# University of Nebraska - Lincoln

# DigitalCommons@University of Nebraska - Lincoln

Dissertations, Theses, and Student Research from the College of Business

Business, College of

4-2011

# BECOMING A FIRM: AN INVESTIGATION OF HOW ONE-PERSON ENTERPRISES CONSTRUCT THE PROBLEM OF BECOMING AN EMPLOYER

Ronda M. Smith Nelson University of Nebraska-Lincoln

Follow this and additional works at: https://digitalcommons.unl.edu/businessdiss

Part of the Business Administration, Management, and Operations Commons, Entrepreneurial and Small Business Operations Commons, and the Human Resources Management Commons

Smith Nelson, Ronda M., "BECOMING A FIRM: AN INVESTIGATION OF HOW ONE-PERSON ENTERPRISES CONSTRUCT THE PROBLEM OF BECOMING AN EMPLOYER" (2011). *Dissertations, Theses, and Student Research from the College of Business.* 21.

https://digitalcommons.unl.edu/businessdiss/21

This Article is brought to you for free and open access by the Business, College of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Dissertations, Theses, and Student Research from the College of Business by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

# BECOMING A FIRM: AN INVESTIGATION OF HOW ONE-PERSON ENTERPRISES CONSTRUCT THE PROBLEM OF BECOMING AN EMPLOYER

by

Ronda M. Smith Nelson

## A DISSERTATION

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of Requirements

For the Degree of Doctor of Philosophy

Major: Business

Under the Supervision of Professor Terrence C. Sebora

Lincoln, Nebraska

April, 2011

BECOMING A FIRM: AN INVESTIGATION OF HOW ONE-PERSON ENTERPRISES CONSTRUCT THE PROBLEM OF BECOMING AN EMPLOYER

Ronda M. Smith Nelson

University of Nebraska, 2011

Advisor: Terrence C. Sebora

This study draws on Coase's (1937) Theory of the Firm, that suggests a firm exists

only after it has employees and Penrose's (1959) Theory of the Growth of the Firm

which suggests human resources are a critical asset to the firm as a means to better

understand the issue of job creation in the United States especially among one-person

enterprises (OPEs). From the perspective of entrepreneurial cognition, and in the

context of ill-defined problems (Abelson & Levi.1985) a survey was conducted to

better understand the Becoming an Employer Problem (BEP) as it is perceived by

OPEs. A measure of the BEP was developed and antecedents consistent with factors

known to be associated with how problems are constructed in general (Reiter-Palmon

& Robinson, 2009) was tested. Results suggest 3 main classes of problems associated

with BEP: concerns related to administrative and legal, recruitment and selection, and

regarding the OPE's management abilities and preferences. The findings suggest that

OPEs (n=100) who are older, married, have completed a business plan for their

business, and have a promotion orientation towards goals will perceive less problems

associated with becoming an employer, whereas those who have more expertise in the

functional areas of business are likely to perceive more problems associated with BEP. These effects are significant after controlling for gender, minority status, operating state, type of business, and whether or not the entrepreneur has previously hired employees. Implications and opportunities for future research are discussed.

#### **DEDICATION**

# To my parents, Mom and Dad,

- ... Who always found a way to help me reach my dreams.
- ... Who were always there for me, no matter what I needed.
- ... Who taught me more about business, than any course in school.
- ... Who showed me what it looks like to find and keep a love for a lifetime.
- ... Who welcomed with open arms my husband and his son, as if they were their own.
- ... Who never failed to remind me how proud they were of me and how much they loved me.
- ... Who as I became an adult became two of my best friends.

Thank you so much for encouraging me to "try everything once" and "do your best" you helped me find my place in the world.

# To my husband, Travis,

- ... Who took a chance, when he said "If you want to get your PhD, GO FOR IT!!!"
- ...Who never failed to remind me that "if it was easy, everyone would do it" and "sometimes you just have to be a duck"
- ... Who has become my biggest advocate, coach and champion.
- ... Who thinks that I am his secret weapon, yet in all reality, he is actually mine.

Thank you for believing in me and believing in us. No matter what the future holds, if we can do this together, we can do anything.

# To my brother, Randy,

- ... Who in childhood, I helped build his own business.
- ... Who, to this day, is the most creative and kind-hearted person I know.

Thank you for all you do to care for Buddy and our family, your generosity is unwavering. The world is yours – so take it on. May you find your wings and soar.

#### ACKNOWLEDGEMENTS

I would like to thank those that have guided, challenged and supported me on this journey: Roni Reiter-Palmon, (my master's advisor), Terry Sebora, (my dissertation chair), Rich Wiener (my first big research project), my advisors Fred Luthans, Gwen Combs, Lester Digman, Mary Uhl-Bien, Sang M. Lee; my former instructors: Bruce Avolio, Calvin Garbin, Lesa Hoffman, James Bovaird, Cynthia Willis Esqueda, Lauree Tilton-Weaver, Carey Ryan, Joe Brown, Kenneth Deffenbacher, James Thomas, Brigette Ryalls, Lisa Scherer, Wayne Harrison and Scott Shane.

To my officemate, Michelle Fleig-Palmer who was always there to be supportive, to offer advice and to help keep me moving forward. To my former classmates and friends, Ben Blackford, Noel Palmer, Jeff Coggin, Shelton Guo, Taewan Kim, Joana Story, Kelly Phipps, Marcy Young Illies and Sam Nelson; Thank you for your friendship, and support, you made the journey worthwhile.

To those that have traveled recently before me demonstrating what excellence looks like and who give me something to aspire to: Marie Mitchell and James Avey, your talent, work ethic and productivity never cease to amaze me.

To Frances Chumney and Houston Lester, my statistics consultants at the NEAR Center. Thank you for the extra time you spent to help me reorganize what I knew, help me find the information I needed, and remind me that "I didn't really need you."

To the faculty and staff in the Management Department at the Terry College of Business at the University of Georgia, thank you for creating the opportunity to work with you and be a "bulldog" for a while. To my students at the University of Georgia, thank you for the opportunity to get to know you and for all your assistance with this project.

To the students who worked with me on my research, without your help much of my research would not be possible: Carl Guice, Rick Cantril, Tony Evasco, Nathan Feather, Charlsey McMahon, Samantha Campbell, Cameron Billingsley, Sophia Kohls, Cameron Andreesen, Jia Wen "Christine" Chng, Parker Bender, Katie Thomas, Lindsey Clausen, Tina Bacce, Stephen Rindone, Elijah Kang, Alex Hale, and Jun Jeong "Jimmy" Koo .

To the staff in the department of management at UNL, Tamera Brennan, Nicole Church, Cathy Watson, Margaret Ladely, and Rose Graves, thank you for all your help and support over the years.

To my extended family, cousins and in-laws, thank you for your love and support, the many meals you provided and helping us have a full life during this process, your compassion, understanding and assistance is greatly appreciated.

# BECOMING A FIRM: AN INVESTIGATION OF HOW ONE-PERSON

# ENTERPRISES CONSTRUCT THE PROBLEM OF BECOMING AN

# **EMPLOYER**

# TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION TO THE STUDY	
Purpose of the Study	1
Theoretical Importance	3
The Problem of the Problem	
Many One Person Enterprises Do Not Become Employers	4
Hiring for One Person Enterprises Is A Problem	
Research Questions	8
Significance of the Study	13
Organization of the Dissertation	15
CHAPTER TWO: LITERATURE REVIEW AND HYPOTHESES	
Why initial hiring hasn't been investigated	16
Demographic of Interest Problem	17
Definitional Problem	17
Level of Analysis Problem	20
Temporal / Transition Stage Problem	21
Human Resources and Small Business	22
Economic Influences	23
Personal Influences	23
Becoming an Employer	25
Theory and Hypotheses	27
Social and Entrepreneurial Cognition	28
Ill-Defined Problems	30
Individual Business Knowledge	33
Entrepreneurial Aspirations	34
One Person Enterprise Context	38
CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY	
Sample	43
Power Analysis	
Questionnaire Development and Administration.	
Measures	
Personal Influences	60
Situational Influences	62
CHAPTER FOUR: ANALYSES AND RESULTS	
Hynothesis Testing	67

CHAPTER FIVE: DISCUSSION	
Discussion	76
Limitations of Study	
Future Research	78
Implications	
REFERENCES	85
APPENDIX	
TABLES	
Table 3.1.Sample Referral Source and OPE Status	47
Table 3.2. Participating Businesses by Type of Industry	48
Table 3.3. Business Sample Characteristics	48
Table 3.4. Reliabilities of initial hypothesized factors	
Table 3.5. Final Model of Parameter Estimates	58
Table 3.6. Model Statistics for the BEP Construct	59
Table 3.7. Reliabilities for Final Model Indicators	59
Table 3.8 Test of mean differences between OPEs and Businesses with	
Employees	60
Table 4.1. Descriptive Statistics for Measured Variables	72
Table 4.2 Regression results predicting BEP from all Control Variables	73
Table 4.3 Regression results predicting BEP from Hypothesized Variables	74
FIGURES	
Figure 1.1. Conceptual Model of Relationships with the BEP	12
Figure 2.1. Transitions in the Entrepreneurship Process	
Figure 2.2. Model of Proposed Hypotheses	
Figure 3.1. Factor Structure of the Becoming an Employer Problem	
Figure 4.1 Model of Hypothesis Results	

# BECOMING A FIRM: AN INVESTIGATION OF HOW ONE-PERSON ENTERPRISES CONSTRUCT THE PROBLEM OF BECOMING AN EMPLOYER

#### **CHAPTER ONE**

#### INTRODUCTION TO THE STUDY

## Purpose of the Study

"To recognize a problem which can be solved and is worth solving is in fact a discovery in its own right" (Polyani, 1958; in Getzels, 1982).

