findings of an ongoing study designed to determine the triggers that led pre business and in business entrepreneurs to begin the entrepreneurship process and their relative importance. The findings suggest that the triggers are personal, opportunity/idea, job related, financial, and family/interpersonal. Demographically the two groups studied were different. There were significant differences and some similarities in triggers between the groups and in the degree to which the triggers impacted their decision to embark on entrepreneurship.

INTRODUCTION

Peter and Katarina, a young couple who have excellent education and work experiences in cutting edge medical research earning competitive income, have recently decided to start their own medical information service business. Why would they trade a comfortable life style for the intensive stress and anxiety related to creating a new business? Peter and Katarina are not alone in the entrepreneurial path. Research in entrepreneurship has introduced many aspects of how and why people make decisions in new venture creation (Shane, 2002). Some researchers have characterized entrepreneurs by traits, personalities, preferences and behaviors (Kihlstrom & Laffont, 1979; McClelland, 1961; Shaver & Scott, 1991). These researchers have concluded that entrepreneurial individuals are often motivated by economic and/or psychological factors. Other researchers have examined circumstantial variables of the environment and their influences on individual decisions in new venture formation by considering market forces, employment change and shifting organizational structures (Arrow, 1962; Casson, 1982; Audretsch, 1997). Most scholars have agreed that the entrepreneurial process and theories involve a complex set of variables that are beyond any single aspect. To identify motives and incentives of entrepreneurial activities involves disseminating several layers of relationships between personal factors, external forces and other random events.

Existing literature has provided limited evidence to explain the differences among entrepreneurs by demographics and in different stages of pursuing new venture opportunities, i.e., pre business and in business. It is logical to speculate that the decision to launch a new venture probably includes both endogenous factors in the individuals and exogenous factors in the environment. None of the existing literature discussed the possibility that pre business entrepreneurs (who may not have any experience in starting a new venture) might have different reasons to launch new ventures compared to in business folks. This article presents the results of an on-going study designed to provide additional insight into why pre business and in business entrepreneurs choose to start new venture by considering both endogenous and exogenous factors - a group of triggers. We define triggers as forces in the individuals or in the individuals' perception of their situation that move them toward the entrepreneurial process. It is important to distinguish "triggering factors" and "triggering events" from "triggers". Triggering events and triggering factors have both been commonly applied in many entrepreneurship research (Shane, 2002). Triggering events are more like "something happened as an occasion or an episode that influence individual's assessment on the situation." Triggering factors could be interpreted as "issues or features that influence individual's perspectives about certain situations". Triggers, as defined in this study, are not necessarily to be any event or factor. They could be things that each individual has identified logically or randomly based on feelings, experiences, or interactions with environment or other individuals.

This research is in the exploratory stage. The long term goal is to develop research results to formulate a conceptual theoretical framework using a multivariate equilibrium approach to explain why and how entrepreneurs make decisions. The fundamental research questions are "What triggers were present that stimulated the decisions to start a new venture among pre business and in business entrepreneurs?" and "Are the triggers different/similar for entrepreneurs who are pre business and those who are in business?"

LITERATURE REVIEW

Much entrepreneurship research has been devoted to the characteristics and motivation of the entrepreneurs (Stevenson, Grousbeck, Roberts, & Bhide, 1999; Longenecker, Moore, & Petty, 2000; Scarborough & Zimmerer, 2000; Bhide, 2000; Bygrave, 1994; Kuratko & Hodgetts, 1998; Vesper, 1996; Hodgetts & Kuratko, 1995; Timmons, 1999; Jennings, 1994; Lambing & Kuehl, 1997). A summary of these characteristics of entrepreneurs from various sources includes: high achievement drive, action oriented, internal locus of control, tolerance for ambiguity, moderate risk taking, commitment, optimism, opportunistic, initiative, independence, commitment/tenacity or some form of one or more of these. The motivation related to new venture formation often revolves around the opportunity to gain control over personal lives/independence, to get profits/financial rewards, to enjoy what individuals are doing, to achieve personal goals and recognition, and to make a difference/contribute to society.

Early authors in entrepreneurship and small business recognized some of the reasons entrepreneurs starting new ventures. Baumback, Lawyer, & Kelley (1973), indicated that entrepreneurs started businesses for self-expression, security and income. Longenecker, Moore, Pettit, & Palich (2006) suggested that entrepreneurs wanted to make money, become their own boss, escape a bad situation, enjoy and satisfying life, and contribute to the community.

Kuratko and Hodgetts (2001) provided a brief but meaningful discussion of the macro and micro views of entrepreneurs and entrepreneurship. The "macro" view emphasized broad exogenous factors that give rise to entrepreneurship, and included three categories. The Environmental School of Thought developed an explanation of entrepreneurs and entrepreneurship by studying the environment(s) that gave rise to entrepreneurs and entrepreneurship. This group focused on the institutions, values, and mores that, grouped together, form the sociopolitical environment that strongly influence the development of entrepreneurs and entrepreneurship. The Financial/Capital School of Thought saw entrepreneurs and entrepreneurship based on largely financial issues. Finally, there was the Displacement School of Thought. This school emphasized the displacement of people as the source of entrepreneurs and entrepreneurship. Political, cultural, and economic displacement factors nurtured the ideas and actions to entrepreneurs and entrepreneurship.

The "micro" theorists focused "… on the entrepreneurial trait theory, the venture opportunity theory, and the strategic formulation theory." The micro theories emphasized forces internal to the entrepreneurial process that cultivated entrepreneurs and new venture formation. Examples of these internal forces included commitment, seeking opportunities, seeing the demand in the market place, and creation of strategic alliances and networking with others.

Bygrave (1989) discussed entrepreneurship as a process that involved innovation, triggering event, implementation, and growth. In the triggering event stage he suggested that there were personal, sociological, and environmental factors that led to entrepreneurship. Again, both internal and external forces seemed to be at play. The factors suggested by Bygrave are the same or similar to those studied in this research.

