



**Antecedents to the Entrepreneurial Decision:  
An Empirical Analysis of Three Predictive Models**

Ph.D. Dissertation Abstract

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**ABSTRACT**

This research investigates why individuals become entrepreneurs. A comprehensive literature review identified three prominent intentions-based models that might meaningfully explain the entrepreneurial decision: Ajzen's Theory of Planned Behavior, Shapiro's Model of the Entrepreneurial Event, and Davidsson's Determinants of Entrepreneurial Intentions. A unique database of 669 twenty-two page vignette profiles was developed to empirically test and compare the models. Results suggest the decision to become an entrepreneur is best explained by a composite of the three models, comprised of propensity to act, perceived desirability of entrepreneurship, entrepreneurial availability, perceived feasibility, entrepreneurial subjective norm, and entrepreneurial conviction.

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Executive Summary

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## **Overview**

This research investigates the factors influencing the decision to start a new independent business venture. The study is divided into three phases. Phase One involves an extensive search and synthesis of literature germane to the entrepreneurial decision. Three intentions-based models emerge as particularly worthy of further investigation and empirical testing, and are selected for inclusion in the study: (1) Ajzen's Theory of Planned Behavior, (2) Shapero's Model of the Entrepreneurial Event, and (3) Davidsson's Determinants of Entrepreneurial Intentions.

Phase Two develops a unique database of 446 nascent U.S. entrepreneurs and 223 non-entrepreneurs utilizing data from the Panel Study of Entrepreneurial Dynamics (PSED). The PSED is a data-collection effort that identified a representative sample of U.S. nascent entrepreneurs from a random sample of U.S. households, and conducted phone interviews and collected mail survey data each of four subsequent years. This comprehensive PSED data set is used to develop an individual 22-page vignette profile on each of 669 individuals. Three independent raters score the twenty-five factors identified in the three models under investigation for each of the 669 individual vignette profiles.

Phase Three utilizes a path analysis technique to evaluate and compare each of the three models, as well as assess relative strength and predictive value of the factors found within the models. Ajzen's TPB model proved to more powerfully explain the intention to start a new business (TPB=0.38, SEE=0.19, DEI=0.24), while Shapiro's SEE model proved to best explain entrepreneurial activity (TPB=0.31, SEE=0.39, DEI=0.31). More importantly, a composite of the three models increases the explanatory power of entrepreneurial intentions from an average of 0.27 to 0.49 and the explanatory power of entrepreneurial activity from 0.34 to 0.42.

In addition to the empirical testing of the three models, and the development of a more powerful composite model, the study produced several noteworthy contributions. First, the extensive literature review produced a chronological and thematic perspective of entrepreneurship, useful to entrepreneurship practitioners, scholars, and educators. Second, the

literature review uncovered a problematic conceptualization of the entrepreneurial decision as a single decision, when it is clearly comprised of (1) a decision of self-employment, and (2) a decision to pursue a specific market opportunity. Third, the creation of the vignette profile database revealed key insights into the nature of U.S. entrepreneurship that are currently under-investigated in entrepreneurship studies. In particular, it revealed that although essentially absent from the literature, wealth aspiration and the unforeseen strain of employee management burden play important roles in the formation of entrepreneurial intentions and the undertaking of entrepreneurial activity. Fourth, the coding of the vignette profile data identified the need for extensive rater training, resulting in unusually high consensus among raters.

### **Why Study the Entrepreneurial Decision?**

For better or worse, the institution of business has become undeniably ubiquitous, necessary, and omnipotent. Not only do businesses drive economies, they comprise and fuel the increasingly hypercompetitive and global marketplace that provide the essentials of life and the indulgences of desire. Guided by an invisible hand, motivated by a competitive spirit, and driven by an insatiable need for profit, businesses provide the stage upon which individuals simultaneously perform the roles of buyer, seller, worker, investor, and regulator. Upon this economic stage, and among the structured yet seemingly chaotic nexus of opportunity and ambition, one role emerges supreme – the role of business creator, the role of entrepreneur.

William Baumol tells us that “[t]he entrepreneur is at the same time one of the most intriguing and one of the most elusive characters in the cast that constitutes the subject of economic analysis. He has long been recognized as the apex of the hierarchy that determines the behavior of the firm and thereby bears a heavy responsibility for the vitality of the free enterprise society.” Amid the complex and intricate structure of economic activity, the entrepreneur’s activities promote economic development (Kilby, 1983; Acs, 1996), drive innovation and technological progress (Saxenian, 1999), promote free trade (Baumol, 1968), and create new jobs

(Birch, 1979). The entrepreneur's role is multifaceted, occurring within a competitive market environment and involving opportunity recognition and evaluation, decision, motivation, initiative, action, resource marshaling and allocation, risk-bearing, problem-solving, management, networking, negotiation, compromise, commitment, determination, perseverance, and resolve. Unfortunately, the complexities of entrepreneurship have limited our ability to better understand why some people choose to start new businesses and others do not.