The growth of small businesses (Dencker, Gruber & Shah, 2009) and job creation (Cowling, Taylor & Mitchell, 2004) are significant political and economic issues, as evidenced by the continual effort of politicians to legislate and regulate incentives for small business expansion (Davis & Haltiwanger, 1994; Duncan & Handler, 1994, The White House Office of the Press Secretary, 2009). The attention to small businesses is based on the argument that they generate the majority of new jobs in the United States (Birch, 1979; Duncan and Handler, 1994; Folster, 2000). The interest in job creation spurred by entrepreneurial activity is not just a concern of the United States. A recent report by the European Commission Expert Group (2005) suggests that, if each one-person-enterprise (OPE) could hire just one employee, the unemployment problems in Europe could be solved. Yet, job creation has not been seen as an important dependent variable, as can be evidenced by its complete absence in any entrepreneurship research published in the Academy of Management Journal, one of the premier management journals (Ireland, Retzel & Webb, 2005). Empirically, growth of business, typically measured as a change in sales (Carton & Hofer, 2006), is considered to be the most important outcome of entrepreneurial activity (Bhidé, 2000; Khaire, 2010; O'Neill & Duker, 1986; Venkataraman, 1997). If sales growth is critical and, logically, creating additional jobs to

win and maintain these sales must also happen, it is surprising that so little attention has been paid to the issue of why small businesses do or do not create jobs, especially in the United States (Knaup, 2005).

Each year, millions of people are engaged in the entrepreneurial process. Data from surveys conducted during the past decade indicate that new venture creation is not a new phenomenon. In 2002, the United States Census Bureau reported that there were 23 million "non-farm" firms (U.S. Census Bureau, 2002). In 2004, Miller and Arum (2004) reported that more than forty percent of men in the U.S. will experience self-employment at least once in their lifetime. In the same year, Gartner and colleagues reported that six to eight percent of all adults in the United States attempt to start a new business each year (Gartner, et al., 2004). In 2007, Reynolds' Panel Study of Entrepreneurial Dynamics (PSED) reported that approximately sixteen million people are actively are engaged in the process of starting their own business each year. The most recent Survey of U.S Business Owners by the U.S. Census Bureau (2010) reported that in 2007 there were 27,110,362 firms (representing all business sectors and industries) in existence in the United States.

Furthermore, most new businesses have few if any employees (Aldrich & Reuf, 2006). Of these 27 million plus firms identified in the 2010, only 21% had any paid employees, suggesting that the other 79% operate alone or in some capacity without any paid employees. These results are similar to those from the previous report of 2002, in which the United States Census Bureau reported that there were 23 million "non-farm" firms with almost 76% (12.5 million) operating without any paid employees (U.S. Census Bureau, 2002). In addition, the U.S. Bureau of Labor Statistics Current Populations Survey in 2003 reported 10.3 million people as being self-employed in (Hipple, 2004). As these data suggest, a significant number of new

businesses, once founded, never grow or grow very little and hire very few, if any, employees (Aldrich and Reuf, 2006; Penrose, 1968, 1995; Shane, 2003, 2008). Research by Duncan and Handler (1984) and Reynolds and White (1997) suggests that less than 10% of new ventures grow at all and, of those that survive, less than 10% employ more than 10 employees (Duncan and Handler, 1994).

While the desire for small businesses to grow is well intended, it is not well understood (Parker, 2006). Businesses that start with larger founding teams or more employees have better outcomes in general, including increased rates of survival and a tendency to grow larger and faster when compared to those founded by individuals (Shane, 2003). There is still much to learn about how new businesses actually grow (Cowling, Taylor & Mitchell, 2004; Khaire, 2010; O'Neill & Duker, 1986). This study suggests that a basic growth issue, as of yet not researched, is the transition from being self-employed to becoming a firm with employees (Parker, 2006; Carroll et. al, 2000).

# **Theoretical Importance**

Coase (1937) in his Theory of the Firm, defines a firm as a business that has employees. As a business is organizing and preparing for growth, it needs to accumulate resources of which human resources are one of the most critical (Penrose, 1959), and deliver its products and / or services (Brush & Manolova, 2004). Whether or not a self-employed person chooses to hire an employee has real consequences to the firm in terms of transaction costs, adverse selection and moral hazard. These could be detrimental if not terminal to the firm's survival and existence (e.g., Chi, 1994).

Several organizational theories amplify these concerns (Brush & Manolova, 2004). For example, the Resource Based View of the firm (Wernerfelt, 1984) suggests that human capital

employed by the firm will influence the resources and capabilities it has and can exploit.

Resource Dependence theory (Pfeffer & Salancik, 1978) suggests that choices made earlier on in a process or life cycle regarding resources will influence the available choices, opportunities and outcomes later in the process or lifespan of the organization.

#### THE PROBLEM OF THE PROBLEM

## Many One Person Enterprises Do Not Become Employers

Recent attention has been directed at the role of founder's skills, their psychological characteristics and issues relevant to human resources within entrepreneurship research as documented in the publication of several special issues in journals such as *Entrepreneurship Theory and Practice* (e.g., Katz, Aldrich, Welbourne & Williams, 2000) and *Human Resources Management Review* (e.g., Baron, 2003; Barrett & Mayson, 2006). Despite this attention, little empirical attention has been paid to the issue of the initial hiring decisions (Wilk & Capelli, 2003).

New and emerging small firms face unique hiring challenges (Cardon & Stevens, 2004) associated with their newness. As described by Stinchcombe (1965), this "liability of newness" stems from (1) a lack of external ties, (2) new roles in the organization (i.e., the lack of role clarity, organizational design and delegation, (3) internal efficiencies – the absence of organizational routine, and (4) relations among strangers. It is suggested that these liabilities affect decisions about who to hire and when, as new organizations are simultaneously trying to define themselves, their market and their customer, all the while competing against other firms for survival.

Scholars of entrepreneurial cognition argue that problems as perceived by entrepreneurs should be of central importance to the study of entrepreneurial cognition (Mitchell, et al., 2007). In order to better educate, train, counsel and support the job creation efforts of new and small businesses the problem of becoming an employer must be understood from the founder's point of view. The problems that have been examined by entrepreneurship scholars have been relatively generic. For example, in the PSED, five start-up problems were measured: being taken seriously as a business person; receiving support from close family, friends and/or spouse; access to health insurance; work-life balance; and access to mentors for advice and support (Brush & Manolova, 2004). Despite a considerable amount of attention towards a cognitive perspective of entrepreneurship (cf., *Entrepreneurship Theory and Practice*, 2004; 2007 for special issues), how business founders think about becoming an employer is relatively unexplored.

This study examines the focal growth problem as experienced by one-person enterprises as they engaged in the first step of the problem solving process when faced with the problem of becoming an employer. The first step in the process of problem solving has been described as problem representations (Holyoak, 1984), problem identification, definition and construction (Mumford, Reiter-Palmon & Redmond, 1994; Reiter-Palmon & Robinson, 2009). This problem construction activity (how an individual "identifies, defines and constructs" the problem) has been shown to influence the options and solutions available to the problem solved especially when interacting with problems that are new, novel or ill-defined (Mumford, Reiter-Palmon & Redmond, 1994). Mumford and colleagues (1991) suggest that the problem must be defined before any attempts can be made at solving it, especially when dealing with ill-defined problems.

In this area of research, most activity has been on understanding and developing an individual's ability to construct and solve problems; yet, early theorists suggest that the

discovering a problem that needs to be solved is a discovery of its own (Polyani, 1958; as cited in Getzels, 1982). There is insufficient research to fully understand how business founders perceive the problems associated with of job creation and becoming an employer for the first time (Parker, 2006). Of the research that has been conducted, most treat the problem as solely an economic problem; but, for the entrepreneur or small business owner, this decision to become an employer can be more of a personal problem than an economic one (David & Watts, 2008; Dencker, et al., 2009).

This research focuses on the problem of hiring for the smallest of new businesses, the "one person enterprise," during the period of their consideration of and/or transition to becoming an employer and creating their first job. Prior research in this area suggests that there is insufficient insight into why so few of these solo entrepreneurs ever become employers (cf., Cowling, et al., 2004; Parker, 2006). The limited research in this area has suggested but not verified a number of possibilities. For example, David and Watts (2008) propose that founders may be reluctant to hire due to: concerns about their changing role to that of becoming an employer and issues of trust and delegation associated with hiring strangers. These concerns may be related to personal preferences and motivations for starting their own business.