Dollinger (1995) discussed what he characterized as the "impetus for entrepreneurship." He discussed the "Sociological Approach" which focused on four factors that led entrepreneurs toward new venture creation. "Negative displacement" was where individuals were marginalized from society, because of who they were or their situation including being fired or not satisfied with their current employment or divorced. "Between things" included individuals between stages of their life. "Positive pull" included other people (potential collaborators, parents, customers) who provided an impetus to entrepreneurship. "Positive push" included entrepreneurs who, because of their education or situation, were pushed toward entrepreneurship. Individual factors or a combination of any of these factors could move the entrepreneur toward new venture creation. Finally Dollinger discussed the "Situational Characteristics" that included "perceptions of desirability" that came from the entrepreneur's culture, family, peers, and so on; and "perceptions of feasibility" that came from role models and examples and a supportive environment. Dollinger seemed to think that the impetus to change was in the individual from their background or environment or outside the individual in the situation.

Haynes, Becherer, Helms,and Jones (1999) studied entrepreneurs who were dissatisfied with their former jobs and found that this dissatisfaction did, in fact, provide an impetus to entrepreneurship. One important conclusion was that dissatisfied entrepreneurs tended to found smaller lifestyle ventures over which they had more control with personal savings.

While the notions of push and pull forces and triggering events have been bandied around, little research has been done to identify the specific triggers involved in the entrepreneurial process and their relative impact on entrepreneurship among both pre business and in business entrepreneurs. This research attempts to provide some specification to those triggers and to their relative strength in the entrepreneurship process among pre business and in business entrepreneurs.

METHODOLOGY

To find out the triggers that lead entrepreneurs to move to start businesses, a questionnaire was developed by asking over 100 entrepreneurs to share the triggers that caused them to consider starting a business, entrepreneurship students were asked to contribute to the list, and the authors and colleagues in entrepreneurship education were asked to share their thoughts. These were compiled into a structured questionnaire. On each question, respondents asked to indicate whether each trigger was very important, important, moderately important or not important to them in their entry into entrepreneurship. The questions were randomized on the questionnaire to avoid list bias. The triggers in the randomized order presented on the questionnaire are shown in Figure 1.

Two samples were used in this research. First, the questionnaire was administered to a convenience sample of entrepreneurs who were in business. The in business respondents were interviewed by students. Students in entrepreneurship classes were given three questionnaires each and asked to administer the questionnaire to a convenience sample of entrepreneurs in north Louisiana during the spring of 2006 semester. Students completed 159 useable questionnaires. Although the sample was convenience, the businesses met the SBA guidelines for small business.

Second, the same questionnaire was administered to participants in a pre business workshop given every three weeks in northeast Louisiana. The questionnaire was administered to the participants at the beginning of the workshop. While some of the participants in the workshop were in business, those in business were removed and only 227 pre business respondents were used in this paper. The workshop participants vary from individuals who are curious to those who are seriously attempting to get a new venture started. There is no way to separate the less serious from the more serious respondents. Questionnaires to both groups were administered during the fall 2005 and spring 2006. While Katrina and Rita both struck Louisiana during that period, none of the respondents was directly impacted by those natural events.

Figure 1. Triggers of Entrepreneurship

I saw an opportunity	I didn't like my coworkers
My job was boring	My spouse is not satisfied with our current financial situation
My spouse or other close person died	My job was not financially rewarding
I had to earn more money	I felt I wasn't accomplishing all I could
My job was not satisfying	I didn't like my job
My boss and I didn't see eye to eye	My job didn't allow me to reach my potential
I got laid off	I wanted to earn some money
My job didn't provide excitement	I retired and needed something to do
I didn't like my boss	I wanted a flexible work schedule
I got a divorce	I had another job/business and this idea grew out of that one
My spouse and I wanted to work together	I wanted a challenge
I watched someone else in this business and thought I could do better	My business is based on my invention
I saw a business for sale and wanted to buy it	I saw a customer need for this type business
I joined my family business	I inherited the business
I wanted to be independent	I saw a problem and sought to solve it
I wanted to be in control	I had a hobby and it grew into a business
I had money and wanted to invest it	Someone else pointed out a need for this type business
I wanted more time with my family	I wanted to reach my full potential
I always wanted to be my own boss	I wanted to change careers for my own satisfaction
Thought up an idea and pursued it	I wanted to get out of the house
I inherited money and needed to invest it	I wanted to get rich

DEMOGRAPHICS OF THE SAMPLES – PRE BUSINESS VERSUS IN BUSINESS

Table 1 outlines the sample demographics of this study for two samples. Pre business respondents had a larger proportion of females compared to more males among in business respondents. Similarly, pre business respondents were younger than in business respondents.

There were proportionately more minority individuals among the pre business respondents and more white respondents among in business respondents. More of the pre business respondents were single or single with children compared to more married with and without children among in business respondents. In general, the pre business respondents were less well educated than those who were in business. In business respondents had more experience in the line of business than pre business respondents. Retail and service business predominated among both groups, but in business respondents were significantly more retail and service firms.

To summarize, in business entrepreneurs as a group were significantly more male, older, white, married, more experienced, had more education and were more likely going into retail or service businesses.