Businesses are created as a result of the purposeful intent and resolute action of courageous individuals, hailed by many as modern day heroes (Learned, 1992; Schein, 1983). "Not all individuals have the potential to form an organization. Of those that do, not all will attempt a founding" (Learned, 1992: 39). To better understand the process wherein some individuals choose to start new businesses and others do not, researchers have employed a variety of lenses. These approaches include disposition, situation, attribution, cognition, economic, sociologic, and public policy; and have found that for many, entrepreneurship represents a means to create wealth (Kao, 1995; Teece, 1998) or escape social bondage (Hagen, 1962). For others, entrepreneurship is the answer to job displacement (Shapiro, 1975B), career dissatisfaction (Storey, 1982), or an inability to submit to authority (Collins & Moore, 1964). Still others embrace entrepreneurship as a vehicle for self-expression (Timmons, 1999), autonomy (Hornaday & Aboud, 1971), security (Collins & Moore, 1964), and/or control (Rotter, 1966). Unfortunately, after nearly five decades of investigation, we still know very little about why individuals create new businesses (Reynolds, 1995). This dissertation explores the reasons behind the entrepreneurial decision to start a new independent business venture.

### **Contributions of this Research**

This research makes seven noteworthy contributions. This dissertation, although focused on entrepreneurship, resides at the nexus of multiple literatures including entrepreneurship, career selection, strategic management, economics, and cognitive psychology. The contributions

of this research extend into issues relevant to each of these disciplines because the entrepreneurial decision involves cognitive mechanisms, economic evaluation, individual career choices, and consequences; because it is the confluence of these factors that result in entrepreneurial activity that may result in the creation of a new business, and because the newly created business venture may or may not be successful.

The first contribution of this research is the construction of an original database useful for future entrepreneurship-related research. The present study has developed a comprehensive and nationally representative database of 446 nascent entrepreneur profiles (and a comparison group of 223 non-entrepreneurs). Most entrepreneurship research, for a variety of reasons, has relied on samples that are small, non-generalizable, and biased; and include data often collected at a point in time other than when the respondent is engaged in entrepreneurial activity over time. The profiles developed in this dissertation provide a large database that can be used to measure and inform innumerable entrepreneurship-related ideas – with measurements that are highly valid and reliable. The profiles may also provide a reliability check for researchers utilizing the PSED database. Researchers, who use data from specific PSED items, may review each data point relative to the contextual information provided in the respective profile.

A second contribution of this dissertation is the synthesis of existing literature related to the entrepreneurial decision, bringing together perspectives and knowledge from several fields. The resulting diverse and comprehensive literature review resulted in: (1) a chronological summary of the evolution of entrepreneurship knowledge; (2) an overview of dominant paradigms of entrepreneurship; and (3) a comprehensive categorization of entrepreneurship research. The literature review revealed a disconnect between parallel studies germane to the entrepreneurial decision.

A third contribution of this research is identifying the entrepreneurial decision as two distinct choices: one choice to pursue entrepreneurship as a career, and a second choice to pursue

a particular market opportunity. Entrepreneurship researchers to date have failed to realize or acknowledge the two-stage aspect of the entrepreneurial decision. The present study may serve to encourage future researchers to include this information in their work.

A fourth contribution of this study is the identification of important determinants (across the three models) of entrepreneurial intention and entrepreneurial activity. Ajzen's (1991) theory of planned behavior provides a parsimonious model of entrepreneurial behavior, identifying attitude, subjective norm, and perceived behavioral control as important factors contributing to entrepreneurial intention and activity. Individuals contemplating entrepreneurial endeavors will intend to do so, and then act on that intention if they feel positively toward the entrepreneurial activity behavior, if they believe that their personal referent groups approve of their engaging in entrepreneurial behavior, and if they feel that there is a reasonable chance of their successfully completing the behavior necessary to start a new business.

A fifth, and possibly the most influential contribution of this dissertation research, is a discovery in which only someone steeped in the data might perceive. The extended rigorous interaction with the data has revealed three most interesting phenomena: (1) the widely diverse nature of the types of entrepreneurs and entrepreneurial ventures embodied in the representative sample of 250 U.S. nascent entrepreneurs; (2) the large difference in aspiration levels among the nascent entrepreneurs studied in the sample, and the surprising number who have relatively low aspirations; and (3) the fact that many of the entrepreneurs dramatically lowered their stated aspirations in subsequent years, particularly related to the staffing and managing of employees.