Motivations regarding a desire for independence and autonomy may be associated with perceptions that adding employees to the business in effect, reduces personal independence and autonomy.

The research related to this phenomenon is limited to a very few studies (predominantly in the European Union or UK) that attempt to measure 1) the rates of transition into employer status (Carroll, et al., 2000; Cowling, 2003), 2) the obstacles associated with recruitment (European Commission, 2005; Parker, 2006) or 3) personal characteristics, traits and cognitions

of employers as they have engaged the problem of becoming an employer (David & Watts, 2008). This dissertation suggests that, while the decision to hire might be a personal one, the reluctance to hire is more likely linked to a cognitive inability on the part of the sole founder / self-employed / one-person enterprise to define the hiring problem in a way that enables a solution (Parker, 2006; David & Watts, 2008).

#### Hiring for One Person Enterprises Is a Problem

According to the Merriam-Webster dictionary, a problem is defined as: "1a) a question raised for inquiry, consideration, or solution, 1b) a proposition in mathematics or physics stating something to be done; 2a) an intricate unsettled question, 2b) a source of perplexity, distress, or vexation; c) difficulty in understanding or accepting." While it is fairly straightforward to define what a "problem" is, and the importance of its definition in the process of problem solving (Mumford, et al., 1991), very little is known about how problems are actually found and formulated (Getzels, 1982). "To recognize a problem which can be solved and is worth solving is in fact a discovery in its own right" (Polyani, 1958; in Getzels, 1982: 39); yet Getzels (1982) notes, there has been very little attention and "systematic exploration of the finding and formulating of problems." Arlin (1989) and Getzels (1982) refer to this as the "problem of the problem."

Hardly any systematic exploration of the finding and formulating of problems referred to as "the problem of the problem" (Arlin, 1989; Polyani, 1958 in Getzels, 1982). A "problem arises when a living creature has a goal but does not know how the goal is to be reached. A problem becomes a problem when someone perceives there to be a 'felt need' or 'difficulty' or a temporary state of disequilibrium. (Duncker, 1945: In Arlin, 1989) Arlin (1989) discusses Piaget's (1976) perspective on problems, by stating that the essential requirement for a problem

to be recognized as a problem is when a state of disequilibrium is recognized. In other words, the more familiar a problem, the less likely the participant will be to engage in higher order operations in search of solving the problem.

Following work by David and Watts (2008), the purpose of this dissertation is to understand the "Becoming an Employer Problem" (BEP), defined as *how OPEs perceive the problem of becoming an employer for the first time*. Without solving their first-time employment problem, it is unlikely that OPEs will create jobs, add employees, or grow substantially.

# **RESEARCH QUESTIONS**

The guiding research question of this dissertation is how do OPEs construct the problem of becoming an employer? Guided by the social-cognitive theoretical perspective of Bandura (1986), which has been adopted by the entrepreneurial cognition community, that acknowledges that the person (in this case, the entrepreneur) is operating within a particular context or situation (of starting, running and/or growing a business). This context of starting, running and/or growing a business is one that is often a unique and a novel setting for the entrepreneur (Baron, 1998), and one in which he or she encounters many problems (Brush and Manalova, 2004). Problems such as these that are encountered in novel settings are often referred to as ill-defined problems (Abelson & Levi, 1985). Ill-defined problems are an appropriate perspective from which to examine this research question because uncertainty is present in both entrepreneurship (Alvarez & Barney, 2005) and ill-defined problems (Abelson & Levi, 1985). When faced with an ill-defined problem, the problem solver often does not have relevant experience from which to draw on, and even though multiple solutions might be possible, most of them lack guaranteed outcomes (Schraw, Dunkle & Bendixen, 1995).

Most of the research about ill-defined problems has examined how an individual's ability to construct problems (problem construction ability) influences creative solutions to real-world problems (c.f., Reiter-Palmon, et al., 1997; 1998). Many of these studies have presented a problem to the participant and asked them to restate the problem in as many ways as possible. Few have examined the "where" the problem itself comes from (Getzels, 1982), despite the fact that defining the problem is considered to be the most important step in any creative process (Csikszentmihalyi & Getzels, 1971; Getzels, 1975; Getzels & Smilansky, 1983). A few studies (cf., Okuda, Runco & Berger, 1991; Runco & Okuda, 1988) have studied problem finding as a means to better understanding the problem as experienced by the problem solver, but not this specifically in the context of entrepreneurship.

Drawing on the theory of ill-defined problem solving and Mumford, et al.'s (1991)

Analytical Process Model of Creative Problem Solving (in which problem construction is the first step), this research investigates the extent to which the factors known to be associated with how problems are constructed in general (Reiter-Palmon & Robinson, 2009) may be associated with the specific problem construction concerning of how one-person enterprises actually think about a specific entrepreneurial problem, that of becoming an employer. In addition, it draws on the published literature in entrepreneurship for relevant aspects of each of these constructs that have been studied in relationship with other entrepreneurial outcomes that are hypothesized to influence the BEP.

Entrepreneurial cognitions, or what business founders actually "think," have been operationally defined several different ways. The cognitions that are held by the individual have been defined as "problem representations" and the process, by which the problem is identified or

defined, has been referred to as the process of "problem construction" (Reiter-Palmon & Robinson, 2009). Therefore, the first research question to be investigated is:

RQ1: What are the different problem representations held by One-Person Enterprises (OPE) when constructing the Becoming an Employer Problem (BEP)?

Having an understanding how the problem is constructed by the OPE enables the investigation of the influencing factors on these cognitions as well as how they are related in terms of main effects. Theoretically, a number of factors have been suggested from the problem solving literature that should influence how a problem constructed. These include both aspects of the person and aspects of the situation.

Regarding the person, problem representations have been shown to be influenced by an individual's experience (Mumford, et al., 1994; Reiter-Palmon, 2009; Reiter-Palmon & Robinson, 2009), an individual's personality (Reiter-Palmon, Mumford & Threlfall, 1998; Reiter-Palmon & Robinson, 2009), and information included in the problem solver's goals (Holyoak, 1984; Reiter-Palmon, 2009). In regards to the influence of experience, research in problem solving suggests that by having relevant or related experiences that are similar to the problem being encountered will influence the extent to which the problem is perceived as a problem at all (Arlin, 1989).

Research in entrepreneurship has assessed the individual background and attributes of the entrepreneur. Research from the PSED has assessed nascent entrepreneurs' experience, education and expertise in a variety of functional areas including industry, management, and functional experience (Gartner, Shaver, Carter & Reynolds, 2004). Drawing on this research, the following research questions are addressed:

# **RQ2:** To what extent do factors particular to the entrepreneurs in OPEs affect their construction of the BEP?

No two entrepreneurs are exactly the same. Each enters into her or his entrepreneurial endeavor with a unique set of aspirations, constraints and circumstances. From the problem construction literature, constraints on the solution (Holyoak, 1984) and environmental cues relevant to the problem (Reiter-Palmon, 2009; Reiter-Palmon & Robinson, 2009) have been shown to influence how the problem is initially defined or constructed. Individuals have been known to have preferences based on their knowledge as it is specifically related to a problem and for which some aspects may have more or less influence on their construction of the problems in ill-defined or novel contexts (Mumford, Baughman, Threlfall, Supinski & Costanza, 1996).

Personality has been a topic that has been hot and cold in the quest to better understand the entrepreneur (Rauch & Frese, 2007). In the early research an effort was directed at developing a profile or a trait-approach to who would start their own business and/or be successful as an entrepreneur. More recent literature suggests that the personality attributes are relevant to entrepreneurial outcomes but depending on the aspect of personality and the entrepreneurial outcome traits may be more likely to have mediating rather than direct effects on traditional outcomes of success, survival and growth (cf., Baum, Locke & Smith 2001). Baron (1998) suggests that there is still much to be learned about how an entrepreneurs' personality influences specific cognitive activities in entrepreneurial settings. Of particular interest in this study is the aspect of personality known as regulatory focus (Higgins 1997, 1998) which is a disposition of the problem solver that is either promotion focus (oriented towards achieving goals and gains) or prevention focus (oriented at avoiding setbacks and losses).

# **RQ3:** To what extent does their enterprise's situational context affect the construction of the BEP by OPE entrepreneurs?

Within the entrepreneurship literature, goals have been measured based on the entrepreneurs' goals for him or herself as well goals he or she may have for the organization.

Based on the individual, goals of relevance have focused on the career reasons for becoming self-employed, intrinsic and extrinsic motivation, as well as contextual motivational reasons.

Goals related to the firm have been measured as growth aspirations for the business. In addition, social support as measured by relationships with both strong and weak ties (Bruderl & Priesendorfer, 1998; Sanders & Nee, 1996) have been identified as aspects of an entrepreneurs' situational context as having an influence on successful outcomes in entrepreneurial activity.

#### Research Model

Figure 1.1 presents the overall research model that is used to guide the development of hypotheses in this study. The two blocks of predictors include variables that should afford these research questions to be answered.