Table 1. Sample Demographics

	Pre Business	In Business			Pre Business	In Business
Gender				Respondent Age**		
Male	42.5	66.7		<25	11.0	3.8
Female	57.5	33.3		25-35	31.7	22.3
N	219	141		36-45	28.2	26.1
Total	100.0	100.0		46-55	21.6	31.8
Chi-Square	0.000			56-65	6.6	14.0
Gamma	0.000			>65	0.9	1.9
				N	227	157
Ethnicity**				Total	100.00	100.00
White	55.8	73.1		Chi-Square	0.002	
African American	39.3	21.3		Gamma	0.000	
Asian/Pacific Islander	3.1	3.8				
Hispanic	0.4	1.3		Marital Status**		
American Indian	1.3	0.6		Single	25.6	12.6
N	224	160		Single w Children	19.4	8.2
Total	100.0	100.0		Married wo Children	8.8	10.1
Chi-Square	0.004			Married w Children	46.3	69.2
Gamma	0.001			N	227	159
				Total	100.0	100.0
Education Level**				Chi-Square	0.000	
<High School	2.7	1.2		Gamma	0.000	
High School	26.9	22.4				

Table 1. Sample Demographics						
	Pre Business	In Business			Pre Business	In Business
Some College	38.6	25.5		Years of Experience**		
College	21.1	37.3		None	53.5	8.2
Advanced College	10.8	13.7		1 - 5 years	20.2	32.1
N	223	161		6 - 10 years	10.1	20.9
Total	100.0	100.0		11 or more years	16.2	38.8
Chi-Square	0.003			N	228	134
Gamma	0.004			Total	100	100
				Chi-Square	0.000	
Type Business**				Gamma	0.000	
Retail	24.9	33.1				
Service	41.6	50.0				
Manufacture	5.4	0.0				
Wholesale/Distribution	3.8	4.0				
Construction	2.2	0.0				
Other	22.2	12.9				
N	185	124				
Total	100.0	100.0				
Chi-Square	0.008					
Gamma	0.005					

FINDINGS AND ANALYSIS

Previous entrepreneurship literature suggested many aspects to study the reasons, motives, incentives and certain influential factors for people to start new ventures. Based on existing information, the results of the surveys in this research were categorized into five aspects: Personal Triggers, Idea/Opportunity Related Triggers, Job Related Triggers, Financial Triggers, and Family and Interpersonal Triggers.

PERSONAL TRIGGERS

The findings of the study involved assigning triggers to categories based on the literature review. Personal triggers are individual in nature. The triggers contained in this set seemed to be important to both pre business and in business respondents (Table 2). "Lack of accomplishment" was significantly more important to pre business respondents to in business respondents.

Table 2. Personal Triggers

Lack of Accomplishment**				Wanted Independence				Wanted Challenge		
	Pre	In			Pre	In			Pre	In
VI	54.4	41.6		VI	60.1	61.6		VI	44.7	41.8
I	17.1	23.0		I	18.4	17.6		I	25.0	29.7
MI	5.3	10.6		MI	6.6	8.2		MI	8.3	13.3
NI	23.2	24.8		NI	14.9	12.6		NI	21.9	15.2
N	228	161		N	228	159		n	228	158
Total	100.0	100.0		Total	100.0	100.0		Total	100.0	100.0
Chi-Square	0.038			Chi-Square	0.857			Chi-Square	0.145	
Gamma	0.042			Gamma	0.715			Gamma	0.919	
Wanted to be My Own Boss**				Wanted to Reach My Potential*				Wanted Control**		
VI	48.7	54.7		VI	55.5	42.9			Pre	In
I	18.0	25.2		I	17.6	24.4		VI	26.9	49.4
MI	8.3	6.9		MI	4.8	9.0		I	17.6	24.7
NI	25.0	13.2		NI	22.0	23.7		MI	17.2	10.1
N	228	159		N	227	156		NI	38.3	15.8
Total	100.0	100.0		Total	100.0	100.0		n	227	158
Chi-Square	0.022			Chi-Square	0.058			Total	100.0	100.0
Gamma	0.033			Gamma	0.047			Chi-Square	0.000	
								Gamma	0.000	
Change Careers for Satisfaction*				Could Do It Better**				Solving Problems		
VI	39.5	27.8		VI	13.2	21.3		VI	18.5	11.6
I	18.0	19.0		I	8.3	17.5		I	12.3	11.6
MI	9.6	8.2		MI	11.4	17.5		MI	6.2	12.3
NI	32.9	44.9		NI	67.1	43.8		NI	63.0	64.5
Total	228	158		N	228	160		n	227	155
N	100.0	100.0		Total	100.0	100.0		Total	100.0	100.0
Chi-Square	0.058			Chi-Square	0.000			Chi-Square	0.078	
Gamma	0.008			Gamma	0.000			Gamma	0.367	

** Significant at .05 and * Significant at .10
VI, Very Important; I, Important; MI, Moderately Important; NI, Not important

"Wanted control", "wanted to be my own boss", and "could do it better" were all significantly more important to in business respondents than to pre business respondents. It is possible that in business respondents have adjusted their reasons of creating new ventures because they have already accumulated knowledge and experiences in the process. "Wanted independence" and "wanted a challenge" were not significantly different between the two samples. "Wanted to reach my potential", "change in career for satisfaction", and "good at solving problems" were all significantly more important to pre business respondents. "The desire to achieve", "change their situation", or "apply their knowledge and skills" seemed more important to pre business respondents while "control", "being the boss", and "feeling they could do it better" were more important to in business respondents.

IDEA/OPPORTUNITY RELATED TRIGGERS

Table 3 contains the Idea/Opportunity Related Triggers. The most important trigger to both pre business and in business groups, was "saw an opportunity" chosen by 75 percent of both pre business and in business respondents. "Saw a customer need" was the second important choice among all respondents with over 50 percent of both groups making the choice. "Saw an idea and pursued it" was statistically more important for pre business respondents than for in business respondents. "Hobby grew into a business", "idea grew out of my job", and "bought a business" were less important and statistically significant with more pre business respondents making these choices. "Commercialized an invention" did not seem to be important to either pre business or in business respondents in our sample.

JOB RELATED TRIGGERS

A common myth of entrepreneurship relates to "shifts in employment situations". Economists or industry analysts often speculate an inverse relationship between number of available jobs and number of new businesses in the market. Do entrepreneurs really see job related factors to be an important trigger for them to start new businesses? Job related triggers (Table 4) were, in general, less important than personal triggers and idea/opportunity triggers for both groups. Not many respondents (in pre business and in business modes) thought that job related issues drove them into the decisions of new venture formation. "Job boring", "job dissatisfaction", "job not financially rewarding", "job not exciting", "job potential", "laid off", and "disliked coworkers" were important to less than half of the respondents, but were less important to both groups than personal triggers and idea/opportunity related triggers for respondents in both groups. "Disliked job", "boss conflict", "disliked boss" were more important to in business respondents and significantly higher than for pre business respondents.