Regarding the diverse nature of entrepreneurship, this study revealed a shocking, albeit interesting, large variation among entrepreneurs and among the types of entrepreneurial ventures represented in this sample. For example, included in the sample are a 63-yr old male starting a large internet company in San Francisco and an 18-yr old female starting an auto repair shop in a little town on a major highway in Texas. The diverse list goes on. It seems unrealistic to compare



such diverse ventures without first attempting to reduce the within-group variance (such as developing a typology – as will be discussed in the subsequent section on future research implications). Often, entrepreneurship scholars seem to be comparing the proverbial apples to oranges. And, these scholars have often made unsupported generalizations concerning the aspiration levels of nascent entrepreneurs.

Regarding a large aspiration variance and skewing, the present study revealed that most U.S. entrepreneurial ventures are exceedingly small. Tocqueville (1835) wrote of such entrepreneurial aspiration. After observing that Europeans prefer public employment, while Americans seek independence and self-employment, Tocqueville concluded that the American entrepreneur ambitiously seeks self-employment in the pursuit of independence, and self-improvement, but their goals are not of great magnitude. Tocqueville makes it clear that the entrepreneur is highly ambitious; however, Tocqueville's conceptualization of "highly ambitious" relates to being highly motivated to improve oneself or one's position in society, and not motivated toward lofty goals. Interestingly, much of the entrepreneurship educational materials today focus greatly on "gazelle" entrepreneurs who are profiled in the business press (e.g. Bill Gates or Michael Dell). Given this educational focus, it is noteworthy that few nascent entrepreneurs in the study had lofty goals, yet many of those with modest goals seemed highly ambitious and motivated. It would behoove entrepreneurship scholars to heed Tocqueville's implicit advice, and include aspiration levels in their investigations. This emphasis is important when considering aspirations and the neglected factor of dilettantism. A dilettante is a dabbler, a person who takes up an activity merely for amusement. The entrepreneurship literature makes reference to an entrepreneurial dilettante as a "hobby entrepreneur" (Miner, 1996; Kunkel, 2001). This study uncovered a significant number of entrepreneurial dilettantes. In a society as free (Sen, 1999) and materialistic (Hofstede, 1984) as the United States, entrepreneurial dilettantism may play a significant statistical role in the study of entrepreneurship. Often, independent wealth is

correlated with such “hobby” type entrepreneurship. Dilettantism and aspiration are important potential control variables in entrepreneurship research. The present study contributes to the understanding of entrepreneurship by recognizing the importance of such controls.

Regarding the reduction in managerial aspiration, the extensive reading of the contextually rich profiles revealed that over the four-year duration of the PSED study, nascent entrepreneurs and founders of incipient new ventures typically reduced their aspiration levels, particularly regarding the hiring of employees. This may be due to overly optimistic goals and sales expectations, the harsh reality of the requisite long hours and difficult nature of starting a new venture, an inability to acquire the necessary resources to fully exploit a market opportunity, or a myriad of other factors. This is important because most new jobs are reportedly created by new ventures (Birch, 1979). Based on the data in the present study, the difference between intended and real job creation is significantly negative. It might very well be that the managing of employees is more difficult than originally anticipated. One can speculate that bureaucratic regulatory requirements also chill aspirations. Whatever the reason, entrepreneurship researchers considering aspiration levels in their research can be served to include changes in staffing and managerial aspirations in their research designs.

A sixth significant contribution of the study is the increase in inter-rater reliability after substantial rigorous training of the raters was conducted. Although it is widely understood that qualitative and secondary coding requires training to achieve acceptable levels of inter-rater reliability, rarely is that training quantitatively described or defined. This study found that an intensive two-day workshop was necessary to improve agreement among raters. The raters in this study agree that the most beneficial aspect of the training was the systematic group processing of specific examples of each construct at each point of the 7-point scale. This study suggests the use of intensive workshop training and specific construct coding examples to researchers conducting studies that utilize secondary coding.

A seventh contribution of the present study involves the practical benefits provided to entrepreneurs, venture financiers, educators, and policy makers. For entrepreneurs and educators, a better understanding of the entrepreneurial decision yields a wealth of practical applications, such as enabling the development of entrepreneurial training. Armed with a better understanding of how the entrepreneurial decision is made may allow entrepreneurs to better manage the critical variables influencing their decision. Results of this study suggest that an individual entrepreneur is strongly influenced by attitude, subjective norms, perceived feasibility, conviction, and propensity to act. Knowing this, the individual may assess their relative strengths and weaknesses, and thereby gain a more realistic perspective of their entrepreneurial endeavor. The same holds true for educators and service providers. Public policy makers can benefit from understanding the impact of policy initiatives that target specific decision cues and the formation of intentions, and, ultimately, the engagement in entrepreneurial activity and the formation of new businesses. For example, information regarding the influence on entrepreneurial activity created by special economic incentives, the formation of incubator programs, and changes to regulatory reporting requirements will be easier to assess (Krueger et al., 2000).

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