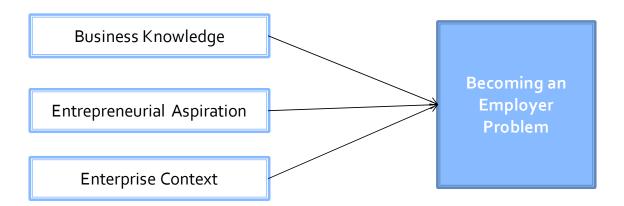


Figure 1.1. Conceptual Model of Relationships with the BEP

#### SIGNIFICANCE OF THE STUDY

This dissertation contributes to the literature in entrepreneurial cognition and the human resources / entrepreneurship nexus in several ways. First, it adopts a definitional perspective, the one-person enterprise, which is being used in the European community of researchers (Expert Group, 2005) for this group of single founder firms enables the study of a range of single owner businesses yet does not discriminate based on legal entity status. Offering a more inclusive definition of the solo self-employed or solo entrepreneur as a one-person enterprise avoids some of the definitional problems present in the existing literature and governmental reported demographics. Second, it examines a previously neglected and under-studied demographic during an under-researched stage in the development and transitory stage of new firm development, the transition from a one-person enterprise to a firm with employees. This research addresses the problem of the levels issues mentioned previously by studying the oneperson enterprise at the individual level as it transitions to what others have measured at the firm level. Third, it applies a new theoretical perspective to the study of entrepreneurial cognitions that has not previously been applied to the issues in entrepreneurship, let alone issues associated with entrepreneurship transitions, or the self-employed. Fourth, it examines a specific situation that has previously not been addressed as an independent concern, that of "becoming an employer."

Katz and colleagues (2000) suggest that research in the nexus of entrepreneurship and human resources is desperately needed and can make a real difference to students who aspire to own their own business, practicing entrepreneurs and policy makers who need our help. In addition, this area is a relatively untapped area for academic investigation. Insight into this problem has implications for education, practice, research and public policy.

**Educational implications**. Entrepreneurial education has become one of the hottest topics in business schools (Kuratko & Hodgetts, 2007); and, while any person can start his or her own business, the critical step of becoming an employer and the issue of managing human resources and how the owner's role changes as a result of becoming an employer is generally not covered in the traditional entrepreneurship textbook.

**Practical implications**. If what the OPEs perceptions about becoming an employer is better understood, we should be better able to counsel and train them by offering both personally and contextually relevant alternatives for satisfying their need for additional labor in their businesses. In addition we should be better able to educate advocacy groups in a similar way enabling them to be a better resource to their members.

**Empirical implications**. By empirically examining and, therefore, better understanding how the problem is perceived by an understudied group of small business owners and founders we may discover that many of our existing theories and frameworks do not apply to the smallest of businesses as we may have otherwise expected as some have already suggested (Heneman & Tansky, 2002; Katz, et al., 2000; Marlow, 2006).

Public policy implications. One of the key areas where this research has an opportunity to make an impact is through public policy. With the current attention at the policy level reflecting a desire to increase job creation by small businesses, it could be argued that those making the policies are very far removed from what actually needs to be done in order to facilitate job creation by the smallest of businesses. At a minimum policy makers could also benefit from a better understanding of what Arlin (1989) and Holyoak (1984) refer to as the "problem of the problem."

#### ORGANIZATION OF THE DISSERTATION

This dissertation is divided into five chapters and is organized as follows. Chapter Two reviews the relevant theoretical and empirical literature on why initial hiring has not been investigated, human resources and small business, becoming an employer, entrepreneurial cognition, ill-defined problems and the role of problem representations. The purpose of this review is to position the arguments and guide the research as presented in the theoretical model and proposed hypotheses (See Figure 2.2) necessary to answer the questions posed in Chapter One. Chapter Three presents the methodology of the study including: the sampling scheme, the proposed participants, how the data were collected, the design of the study, the variables of interest and a post hoc power analysis. Chapter Four includes the statistical analyses and results of the study. Chapter Five includes a discussion of the results, the contribution of the findings, strengths, limitations and future directions for research.

#### **CHAPTER 2**

## LITERATURE REVIEW AND HYPOTHESES

Research in entrepreneurship has made significant progress in understanding nascent entrepreneurs -- those individuals who are in the process of starting their own business -- and the extent to which they actually succeed in founding the business. Another stream of research has been interested in growth of businesses after startup; but, usually, it is the high growth businesses that have gotten most of the attention. There is a significant void in research regarding how the self-employed become firms, that is, have employees.

The purpose of this research is to understand how the very smallest of the small businesses, the "one-person enterprise" approaches, considers and thinks about the problem of becoming an employer. If job creation is such an important economic outcome, and we have so many people engaged in the process of starting their own businesses, why is it they these businesses are not creating jobs? In the European Commission's report by the expert group (2005) they suggest that if each business owner were to create one job, unemployment in Europe would be a non-issue.

#### LITERATURE REVIEW

## Why initial hiring has not been investigated

Very little research has attempted to understand why small businesses do not grow, or stated a different way, do not hire employees. Research attention has been directed at either the individual or the firm level to answer questions regarding who desires to start a business and to what extent those business actually get started. Less research attention has been directed towards the early decisions. There are four main reasons why this research has not yet been conducted within the field of entrepreneurship: a definitional problem, a demographic of interest problem, a level of analysis problem and a temporal / transition stage problem.

Demographic of interest problem. A primary challenge has been a general lack of concern for the single person enterprise (Curran and Stanworth, 1979; Kirchoff, 1996; Susbauer, 1979). In the *Handbook of Strategic Management*, Susbauer (1979) commented that businesses of the "mom and pop" variety were not a worthwhile population of study, as he perceived they would not be willing to accept and change course based on empirical research even if they had the resources and capabilities. In addition, he suggested that this demographic might be better assisted with a Congressional welfare bill than with the conduct of any public policy research concerning these businesses. His more general statement directed at all small firms stated, "There is little reason to research policy questions in small firms" (Susbauer, 1972, p. 332). While these were the opinions of just one author and entered under a heading of a "commentary," they were also included in the first compilation of the study of strategic management, edited by Don Schendel and Charles Hofer, as a result of consortium of scholars who participated in the early conferences and writings on strategic management.

Cooper (1979) argued that research on new and small firms that can increase their chances of survival would be of great benefit to the overall general society. Katz, et al. (2000) echoed these concerns in the introduction to a special issue on human resources and entrepreneurship, concluding that as of 1999, the field of entrepreneurship scholars still did not have much empirical advice to offer small and medium sized businesses because they had not really been studied with much diligence. Despite Cooper's (1979) recommendation that small firms and new ventures were appropriate for policy research, until recently, this demographic has not been perceived as a meaningful group to study.

**Definitional problem**. A related challenge with this area of research has been how exactly one should best define the small firm (Curran and Stanworth, 1979). A variety of terms

have been used to describe "small firm." Depending on the source and setting of the research, the terms "small business" and "self-employed" may mean many different things. The Small Business Administration defines a small business as having less than 500 employees (U.S. Small Business Administration – Office of Advocacy, 2011). Star (1979) referred to businesses with just a few employees as quasi-businesses. Cowling, Taylor and Mitchell, (2004) mention the term micro-business as a business with less than 10 employees.

Early on, businesses were considered small if they had less than 500 employees (Cooper, 1979). At that time, Vesper (1979) identified nine different types of entrepreneurs. These include: the solo self-employed, workforce builders, product innovators, and unutilized resource exploiters, economy of scale exploiters, pattern multipliers, takeover artists, capital aggregators, and speculators. In this classification scheme, Vesper (1979) concluded that the category of "mom and pop" included solo self-employed entrepreneurs. Feldman and Bolino (2000) distinguished between two types of small business owners – the traditionalists who owned and operated small establishments such as restaurants and retail stores, and soloists who operated as individual professionals for hire, such as consultants and free-lancers.

Others, such as Case (1992), have defined different types of entrepreneurs, based on their growth aspirations for their business. These include the traditionalists, job creators, soloists, and minimalists. Traditionalists are those who start or buy family-owned types of business and expect little change over time. Job Creators are those who are very ambitious about their business and expect to build a company, not just their own job as a result of starting their own business. Soloists are those who prefer to operate or are currently operating on their own and the last type, the Minimalists, are similar to the job creators in that they are interested in building a firm that has value beyond the founders, yet their approach is to do so with fewer employees..

Legal entity status has had an influence on how one measures and accounts for those who operate their own businesses. Hipple (2004) chronicles the changes in the Current Population Survey administered by the Bureau of Labor Statistics and explains that all respondents who categorized themselves as self-employed are also asked if their business is incorporated. Those that are incorporated have been included in the calculation of wage and salary workers since they are considered employees of their own business. This allocation of these incorporated self-employed business owners into the wage and salary workers skews the real data on small business and the self-employed. In addition, since incorporating a business is often a signal of anticipated growth, it hides this demographic from additional research and policy assistance.