Table 3. Idea, Opportunity Triggers

Idea Grew out of Job**				Commercialized Invention				Saw Customer Need		
	Pre	In			Pre	In			Pre	In
VI	10.1	20.0		VI	11.8	9.0		VI	38.2	37.8
I	11.5	9.3		I	4.4	5.8		I	17.1	21.8
MI	7.5	12.7		MI	7.0	4.5		MI	10.5	12.2
NI	70.9	58.0		NI	76.8	80.8		NI	34.2	28.2
N	227	150		N	228	156		n	228	156
Total	100.0	100.0		Total	100.0	100.0		Total	100.0	100.0
Chi-Square	0.009			Chi-Square	0.522			Chi-Square	0.503	
Gamma	0.008			Gamma	0.347			Gamma	0.513	
Hobby Grew Into Business**				Saw an Opportunity				Bought Business**		
VI	16.7	26.4		VI	52.2	53.1		VI	2.6	13.4
I	8.3	12.6		I	22.8	28.1		I	2.2	12.1
MI	7.9	6.9		MI	3.9	5.0		MI	3.9	4.5
NI	67.1	54.1		NI	21.1	13.8		NI	91.2	0.7
N	228	159		N	228	160		n	228	157
Total	100.0	100.0		Total	100.0	100.0		Total	100.0	100.0
Chi-Square	0.034			Chi-Square	0.251			Chi-Square	0.000	
Gamma	0.006			Gamma	0.435			Gamma	0.000	
Saw Idea, Pursued It*										
	Pre	In								
VI	29.4	27.2								
I	23.2	15.8								
MI	11.4	8.9								
NI	36.0	48.1								
N	228	158								
Total	100.0	100.0								
Chi-Square	0.084									
Gamma	0.073									

** Significant at .05 and * Significant at .10
VI, Very Important; I, Important; MI, Moderately Important; NI, Not important

Table 4. Job Related Triggers										
Job Boring				Job Dissatisfaction				Job Not Financially Rewarding		
	Pre	In			Pre	In			Pre	In
VI	11.4	7.0		VI	21.5	22.4		VI	28.1	28.4
I	12.7	10.8		I	17.1	19.9		I	16.2	11.6
MI	13.6	17.1		MI	11.0	14.7		MI	13.2	14.2
NI	62.3	65.2		NI	50.4	42.9		NI	42.5	45.8
N	228	158		N	228	156		n	228	155
Total	100.0	100.0		Total	100.0	100.0		Total	100.0	100.0
Chi-Square	0.376			Chi-Square	0.461			Chi-Square	0.644	
Gamma	0.327			Gamma	0.282			Gamma	0.605	
Job Not Exciting				Dislike Job*				Job Potential		
				VI	10.5	15.3		VI	38.2	36.4
VI	10.1	10.3		I	12.3	12.7		I	15.8	21.4
I	9.6	16.7		MI	11.0	17.8		MI	8.8	11.7
MI	14.0	16.0		NI	66.2	54.1		NI	37.3	30.5
NI	66.2	57.1		N	228	157		n	228	154
N	228	156		Total	100.0	100.0		Total	100.0	100.0
Total	100.0	100.0		Chi-Square	0.069			Chi-Square	0.296	
Chi-Square	0.161			Gamma	0.027			Gamma	0.585	
Gamma	0.081									
Laid Off				Disliked Coworkers				Boss Conflict**		
VI	6.1	5.1		VI	4.8	5.1		VI	5.3	17.2
I	2.6	3.2		I	4.4	6.4		I	4.8	7.6
MI	1.8	1.3		MI	7.9	12.1		MI	11.4	8.3
NI	89.5	90.4		NI	82.9	76.4		NI	78.5	66.9
N	228	157		N	228	157		n	228	157
Total	100.0	100.0		Total	100.0	100.0		Total	100.0	100.0
Chi-Square	0.935			Chi-Square	0.405			Chi-Square	0.001	
Gamma	0.748			Gamma	0.145			Gamma	0.003	

Table 4. Job Related Triggers										
Dislike Boss**										
VI	3.9	9.6								
I	3.9	7.6								
MI	7.0	7.0								
NI	85.1	75.8								
N	228	157								
Total	100.0	100.0								
Chi-Square	0.046									
Gamma	0.017									
** Significant at .05 and * Significant at .10 VI, Very Important; I, Important; MI, Moderately Important; NI, Not important										

FINANCIAL TRIGGERS

Financial incentives have been popular research subjects in entrepreneurship. Many scholars have argued that entrepreneurs were not motivated primarily by money. It would be naïve to think that entrepreneurs do not seek financial rewards. However money is rarely the primary reason for people to start their own businesses. It is also possible that seeking financial reward could be distractive to entrepreneurial objectives (Barringer & Ireland, 2006). Did our sample respondents agree? "Needed more money" and "wanted to earn some money" were important triggers for over 50 percent of both respondents groups. "Spouse wanted more money" was much less important to both groups. There was no statistically significant relationship between the groups on these triggers. Interestingly, in business respondents were more inclined to want to get rich. "Having money to invest" or "inherited money to invest" were more important triggers for in business respondents than for pre business respondents with statistically significance. Evidently having money or inheriting money were important trigger for in business respondents. Most of our respondents indeed hoped for some financial rewards, but they did not want to (or did not think about) get rich by starting their own businesses.

One interesting observation was that financial triggers were more important than job related triggers, but less important than personal and idea/opportunity triggers with the exception of needed more money and wanted to earn some more money.

Table 5. Financial Triggers										
Needed More Money				Spouse Wants More Money				Wanted to Earn Some Money		
	Pre	In			Pre	In			Pre	In
VI	46.7	44.1		VI	11.0	9.5		VI	46.5	52.2
I	14.1	16.1		I	7.9	13.9		I	22.8	20.1
MI	8.8	9.3		MI	10.1	10.8		MI	9.2	10.7
NI	30.4	30.4		NI	71.1	65.8		NI	21.5	17.0
N	227	161		N	228	158		n	228	159
Total	100.0	100.0		Total	100.0	100.0		Total	100.0	100.0
Chi-Square	0.934			Chi-Square	0.275			Chi-Square	0.549	
Gamma	0.757			Gamma	0.330			Value	0.252	
Wanted to Get Rich				Had Money to Invest**				Invest Inherited Money**		
VI	16.7	17.6		VI	2.6	17.0		VI	1.8	5.1
I	11.0	20.1		I	3.9	11.9		I	1.8	3.2
MI	18.4	16.4		MI	7.9	7.5		MI	0.4	3.8
NI	53.9	45.9		NI	85.5	63.5		NI	96.1	87.8
	228	159		N	228	159			228	156
Total	100.0	100.0		Total	100.0	100.0		Total	100.0	100.0
Chi-Square	0.078			Chi-Square	0.000			Chi-Square	0.013	
Gamma	0.102			Gamma	0.000			Gamma	0.005	

** Significant at .01 and * Significant at .05
VI, Very Important; I, Important; MI, Moderately Important; NI, Not important

FAMILY AND INTERPERSONAL TRIGGERS

Family and interpersonal triggers (Table 6), with the exception of "joined a family business", were not statistically significant between the two groups. More in business respondents than pre business respondents listed "joined family business" as a trigger. "Wanted a flexible work schedule" and "wanted more family time" were two important triggers for both pre business and in business respondents from the family and interpersonal perspectives. "Wanted to work with spouse", "death of a loved one", "divorce", "wanted to be out of the house", "retired-wanted something to do" were important to less than 10 percent of the respondents. "Someone else suggested the business" was important to more than 20 percent of respondents, but was not statistically different between the groups. With the exception of "wanted flexible schedule" and "wanted family time", family and interpersonal triggers were the least important of all the triggers studied for both groups.

Table 6. Family and Interpersonal Triggers

Wanted Flexible Schedule				Spouse and I work together				Wanted Family Time		
	Pre	In			Pre	In			Pre	In
VI	25.9	31.3		VI	13.2	9.6		VI	33.3	26.3
I	18.0	18.8		I	8.4	11.5		I	12.7	18.6
MI	10.5	10.0		MI	7.5	8.3		MI	11.4	11.5
NI	45.6	40.0		NI	70.9	70.7		NI	42.5	43.6
N	228	160		N	227	157		n	228	156
Total	100.0	100.0		Total	100.0	100.0		Total	100	100
Chi-Square	0.636			Chi-Square	0.560			Chi-Square	0.302	
Gamma	0.196			Gamma	0.883			Gamma	0.465	
Death of Loved One				Wanted to be Out of the House				Joined Family Business**		
	Pre	In		VI	8.3	7.7		VI	3.9	9.6
VI	1.3	4.5		I	4.4	9.0		I	0.9	5.7
I	2.2	1.3		MI	7.5	7.1		MI	2.6	1.9
MI	1.3	1.3		NI	79.8	76.1		NI	92.5	82.8
NI	95.2	92.9		N	228	155		n	228	157
N	228	155		Total	100.0	100.0		Total	100.0	100.0
Total	100.0	100.0		Chi-Square	0.335			Chi-Square	0.004	
Chi-Square	0.253			Gamma	0.406			Gamma	0.005	
Gamma	0.343									
Inherited Business				Someone Else Suggested Business				Divorce		
VI	1.8	5.8		VI	15.8	11.8		VI	4.8	3.2
I	1.3	1.9		I	12.7	11.1		I	0.9	1.9
MI	0.9	1.3		MI	11.4	19.0		MI	0.9	2.6
NI	96.1	91.0		NI	60.1	58.2		NI	93.4	92.3
N	228	156		N	228	153		n	228	156
Total	100.0	100.0		Total	100.0	100.0		Total	100.0	100.0
Chi-Square	0.170			Chi-Square	0.178			Chi-Square	0.382	
Gamma	0.053			Gamma	0.830			Gamma	0.724	

Table 6. Family and Interpersonal Triggers										
Retired--Something to Do										
VI	3.9	5.1								
I	3.9	4.5								
MI	3.1	3.2								
NI	89.0	87.3								
N	228	157								
Total	100.0	100.0								
Chi-Square	0.946									
Gamma	0.586									
** Significant at .01 and * Significant at .05										
VI, Very Important; I, Important; MI, Moderately Important; NI, Not important										

SUMMARY, CONCLUSIONS AND IMPLICATIONS

Demographically, the pre business entrepreneurs were different from in business entrepreneurs. In business entrepreneurs were significantly more male, older, white, married, more experienced, had more education and were more likely going into retail or service businesses. The results of this preliminary study seem to show that there are statistically significant differences in triggers between pre business and in business entrepreneurs.

Among the personal triggers, pre business entrepreneurs were more likely to feel that they were not accomplishing what they could or realizing their potential, and were changing for more satisfying careers. In business entrepreneurs on the other hand were more likely to want control, be their own boss and felt they could do better than others in business. The personal triggers, as a group, were rated important by both groups of entrepreneurs with a few exceptions for individual items.

Idea/Opportunity triggers were also important for both groups. In business entrepreneurs were more likely to rank idea grew out of job, saw idea, pursued it, hobby grew into a business, and bought business higher than pre business entrepreneurs. Saw a customer need and saw an opportunity, were among the most important triggers chosen by both groups, but not different between the groups.

Job related triggers seemed less important than Personal and Idea/Opportunity triggers among both groups of entrepreneurs. The individual triggers were similarly ranked by both groups with the exception of dislike job, dislike boss, and boss conflict which in business entrepreneurs ranked more important. Job potential, similar to two personal triggers, ranked most important among the job related triggers for both groups.

Financial triggers do not seem as important to both groups as personal, idea/opportunity, and job related triggers. With the exception that in business entrepreneurs had resources available to invest compared to pre business entrepreneurs. Interestingly, the desire to get rich was important to about a third of the respondents. Most entrepreneurs seemed to want to earn more or some money.