Hipple (2004) reports the percent of total employment for Unincorporated Self-Employed, for 1989-2003 comparing all industries (2.9-3.6%), non-agricultural (2.9-3.6%), and agricultural industries (3.9-6.4%), suggesting that over this 14 year period, between 2.9 and 6.4% of the total employment in the United States was not being measured in terms of their contributions to small business growth and development and perhaps not being considered for assistance. In addition, Hipple (2004) compares the 2003 demographic distribution between Unincorporated Self-Employed (10,295,000), Incorporated Self-Employed (4,956,000) to the total Wage and Salary Workers (122,358,000). This clarification suggests that in 2003, there were approximately 5 million Incorporated Self-Employed business owners that had previously not been accounted for in previous studies. This clarification suggests that in the United States, there are 50% more people operating their own independent business than previously accounted for suggesting that the total population that is considered self-employed (whether incorporated or unincorporated) is almost 10% of all employees in the United States. With all the attention and

research directed at the self-employed demographic (e.g. Kirchoff, 1996), it is hard to understand why there has not been more attention on these small businesses that may be poised for growth.

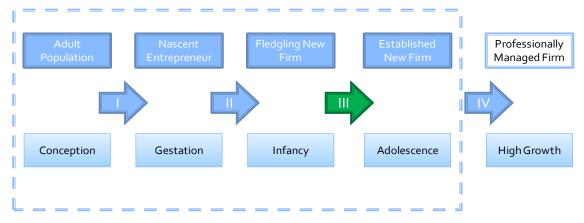
Level of analysis problem. Traditionally, entrepreneurship has been studied at one of two levels: the individual level most commonly associated with activities of self-employment; and the firm level, associated with the creation of new firms (Gartner and Shane, 1995; Reynolds, 1991). A third challenge in much of the entrepreneurship research is that the level of analysis and theoretical basis for its inclusion has not been adequately documented or supported (Low and MacMillan, 1988).

In addition, the sources of data on these groups have often defined self-employed and new businesses somewhat differently based on the study's country of origin, due to the local governmental definitions of these entities, the author's own biases or a combination thereof (Duncan & Handler, 1994; Kirchoff, 1996). For example, self-employed have been defined by their source of income not being gained from another individual or organization, even though the self-employed can be incorporated or unincorporated and may or may not be employers (Blau, 1987; Evans and Leighton, 1989; Gartner and Shane, 1995; Kirchoff, 1996; Steinmetz and Wright, 1989). The legal entity status of the self-employed may include them in some research samples while excluding them in others. Cowling, et al. (2004) suggests that there are two categories that should be considered when examining these entrepreneurs, individuals who are self-employed (individual self-employment) and self-employed with employees.

A report by the Expert Group of the European Commission (2005) addressed the definitional and legal entity problem by referring to these single person, self-employing businesses, regardless of legal entity status, as "one person enterprises" (OPEs), which is the definition adopted for this dissertation. This definition bridges the levels in which

entrepreneurship has been traditionally studied and creates clarity in the discussion of the sample of interest. It is not a small business' legal entity status that is relevant in this study; rather it is important that they are currently operating their business without employees. Furthermore, for this dissertation, the term "owner" is used for the owner of all such small businesses, regardless of legal entity status, or structure, based on the reality that essentially all one-person enterprises are also small businesses (Kirchoff, 1996).

**Temporal / transition stage problem**. Entrepreneurship is temporally dynamic and while empirically challenging, it is important to study the process of entrepreneurship at specific points in time when possible (Busenitz, et al., 2003). As new ventures are founded and grow, they experience several important transitions (Aldrich and Reuf, 2006). The majority of this work has examined nascent entrepreneurship. Nascent entrepreneurs are defined as "individuals who were identified as taking steps to found a new business but had not yet succeeded in making the transition to new business ownership" (Carter, Gartner, & Reynolds, 1996, p. 151). These stages of nascent entrepreneurship were documented by Reynolds and colleagues (2000; Carter, et al., 2004) in the Panel Study on Entrepreneurial Dynamics (PSED). As depicted in Figure 2.1, the stage model includes three transitions connecting four periods or stages. The first transition is from conception (when the aspiring entrepreneur starts thinking about their idea) to gestation (the initial activities associated with organizing a new business). The second transition is from this gestation to the stage of infancy (or fledgling new firm status). Their research suggests that about 50% of the startups make this transition within a year's time. The last transition in their model is from the fledgling firm (infancy) to an established new firm (adolescence). It is during this transition that we have a gap in both theory and empirical research to inform our understanding (Aldrich and Reuf, 2006).



The area within the dashed box represents the transitions as presented by Reynolds (2000) and colleagues (cf. Carter et al, 2004) (as presented in Aldrich & Reuf, 2006, pq. 66)

Figure 2.1. Transitions in the Entrepreneurship Process

#### **HUMAN RESOURCES AND SMALL BUSINESS**

Research has addressed the questions of who starts businesses, the stages or transitions and whether or not they experience them; however, less attention has been directed at why a business chooses to hire employees or become an employer. What has been studied in human resources and small businesses has examined how small businesses managed their compensation systems (Amba-Rao & Prendse, 1985), the extent to which the founder/owner was responsible for personnel practices (Little, 1986), how to establish training and development programs in small firms (Fairfield-Sonn, 1987), selection methods (Gatewood & Fields, 1987), legal appropriateness of selection methods (Maurer & Fay, 1986), employment at will (Holley & Wolters, 1987), the cost effectiveness of recruitment methods (Carroll, Marchington, Earnshaw & Taylor, 1999), applicant attraction practices (Heneman & Berkley, 1999), and general human resources practices (McEvoy, 1984).

Of the small firm studies that examined human resource issues, very few examined the OPE. For example Amba-Rao and Pedse's (1985) assessed firms with fewer than 25 up to 300

employees. Little (1986) examined only firms up to 100 employees. What we do know about the early hiring decisions in the very small business is limited (Heneman & Tansky, 2002; Parker, 2006). Those who have studied job creation in the very small businesses have examined the influencing factors from either an economic or a personal perspective.

Economic Influences. Cowling, Taylor and Mitchell (2004) distinguished between two types of self-employed, those with that were individually self-employed and those who were self-employed with employees. They studied job creation activities among these two groups from an economic perspective. Their research suggests that work and life experiences were related to whether or not a self-employed person would hire an employee. OPEs who had more experiences (higher levels of human capital) were more likely to hire. They also conclude that, based on these two types of self-employment and how each face different constraints and management concerns, policy should be more accommodating to both paths in self-employment. A study by Carroll and colleagues (Carroll, Holtz-Eakin, Rider, & Rosen, 2000) examined how income tax reform influenced hiring decisions among the self-employed, thereby influencing the transition from self-employed to employer status. They measured the probability of becoming an employer and their results suggested that a 10% decrease in the income taxes on these small businesses increased the likelihood of becoming an employer by 12%.

Personal Influences. Van Praag & Cramer's (2001) study of the self-employed in the Netherlands found that men who were more highly educated, described in their personal experiences as having a father who was either previously self-employed, or held a management position, were more likely to hire and employee in their business. Baker and Aldrich (1994) found that most businesses hired their first employee after being in business one or two years, either because the volume of the business increased to warrant additional labor, or due to

personal exhaustion, such that the volume of work reached a level that exceeded the capability of the entrepreneur to sustain any longer. In David and Watts' (2007) research, the timing of when OPE's needed an employee was often marked by a shift in the founder's perception regarding the balance of the workload. This shift is similar to the disequilibrium discussed by Piaget (1976) and Arlin (1989) when they discussed how problems were recognized.

In addressing who to hire and/or for what, Baker and Aldrich (1994) found that businesses had a tendency to hire very junior or very senior employees. Those hired at senior levels were generally someone who was already known and trusted and they were often hired for relatively broad and ambiguous roles with the expectation that they would someday oversee a division or large area of responsibility. The junior positions, on the other hand, were often recruited via more traditional measures of attracting applicants from the general population, had more defined roles based on specific tasks to be accomplished, usually with very little responsibility. In David and Watts' (2007) qualitative interviews, some mentioned needing to hire someone to take on the aspects of the job that were "rubbish," or to fulfill a vague role, such as: a marginal role, producer role or a senior role.

Additional literature has addressed the problems associated with early hiring activities of small firms. Most of this attention has addressed the attraction, recruitment and selection of applicants to smaller businesses (Carroll, Marchinton, et al, 1999) and the extent to which human resources practices that are common in larger organizations either don't apply or are not implemented with the same attention or rigor (cf. Heneman & Tansky, 2002; Marlow, 2006). Most notably in this area is the likelihood of entrepreneurs to hire individuals in their social network (Baker & Aldrich, 1994) and to demonstrate more caution and concern when considering hiring strangers (David & Watts, 2007; 2008).

#### **BECOMING AN EMPLOYER**

Little is known about why more OPEs do not hire employees. David & Watts (2007; 2008) have defined this notion as reluctance for hiring, calling a subset of entrepreneurs "reluctant employers". A report by the European Union's Expert Report (2005) asked OPEs why they do not recruit. Parker (2006) addressed this question from the perspective of why small businesses do not create jobs.