Family and interpersonal triggers were not ranked very high among both groups and were statistically similar except that joined the family business was ranked higher among in business entrepreneurs.

Based on these findings, pre business entrepreneurs and in business entrepreneurs, though different demographically, seem to have many similar and some different triggers. The differences that do exist may result from the fact that pre business entrepreneurs sample contains some individuals who are not seriously pursuing entrepreneurship and/or that those who do, in fact, go into business may turn out to be similar to their in business counterparts. Too, it is possible that in business entrepreneurs have forgotten or altered their perception of some of the triggers that prompted them to pursue entrepreneurship.

From the theoretical point of view, this study has given additional specification to the personal and environmental triggers that influence entrepreneurs who embark on new ventures. While there were some statistically significant differences between pre business and in business entrepreneurs on specific triggers, most entrepreneurs seem to have embarked on their enterprise as a result of largely positive personal and idea/opportunity triggers, some negative job related triggers, some desire to earn money, and last, family and/or interpersonal triggers. These findings confirm and give more specification to the work of previous researchers.

From the practitioner point of view, knowing why entrepreneurs are behaving can lead to a better understanding of the information needs of entrepreneurs who are preparing to go into business. In particular, the triggers suggest that entrepreneurs are looking for new venture opportunities and will take action when something comes up. Coupled with negative triggers, such as job dissatisfaction, these triggers could result in precipitous action by entrepreneurs and result in difficulties for the individuals involved. It is important that entrepreneurs take the time to assess and plan their ventures before they start.

LIMITATIONS AND FURTHER RESEARCH

This study was limited geographically to north Louisiana and can not be generalized to all entrepreneurs. Broadening the geographic base of the study could lead to different results. More in depth study of the individual triggers and their impact on subsequent actions by entrepreneurs similar to the Haynes et al study. Additional research on the source of these individual triggers can lead to a better understanding of entrepreneurs. A longitudinal study of pre business entrepreneurs and their subsequent behavior may yield better insight into entrepreneurs and the entrepreneurial process.

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SMALL BUSINESS OWNERS AND CREDIT CARDS: AN ANALYSIS BY GENDER AND LOCATION

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ABSTRACT

Small business owners who find it difficult to obtain traditional financing from banks often resort to using credit cards, usually at a higher rate of interest. To further examine credit card use by small business owners, data from the U.S. Census Bureau's 2001 Survey of Income and Program Participation were analyzed. The study specifically compares the proportions of incorporated and unincorporated business owners who have credit card or other types of debt with people who are not business owners. Not surprisingly, owners of unincorporated small business, especially sole proprietors, were the most likely to have credit card debt.

INTRODUCTION

Small business credit cards have become increasingly popular, providing business owners not only with convenience, but also easy access to fast credit. According to the SBA Office of Advocacy (2006, p. 1), "the number of small business loans outstanding under $100,000 increased 25% between June 2004 and June 2005…The increase came mostly from credit card use by small business." This study further explores small business owners' credit card use by comparing the proportions of incorporated and unincorporated business owners with credit card debt. In the following sections, a brief background on credit card use is provided, leading to the methodology of this study, and the results.

CREDIT CARD USE

Credit cards became popular because of their user-friendliness and the decrease in post depression aversion to financial risk. People rebelled against the previous logic of going without items until they could save up enough to purchase them outright (Nocera, 1994). In 2003, 35 million out of the 144 million cardholders regularly made only the minimum payment on their credit card accounts (PBS Frontline, 2004). Many cardholders have contributed significantly to the mounting number of bankruptcies (7 million bankruptcies from 1999-2004) in recent years. One of the important and worrisome issues with this vast cardholder base is that “most cardholders do not view their credit card balance as a loan” (Nocera, 1994, p. 20). According to the Federal Reserve (2005), the average family filing for bankruptcy in 1997 owed $36,000 in high-interest credit cards and other debt while earning only $24,000.

Banks that issue credit cards do so because of the high potential profitability of this financial product. With interest rates that climb as high as 25-30%, the industry continues to reap the benefits of consumer credit usage that has drastically increased in the last 50 years. In the U.S. alone, 641 millions cards were issued in 2003, generating $30 billion (PBS Frontline, 2004). During the 1983-1995 period, there was a real increase of 179% in such borrowing as credit rose to $812 from $291 1983 constant dollars based on household data (King, 2004, p. 56). Interest rates are not, however, the only cost associated with credit card use. Penalties and fees accounted for 28% of credit card issuer profits in 2000 and 31% a year later (Lazarony, 2005).

The importance of credit cards has likewise grown among small business owners in the last 10 years. In a survey of the members of the National Federation of Independent Business (Scott, Dunkelberg, & Dennis, 2003), 11% of business owners in 1995 reported that credit cards were their most important source of working capital. That proportion grew to 15% by 2001. Approximately 6% depended on credit cards alone for financing. Of the 82% of business owners that used credit cards, 44% carried balances. In addition, 54% of all surveyed business owners took advantage of trade credit and 20% used personal loans. Credit cards were most important to small companies with less than $500,000 in sales, women business owners, and businesses less than 10 years old. People who had been in business fewer than ten years were the most likely to carry a credit card balance.

Credit cards are clearly an important element in U.S. finances today, both among business owners and the general population. This study further examines credit card use by incorporated and unincorporated business owners, comparing these groups with people who are not business owners. In the following section, the data from a nationwide survey are analyzed, with special attention given to the proportion of people having credit card debt and the average debt carried by those who do not pay off their balances monthly.

METHODOLOGY AND RESULTS

Data were obtained from the U.S. Census Bureau's 2001 Survey of Income and Program Participation through the use of Data Ferret. Over 48,000 people from age 18 to 88 were included. Two important variables used in this study were the dollar value of credit card debt and whether the respondent had no debt, credit card debt (alone or with other debt as well), or only debt that was not from a credit card. This variable was limited to debt in the respondent's own name. Therefore, the proportions of people reporting debt may be underestimated while the percentage of people with no debt may be overestimated as married respondents may essentially owe money, but it is in their spouses' names. In the following tables presenting the data regarding the debt variables as well as demographic variables, both actual and expected counts from cross-tabs matrices are included where appropriate in order to allow for easier analysis of the association between the variables.

Analysis of the data in Tables 1 and 2 shows that there was not a close relationship between the proportion of people with credit card debt and business ownership, although there was a significant difference in the mean debt held by those with credit card debt. When business ownership was broken down into incorporated and unincorporated businesses, as shown in Table 3, an association emerged. More than 19% of unincorporated business owners in the study had credit card debt in their own name. In contrast, only 15% of incorporated business owners had this debt. One explanation for this could be that owners of incorporated businesses have better access to lower-cost bank loan financing. Because incorporated businesses are separate legal entities, their owners may incur debt in the name of the business, leading to a high proportion of people in this category (81.0%) claiming they have "no debt" in their own name. The proportions of people with no debt were very similar between unincorporated business owners and non-business owners (76.4% and 77.6%). Non-credit card debt percentages were similar across all three categories.

Table 1: Proportion of People with Credit Card (CC) Debt and Other Debt

	No debt	CC debt	Non-CC debt	Total
Not a business owner	34780	7964	2100	44844
Expected value	34790	7969	2056	
Within category %	77.6%	17.8%	4.7%	
Business owner	2797	643	153	3593
Expected value	2787	639	167	
Within category %	77.8%	17.9%	4.3%	
Chi-square 1.360 sig. .507				

Table 2: Mean Debt Among Those with CC Debt by Business Ownership

	Mean	std. dev.
Not a business owner	$4103	6391
Business owner	$5792	7953
***t = -5.249 sig. .000		

Among those with credit card debt, unincorporated business owners had the highest mean debt (see Table 4). ANOVA showed a significant difference between the means. Post hoc analysis revealed the difference was significant (sig. .000) between non-business owners and unincorporated business owners. However, it was not significant between incorporated business owners and either of the other two groups. In all three groups, the standard deviation was very large in relation to the mean due to a large range.

Table 3: Proportion of People with Credit Card (CC) Debt and Other Debt by Business Ownership

	No debt	CC debt	Non-CC debt	Total
Not a business owner	34780	7964	2100	44844
Expected value	34790	7969	2056	
Within category %	77.6%	17.8%	4.7%	
Incorporated bus. owner	926	171	46	1143
Expected value	887	203	53	
Within category %	81.0%	15.0%	4.0%	
Unincorp. bus. owner	1871	472	107	2450
Expected value	1901	435	114	
Within category %	76.4%	19.3%	4.4%	
***Chi-square 102.212 sig. .000				

Table 4: Mean Debt Among People with CC Debt by Type of Business Ownership

	Mean	std dev.	Min	Max
Not a business owner	$4103	6391	$1	$118000
Incorporated bus. owner	$5483	7644	$39	$60000
Unincorp. bus. owner	$5904	8067	$1	$60000
***F = 20.215 sig. .000				

When the data from unincorporated businesses were further broken down into sole proprietorships and partnerships (Table 5), there was again a statistically significant relationship as sole proprietors were more likely to have both credit card and other types of debt. This could logically be due to the fact that partnerships allow multiple people to combine their resources, whereas unincorporated sole proprietors must borrow money they need but do not have.

Table 5: Proportion of People with CC Debt and Other Debt by Unincorporated Business Ownership				
	No debt	CC debt	Non-CC debt	Total
Sole proprietorship	1514	409	93	2016
Expected value	1540	388	88	
Within category %	75.1%	20.3%	4.6%	
Partnership	357	63	14	434
Expected value	331	84	19	
Within category %	82.	3%	14.5%	3.2%
**Chi-Square 10.145 sig. .006				

In comparing the mean debt among people with credit card debt (see Table 6), sole proprietors had a mean approximately 50% higher than non-business owners. While the ANOVA showed a significant difference among the means, post hoc analysis revealed there was a statistically significant difference between the mean debt of sole proprietors and non-business owners (sig. .000) but not between partnerships and either other group.

Table 6: Mean Debt Among People with CC Debt by Unincorporated Business Ownership				
	Mean	std. dev.	Min	Max
Not a business owner	$4132	6422	$1	$118000
Sole proprietorship	$6117	8406	$1	$60000
Partnership	$4521	5204	$100	$23000
***F=18.094 sig. .000				

When the same data were broken down by location, as shown in Table 7, a slightly different picture emerged. Within metropolitan regions, the proportion of people with credit card debt was significantly related to business ownership, with 14.6% of incorporated business owners having credit card debt, compared to 19.0% of non-business owners and 21.5% of unincorporated business owners. A similar relationship was not, however, found in non-metro areas.

Table 7: Proportion of Business Owners with Debt by Location and Business Ownership

	No debt	CC debt	Non-CC debt	Total
Not a business owner				
Metro	26166	6473	1513	
Expected value	26488	6405	1599	
Within category %	76.6%	19.0%	4.4%	
Non-metro	8614	1491	587	
Expected value	8293	1899	501	
Within category %	80.6%	13.9%	5.5%	
Incorporated business owners				
Metro	748	134	36	918
Expected value	744	137	37	
Within category %	81.5%	14.6%	3.9%	
Non-metro	178	37	10	225
Expected value	182	34	9	
Within category %	79.1%	16.4%	4.4%	
Unincorporated business owners				
Metro	1281	372	81	1734
Expected value	1324	334	76	
Within category %	73.9%	21.5%	4.7%	
Non-metro	590	100	26	716
Expected value	547	138	31	
Within category %	82.4%	14.0%	3.6%	

*** Among not a business owner Chi-square 150.919 sig. .000
Among incorporated Chi-square 0.660 sig. .719
*** Among unincorporated Chi-square 20.824 sig. .000
*** Overall Within Metro Chi-square 20.201 sig. .000
Overall Within Non-metro Chi-square 6.017 sig. 198

To further compare debt usage by location, data regarding incorporated and unincorporated business owners were isolated and analyzed. Although there was not a significant relationship between debt and location among incorporated business owners, an association was found among the unincorporated business owners. Non-metro residents were more likely to have no debt (82.4% compared to 73.9%) and one-third less likely to have credit card debt (14.0% vs. 21.5%). The lower incidence of credit card debt could suggest that business owners were able to obtain financing from small rural banks with whom they have long standing personal relationships, as is common in rural areas. However, these non-metro business owners were also slightly less likely to have non-credit card debt. This would suggest that they are more averse to debt in general. Non-metro residents who did not have a business or were unincorporated had lower average debts, although there was a statistically significant difference only among those without businesses (Table 8).