Some OPEs were reluctant to hire because of the influence the new employee would have on the organization's culture (Schein, 1983) and perceived this decision one of deliberate choice (David & Watts, 2007). None of the cognition studies (other than David & Watts, 2007; 2008) has attempted to deconstruct the problem from a problem solving perspective, assess the antecedents of the problem and their influence on different aspects of the problem.

The questions that have been asked in this area of research have been explored in the context of the European Union. The Expert Group study (2005) asked specifically why one-person enterprises do not recruit. Parker (2006) approached the question from an economics perspective and the role small businesses have on the labor market by asking, "Why they don't create jobs?" Only one research program (David & Watts, 2007; 2008) examined the question from a perspective of changing the business and the role of the entrepreneur when they asked, "Why one-person enterprises don't become an employer?"

The challenges experienced by OPEs in creating new jobs and attracting and selecting applicants into them all suggest reasons why the process of adding labor to their new business might be difficult, or why some have a problem, or perhaps why they perceive the problem as so complicated. In Baker and Aldrich's study (1994), the "why" was associated with the life cycle and growth of the business. The demand for the outputs of the business required additional labor

in order to satisfy the increased volume of work, or the entrepreneur would reach a point when he/she could no longer sustain the pace and volume of the work by doing it all themselves.

There is a certain amount of uncertainty experienced in this process, as one respondent indicated that he/she did not believe the work was "real" or that the volume would continue long enough to support the additional employee(s). Despite the desire to grow the business, he/she was hesitant to hire.

Other than an initial qualitative studies by David and Watts (2007, 2008), there appear to be no other studies that specifically ask the entrepreneur/founder directly why they do not become employers, even if they desire to grow their business or desire to create jobs. The EU study (2005) has made an attempt to ascertain the problems, but they have yet to examine the specific perceptions of neither the problems nor their antecedents in ways that afford much insight into practical ways of helping OPEs either by counseling, education or reforming public policy. In addition, no such studies have been reported to my knowledge on populations of one person enterprises within the United States.

To fill this gap in the literature, this study explores how OPEs think about the activities associated with creating new jobs in their firms, hiring their first employee and ultimately becoming an employer. In this investigation of the transition from an OPE to a firm, this study adopts a phrase from David and Watts (2008), classifying this transition as "becoming an employer" to more a more specific problem, the Becoming an Employer Problem (BEP). As the hypotheses presented below indicate, it is expected that the problem of becoming an employer will include a variation of concerns ranging from the change in roles and responsibilities (David & Watts, 2008), to the economic implications as suggested by the Expert Group, authors of the European Union Report (2005).

#### THEORY AND HYPOTHESES

Drawing on the previously presented research, this dissertation acknowledges that there are several problems associated with becoming an employer, that there has been very little attention directed at the transitions experienced by small businesses after start-up (Parker, 2006) and that the challenges associated with becoming an employer may be an ill-defined problem for the OPE.

The PSED studies have asked nascent entrepreneurs about some of the generic problems they encounter such as gaining support from family and friends, access to financing (Brush and Manalova, 2004) and about their problem solving styles (Ford and Matthews, 2004) with items such as what aspects of problems do you find difficult, and how frequently do you face new, unpredictable situations, or delay making decisions? A few other studies have attempted to uncover managerial problems experienced by small and or young firms. For example, Said and Hughey (1977) identified five managerial problems in small businesses (cash problems, personnel problems, record-keeping problems, merchandising problems, and tax-planning problems) and Alpander and colleagues (Alpander, Carter and Forsgren, 1990) studied businesses with less than 100 employees in their first three years of operation and identified recruiting and hiring employees as their third most important problem. Other than these studies, little other research has examined the problems as experienced by entrepreneur's from a cognitive perspective.

Early writings from Bird (1992) and Busenitz and Lau (1996) suggested examining how entrepreneurs think in response to their environmental context. Mitchell, et al. (2002) describe two dedicated conferences followed by three special issue volumes in *Entrepreneurship Theory and Practice* on the topic on entrepreneurial cognition. In their 2002 introduction of the special

issue, they define entrepreneurial cognitions as the "the knowledge structures that people use to make assessments, judgments, or decisions involving opportunity evaluation, venture creation and growth" (Mitchell, et al., 2002: 97). Baron (1998) argues for a cognitive perspective as a means in which to investigate the primary research questions of the field and credits an entrepreneur's cognitions for explaining much of their action. There has clearly been a call to examine the cognitive activities of entrepreneurs within the context they are operating (Keh, Der Foo & Lim, 2002).

These recent developments in the research guide our theoretical perspective for this study. Social cognitive theory (Bandura, 1986), entrepreneurial cognition (Mitchell, et al., 2002), and ill-defined problems provide the theoretical grounding for this study, with a particular emphasis on Mumford, et al.'s (1991) problem solving model in which problem construction is the first step in the process of problem solving.

#### SOCIAL AND ENTREPRENEURIAL COGNITION THEORY

Social-cognitive theory (Bandura, 1986) suggests that behavior occurs by the person in the situation and is influenced by both their cognitions and motivations. The overall situation for this study is the entrepreneur who is operating his or her business without any employees (one-person enterprises). Similarly, Busenitz, et al. (2003) proposed that future research in entrepreneurship should be directed towards the intersection of entrepreneurial cognition, the environmental context and modes of organizing. Over the past several years there has been a movement within the field of entrepreneurship to adopt a more cognitive perspective and recent work by Mitchell (Mitchell, et al., 2002) and colleagues has been directed at developing a theory of entrepreneurial cognition that is based in the social-cognitive perspective.

From an entrepreneurial cognition perspective, research has explored a variety of problematic issues associated with the entrepreneurs' environment, such as information overload, uncertainty/novelty, emotions, time pressure, and fatigue (Mitchell, et al., 2002). Similarly, Baron (1998) examined individual differences associated with the cognitive behaviors of entrepreneurs such as their tendency to engage in counterfactual thinking, affect infusion, self-serving biases, the planning fallacy and self-justification that can cause cognitive dilemmas especially challenging for the entrepreneur. Simon, Houghton and Aquino (2000) examined the influence of overconfidence, the illusion of control and how a misguided belief in small numbers is present in the cognitions of entrepreneurs. Other research has examined ways in which issues of overconfidence has influenced entrepreneurs to enlist heuristics in their thinking and decision making such as the representativeness heuristic which might lead to errors in their judgment (Busenitz & Barney, 1997).

While most of this cognition research has examined problems and consequences, very little research has addressed what Arlin (1989) and Getzels (1982) refer to as the "problem of the problem" as experienced by entrepreneurs. Mitchell, et al. (2007) very briefly discuss the reality how an entrepreneur's thinking will vary in relationship to his/her contextual perspective and their personal perception of their problem. Socio-cognitive and specifically entrepreneurial cognition theory suggests that there will be distinct personal and situational influences on how the BEP is constructed by OPEs. Support for each of these hypotheses is presented below combining what we know from the entrepreneurship and problem construction literature.

#### **ILL-DEFINED PROBLEMS**

Baron (1998) argues that in the process of starting a business, individuals continuously face uncertain situations and are challenged with new and novel problems, those with which they have no previous experience or schemas to base their assessment or analysis. In the cognition and problem solving literature, these types of problems have been described as ill-defined problems (Reitman, 1964; Abelson & Levi, 1985) those which are ambiguous, may or may not be solvable, and have no guarantees associated with their outcomes (Schraw, Dunkle & Bendixen, 1995). Simon (1960) referred to these problems as having insufficient information to identify let al.one solve the problem.

Uncertainty is one of the key characteristics of ill-defined problems (Abelson & Levi, 1985); and, in many cases, the goal is ambiguous or absent altogether (Holyoak, 1984). It is due to the presence of uncertainty, ambiguity and the absence of a clear goal that makes experiencing an ill-defined problem a cognitive phenomenon. This ambiguous context is very similar to the context within which entrepreneurs operate (Alvarez & Barney, 2005). How does one begin to address a problem for which one has very little to no experience to rely on?

Ford and Matthews argue that all decisions made by entrepreneurs are attempts to solve a problem. In addition, the new business owner engages in some of the most "ill-structured managerial problem-solving situations imaginable" (2004, p. 196). Research by Mumford and colleagues (Mumford & Gustafson, 1988; Mumford, Mobley, Uhlman, Reiter-Palmon, & Doares, 1991; Mumford, Baughman, Threlfall, Uhlman, & Costanza, 1993; West & Farr, 1989) describes the interaction with new and unfamiliar problems, tasks or challenges as requiring individuals to generate new responses. This activity is most commonly associated with creativity and non-routine problem solving. This creativity approach concerns itself with problem solving

in response to ill-defined problems. By definition, most decisions made by the entrepreneur could be defined as ill-defined, as there is no best answer, and the conditions under which all of their decision making operates is uncertain (Alvarez & Barney, 2005).

Getzels (1982) describes the influence of the problem solver's definition of the problem on their available set of solutions when he tells a story about two cars that are traveling in different directions down a county road and both blow a tire. Upon stopping, after looking in their respective trunks, neither of them finds a jack to use in changing the tire. Each car's occupants defined their problem differently, one asked "Where can I find a jack?" an obvious solution to the problem, whereas the other car's occupants asked, "How can we raise the car?" a less obvious solution.