Table 8: Mean Debt Among People with CC Debt by Location and Business Ownership

	Mean	Std. dev.
Not a business owner		
Metro	$4177	6563
Non-metro	$3783	5571
t = 2.380 sig. .017		
Incorporated business owners		
Metro	$5380	8003
Non-metro	$5855	6254
t = -0.384 sig. .802		
Unincorporated business owners		
Metro	$6204	8490
Non-metro	$4788	6157
t = 1.870 sig. .063		

The data were also broken down by sex, as shown in Table 9. Similar to the way in which there was a significant association between debt and business ownership among metro residents, but not among non-metro residents, there was a relationship between debt and business ownership among men, but not among women. As in previous analyses, unincorporated business owners had the highest proportion of credit card debt (19.0% compared to 14.6% and 14.8%), and the lowest proportion of people with no debt (76.5% vs. 80.9% and 80.5%).

Table 9: Proportion of Non-Business Owners with Debt by Sex and Business Type

	No debt	CC debt	Non-CC debt	Total
Not a business owner				
Men	16328	3004	946	20278
Expected value	15727	3601	950	
Within category %	80.5%	14.8%	4.7%	
Women	18452	4960	1154	24566
Expected value	19053	4363	1150	
Within category %	75.1%	20.2%	4.7%	
***Chi-square 222.734 sig. .000				
Incorporated business owners				
Men	691	125	38	854
Expected value	692	128	34	
Within category %	80.9%	14.6%	4.4%	
Women	235	46	8	289
Expected value	234	43	12	
Within category %	81.3%	15.9%	2.8%	
Chi-square 1.758 sig. .415				
Unincorporated business owners				
Men	1173	291	69	1533
Expected value	1171	295	67	
Within category %	76.5%	19.0%	4.5%	
Women	698	181	38	917
Expected value	700	177	40	
Within category %	76.1%	19.7%	4.1%	
Chi-square 0.350 sig. .840				
*** Overall within men Chi-square 19.581 sig. .001				
*** Overall within women Chi-square 7.046 sig. .133				

When comparing the proportions between, rather than within, the sexes, business ownership was important. Among non-business owners, women were one-third more likely to have credit card debt (20.2% vs. 14.8%) and less likely to have no debt (75.1% compared to 80.5%). Despite the higher propensity to carry debt, the women's average debt was significantly lower than men's (see Table 10). These sex-based relationships were not evident among business owners (incorporated or unincorporated). This suggests that in regard to credit card usage, men and women who are business owners are more similar to each other than are men and women in the general population. While there was more than a 5% difference between the proportions of non-business owning men and women with credit card debt, there was only about 1% difference between the sexes when grouped according to business ownership status (incorporated or unincorporated).

Table 10: Mean CC Debt of Non-Business Owners with Debt by Sex

	Mean	Std dev.
Non-business owners		
Men	$4474	7009
Women	$3778	5975
*** t = 3.882 sig. .000		
Incorporated business owners		
Men	$5330	7556
Women	$5899	7947
t = -0.421 sig. .675		
Unincorporated business owners		
Men	$6042	8130
Women	$5683	7982
t = 0.472 sig. .638		

DISCUSSION AND CONCLUSION

The findings of this study show that while owners of incorporated businesses were the least likely to have credit card debt when compared to unincorporated businesses owners or people without businesses, and unincorporated business owners were the most likely to have credit card debt. Despite high standard deviations, the mean debt (of those with credit card debt) was found to be significantly higher ($4103 vs. $5792) among business owners. When incorporated and unincorporated businesses were separated, non-business owners had significantly lower debt than unincorporated business owners ($4103 vs. $5904). Sole proprietors were found to have the highest mean debt ($6117) when partnerships were placed in a different category. This would suggest that the business owners, especially sole proprietors, use personal credit card to debt to help finance their operations. Because these data were limited to credit cards in the respondent's own name, future research should examine debt by family, to give better insight into borrowing practices.

Breaking the data down by sex, this pattern held true for men as there was a significant association between debt and type of business ownership, with incorporated men having the lowest proportion of credit card debt carriers, and unincorporated men having the highest. Men without businesses, however, were more similar to incorporated male business owners. In contrast, women without businesses were more similar to unincorporated women, and a more similar proportion of incorporated women had credit card debt, so that there was not a significant association between debt and type of business ownership among women. While an association was found between debt and sex among non-business owners (women were more likely to have credit card debt, but a lower mean dollar value), this association was not found among either type of business owners. Taken together, these findings suggest that men and women who are business owners tend to act more similarly than do men and women in the general population.

Location was also a factor in that an association was evident between the overall proportion of people with credit card debt and business ownership in metro areas, but not in non-metro areas. However, when analyzed by business ownership status, these data showed that among unincorporated business owners and those without businesses, metro residents were approximately 50% more likely to have credit card debt, whereas the proportions were not significantly different between incorporated business owners in each location. This could indicate that rural residents tend to have more of an aversion to credit card debt, or perhaps even debt in general. Business owners without debt or with lower levels of debt may not be taking advantage of the growth that could be achieved through leverage. On the contrary, bankruptcy is a lower risk for people with little to no debt. Future research should further explore this issue to determine if metropolitan business owners face greater failure and bankruptcy rates, or it rural business owners have lower levels of growth.

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