Research on the cognitive process approach to problem solving suggests that how individuals define or construct the problems they face is directly related to the subsequent availability of options and the creativity of solutions to their problem (Reiter-Palmon, et. al 1997). Weber (1984) suggests that appropriately identifying the problem will be even more important when the direction or goal is uncertain or unclear. Cowan (1986) suggests that the ability to recognize that a problem even exists requires the individual to acknowledge a discrepancy between their current and desired future situation. Ford and Matthews (2004) argue that entrepreneurs may have difficulty with this stage of the process due to inexperience and a lack of other relevant contexts for comparison.

Based on these theoretical perspectives, it would seem plausible that how the OPE defined the problem of becoming an employer would influence what options they would have available to them for consideration in solving their particular problem. In addition, understanding what influences how a OPE perceives the BEP should also be of concern. Having

an understanding of how the OPE's construct the BEP and to what extent various aspects influence the BEP are important to our understanding of the problem construction process, to our understanding of how entrepreneurs' think, how we might be better able to prepare aspiring entrepreneurs and how we can counsel existing OPEs on the challenges they perceive when facing the need or desire to become an employer.

This study attempts to understand how problems about becoming an employer are constructed, drawing on Mumford, et al.'s (1991) Cognitive Process Approach to Problem Solving Theory in which problem construction, identification or representation (Reiter-Palmon & Robinson, 2009) is the first stage in any creative problem solving effort. The intent is to better understand the problems perceived by OPE's as they construct the problem of becoming an employer and examining a series of potential antecedents.

From a review of research in this area, problem representations have been shown to be influenced by characteristics of the problem solver (person) and the situation in which the problem solver is operating (Reiter-Palmon & Robinson, 2009). These include an individual's experience (Mumford, et al., 1994; Reiter-Palmon, 2009; Reiter-Palmon & Robinson, 2009); personality (Reiter-Palmon, Mumford & Threlfall, 1998; Reiter-Palmon & Robinson, 2009) information included in the problem solver's goals (Holyoak, 1984; Reiter-Palmon, 2009), constraints on the solution (Holyoak, 1984), and environmental cues relevant to the problem (Reiter-Palmon, 2009; Reiter-Palmon & Robinson, 2009). Based on these findings in the literature of everyday problems, it is expected that similar effects will be found when facing a particular problem, that of becoming an employer in the context of a new business.

### Individual Business Knowledge.

In their model, Mumford, et al. (1991) suggest that the process of problem construction is based on some basis of prior information and knowledge, which may or may not be the result of education, experience or a developed sense of expertise with similar problem-solving scenarios. Specifically, relevant experience has been shown to be related to how problems are constructed (Mumford, et al., 1994; Reiter-Palmon, 2009; Reiter-Palmon & Robinson, 2009).

In a study of job creation within new ventures, Dencker, et al. (2009) found those with more business experience, actually created fewer jobs as the business grew. The authors hypothesized this was due to leadership experience influencing the entrepreneur's ability to manage and motivate more efficiently with fewer resources. Hershey, Walsh, Read and Chulef (1990) concluded expertise facilitated effective problem solving when analyzing problem solving efforts relevant to financial analysis. Mumford, Reiter-Palmon, and Redmond (1994) argue that those with more expertise have more relevant problem representations available to them from which to assist in solving new problems they might encounter. Similarly, in his study on job creation, Dencker, et al. (2009) found that entrepreneurs with more relevant background and knowledge about the activities and functions of their business were less likely to hire an employee, based on their ability to do more functions of the business for a longer period of time. In contrast, those who had less experience with the various activities of running a business were more likely to hire, hire sooner and hire more employees compared to those with more experience.

Higher levels of education have been found to be positively related to the probability of starting a new venture (Cooper, Gimeno-Gascon, & Woo, 1994; Bates, 1995; Carr, 1996; Delmar & Davidsson, 2000). Dencker and colleagues (2009) found those with a broader knowledge base were less likely to hire employees in their business due to the belief that they were personally

able to complete more of the tasks the business required. In conclusion, Arlin (1989) suggested that depending on your personal experiences with a particular issue or problem, that your familiarity with the situation will influence the extent to which it is perceived as a problem and, even more importantly, if there is a problem present at all. Drawing on support from this literature, the following hypotheses are presented:

H1: The perception of the becoming an entrepreneur problem by the owner of a one person enterprise is inversely related to the owner's functional experience.H2: The perception of the becoming an entrepreneur problem by the owner of a one person enterprise is inversely related to the owner's functional expertise.

H3: The perception of the becoming an entrepreneur problem by the owner of a one person enterprise is inversely related to the owner's level of education.

### **Entrepreneurial Aspiration**

It has been acknowledged that motivations for starting a business represent the entrepreneurs' intentions (Shaver, 1985) and influence both the behaviors and strategies selected relevant to that particular business (Ucbasaran, Westhead & Wright, 2006). As early as 1934, when Schumpeter published his theory of economic development, motivations for starting a business have been acknowledged as an important consideration in the understanding of entrepreneurial behavior. Schumpeter (1934, p.93-94) specifically describes the various motivations as:

"The dream and the will to found a kingdom, usually, though not necessarily a dynasty.... Then there is the will to conquer: the impulse to fight, to prove oneself superior to others, to succeed for the sake, not of the fruits of success, but of success itself.... Finally, there is the joy of creating, of getting things done, or simply exercising one's energy and ingenuity."

Entrepreneurial motivations for starting a business that have been investigated include various aspects of self-realization, financial success, roles, innovation, recognition, independence, autonomy, wealth, status, and respect (Carter, Gartner, Shaver & Gatewood, 2003; Reynolds & Curtin, 2008). An entrepreneur's motivation for starting a business has been shown to be intrinsic or extrinsic and based on contextual circumstances (Hechavarria, Schenkel & Matthews, 2009).

Reynolds and Curtin (2008) report significant differences in the motivational dimensions between entrepreneurs with different goals for their business. Shane, Locke and Collins (2003), in their theory of entrepreneurial motivation, suggest entrepreneurs' motivations for starting a business will influence how they engage in the process of entrepreneurship, that their motivations may be different at different stages of the entrepreneurial process, and that their motivations are related to their perspective when addressing problems and decisions associated with their business. Due to the varied motivations for starting a business, it is expected that an entrepreneur's motivation for starting a business would be related to how he or she perceives the BEP.

Entrepreneurs strive to grow businesses to different levels of size and or scale. For example, the idea of being self-employed and being one's own boss (Hamilton, 2000) and having a small manageable business are very different goals when compared to the goal of growing a business to become as large as possible (Hechavarria et al., 2009). Delmar and Wiklund (2008) concluded that the small business owners with higher growth aspirations are more likely to realize growth. Holyoak (1984) suggested that information in problem solvers' goals will influence how they perceive the problem, the attention they give the problem, and how they go about solving the problem. Goals for growth of the business have been found to be significantly

related to actual business growth (Baum, Locke & Smith, 2001), yet Mumford and colleagues (Mumford et al., 1991) suggest that goal directed problem solving may not be the best approach for solving novel problems.

One activity in the entrepreneurial process that details the owner's intention for growth is the business plan. The act of business planning has been shown to be related to growth in terms of both sales and employees. The presence of business plans has been shown to be related to higher growth rates (Reynolds and White, 1997). Better quality plans (Schutgens and Wever, 2000) and those who were more likely to plan were more likely to experience increased growth in number of employees (Tuller, 2001) and sales (Miner, 1987). Similar to how the entrepreneur's motivation to start a business should influence the perception of the BEP, an OPE's planning activities and growth aspirations should operate in a similar fashion, those with more plans to grow, or larger growth aspirations may perceive BEP less of a problem as they may have intended to grow to a certain size all along, compared to an OPE who is faced with growth due to necessity versus a pre-planned choice. In consideration of these arguments, following hypotheses are presented:

H4. The perception of the becoming an entrepreneur problem by the owner of a one person enterprise is directly related to the owner's motivation to start a business.

H5: The perception of the becoming an entrepreneur problem by the owner of a one person enterprise is inversely related to the owner's plan to grow.

Reiter-Palmon et al. (1998) conclude that individuals tend to approach and solve problems in ways that fit with their personality. Similarly, Reiter-Palmon and Robinson (2009) conclude that problems will be perceived differently based on a particular aspect of personality, an individual's regulatory focus.

Regulatory Focus theory (Higgins, 1997; 1998) has traditionally been concerned with two different behaviors towards goals. A "promotion focus" is associated with eagerness and pursuing tasks in with the goal of promoting good outcomes. A "prevention focus" on the other hand is associated with the avoidance of negative outcomes. Crow & Higgins (1997) and Higgins (1997; 1998) propose that individuals are inclined to approach or avoid problems differently based on their regulatory focus. Shaw, Higgins & Friedman (1998) distinguish the two by suggesting that a promotion focus individual eagerly strives for advancement and gain, whereas a prevention focus individual is concerned more with safety, security and the avoidance of loss.

Applied cognitive research in decision making has shown that regulatory focus is related to information search, evaluation, decision making, choice behavior (Wang & Lee, 2006) as well as idea generation and evaluation (Herman & Reiter-Palmon, 2011). In the entrepreneurship literature, regulatory focus has been found to influence the subsequent culture of entrepreneurial organizations (Hmieleski & Ensley, 2005), sensemaking, entrepreneurial activity (McMullen & DeCastro, 2003), and the perception of entrepreneurial opportunities (McMullen & Shepherd, 2002).

Higgins et al. (2001) suggest that individuals, by the nature of their personal history and experience, develop a sense of success with either "promotion-related eagerness (promotion pride)" or "prevention-related vigilance (prevention pride)" when pursuing tasks and goals. Those who have experienced success with a promotion-related eagerness approach towards goals and tasks in the past will approach new goals and tasks with a similar promotion focus, and eagerness. Similarly, those who have experienced success being careful, vigilant and security seeking as they have approached new goals and tasks will continue to act in a consistent manner

of prevention focus, striving to minimize losses and prevent bad outcomes when faced with a new task or goal.

Higgins (2002) contends that promotion and prevention foci influence problem perception and decision making independent of one another. The emphasis in this study is on the promotion focus. A promotion focus, with an approach of eagerness suggests a more positive perspective on the task or goal. As such it would be expected that those higher in promotion focus would perceive problems proactively and perhaps as more of a challenge to be overcome as opposed to someone with a prevention focus might see the same problem as something to be avoided. Relating specifically to the problem of becoming an employer, regulatory focus theory and the measure of promotion vs. prevention pride which takes into account individual's subjective experiences would suggest that those higher on promotion pride (and more inclined to approach tasks/goals with eagerness) would perceive the BEP as less of a problem, than those who lower on promotion pride (and less inclined to approach tasks/goals with eagerness). In consideration of this evidence, the following hypothesis is presented:

H6: The perception of the becoming an entrepreneur problem by the owner of a one person enterprise is inversely related to the owner's promotion pride - regulatory focus.

One Person Enterprise Context. The context in which an entrepreneur operates his or her business has the opportunity to influence a variety of decisions, cognitions and emotions (Baron, 1998). Entrepreneurs have long been recognized for operating under uncertain conditions (Alvarez & Malloy, 2006) when attempting to pursue new market opportunities (Schumpeter, 1934; Shane & Venkataraman, 2000). Fernandes and Simon (1991) suggest that

when operating in complex and uncertain the environments one is more likely to be faced will ill-defined or poorly structured problems. An individual's problem solving capacity can be influenced by their personal stress levels (Gaines & Jermier, 1983), cognitive overload which is often associated with entrepreneurial contexts (Ford & Matthews, 2004) and their resulting emotions (Baron, 1998). March and Simon (1995) suggest that when cognitive limits are pushed, effective solutions to problems are constrained, and problems may be more cumbersome than they might otherwise be in less ill-defined situations.

Aspects of the entrepreneurial context that help entrepreneurs cope and thereby minimize uncertainty include marital status (Dencker, et al., 2009; Bruderl & Preisendorfer, 1998; Sanders & Nee, 1996) and emotions, such as positive and negative affect. The entrepreneurial context, especially for those OPEs who are operating their businesses alone, often lack the involvement of peers and coworkers and other frames of reference for helping with complex problem solving that are afforded by working in larger organizations (Mullins, 1996; Stevenson & Gilly, 1991). In addition, the smaller size of the business and the context within which they are operating increases the frequency and range of emotional experiences of the entrepreneur (Baron, 1998).

Granovetter's theory of social networks (1983) suggests that those with more support from strong and weak ties often have access to more information than those with less substantial support networks. In the entrepreneurial context, these networks and access to different sources of information may have substantial effects on the ability of the entrepreneur to operate his business. Sanders and Nee (1996) found that the odds of self-employment increased for those who were married and living with a spouse. Bruderl and Priesendorfer (1998) concluded that social networks improved the success of new businesses. In the case of the BEP, OPEs with more social support may be advantaged over those with less social support as they may have

access to information other than their own experiences to draw on when addressing problems associated with becoming an employer. OPEs with stronger support networks may actually perceive less problems associated with becoming an employer based on their ability to consult with others in their network.

Forgas' (1995) affect infusion model suggests that emotions, or levels of affect, at any given time will have an influence on our ability to comprehend and process information.

Decision making and problem perception are likely to be influenced based one's current emotional or affective state. Complex and uncertain contexts increase the influence that mood has on one's cognitive appraisals of situations and on one's general ability to process information, assess situations and problems and make decisions (Wadeson, 2006). Johnson & Tversky (1983) conclude that when people are experiencing positive affect, or in a good mood, their judgments are likely to be compatible with that mood. So in the case of the OPE, when asked about their perception of problems associated with becoming an employer, it would be likely that those who were experiencing higher positive affect, are more likely to perceive the BEP as less of a problem, than those with lower positive affect.

Given the unique nature of entrepreneurship, especially for those who operate their business alone, it is suggested that aspects of the OPE's context will influence perceptions of problems with the following hypotheses:

H7: The perception of the becoming an entrepreneur problem by the owner of a one person enterprise is inversely related to the owner's marital status.

H8: The perception of the becoming an entrepreneur problem by the owner of a one person enterprise is inversely related to the owner's level of social support.

H9: The perception of the becoming an entrepreneur problem by the owner of a one person enterprise is inversely related to the owner's level of positive affect.

A model depicting the relationship of these proposed hypotheses in relationship to the criterion, the Becoming an Employer Problem is presented in Figure 2.2. These include relationships between the individual's business knowledge, entrepreneurial aspiration, and the enterprise context. The individual's Business knowledge is hypothesized to have a direct relationship of functional experience (H1), functional expertise (H2) and level of education (H3) with BEP. Entrepreneurial aspiration is proposed to have direct effects of motivation (H4), and inverse relationships with growth aspiration (H5) and regulatory focus (H6). Finally, the enterprise context of marital status of the entrepreneur (H7), social support (H8) and positive affect will all be inversely related to the perception of the BEP.

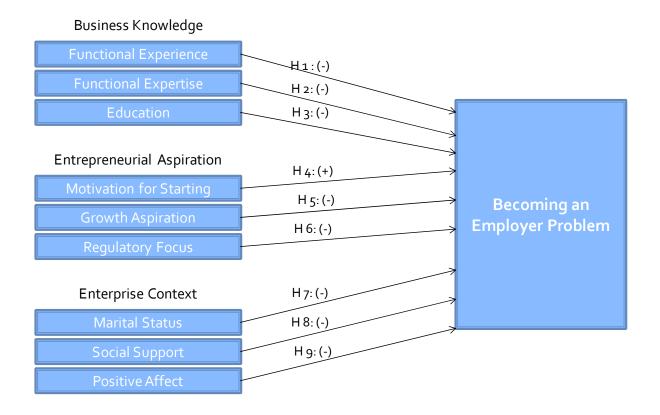


Figure 2.2. Model of Proposed Hypotheses

#### **CHAPTER THREE**

### RESEARCH DESIGN AND METHODOLOGY

## Sample

Small business owners were recruited from the Dun and Bradstreet Million Dollar Database, networking with members of the community through small business advocacy groups (e.g., SBDC, LIBA, Nebraska Center for Entrepreneurship), student referrals and social networking with the goal of identifying as many small business owners and one-person enterprises as possible.

**Dun and Bradstreet Million Dollar Database**. Consistent with previous studies in entrepreneurship, this study seeks to examine a sample of entrepreneurs who operate within the context of a specific state (e.g., Reynolds, 1987; 1996; Cardozo et al., 1992; Wicker & King, 1989; Kalleberg & Leight, 1991; Matusik, 1997; Aldrich & Langdon, 1998) and within specific industries (e.g., Wicker & King, 1989; Khaire, 2010).

Participants were randomly recruited from Nebraska-based entities listed in Dun and Bradstreet's million dollar database who reported that their business has one or fewer employees. New businesses are entered into the Dun and Bradstreet database when they attempt to establish trade credit or acquire commercial insurance for their business (Kirchoff, 1996). This database is ideal for sample selection as it contains the names and addresses of the founders, the date founded, and the industry classification codes so that an appropriate sample can be identified for recruitment. It has been recognized as having the most comprehensive database of recently formed firms in the United States (Kalleberg, Marsden, Aldrich & Cassell, 1990). While not all businesses that meet our sample demographic will have a listing with Dun and Bradstreet, it is the most comprehensive listing available that does not require an annual membership fee such as the National Association of Self-Employed, local Chambers of Commerce, or other business

organizations. In addition, it retains the information of the business even after it has ceased operating, minimizing the risk of range restriction through sampling only surviving businesses.

From the Dun and Bradstreet database, the industries of construction trades and professional services were intentionally oversampled. These industries were selected because they are most often founded by a single individual, construction for men and professional services for women (Shane, 2003). In addition, they have been shown to experience the most significant decrease in survival rates over a four year period according to the Bureau of Labor Statistics of 8.2 million public and private establishments (Knaup, 2005).

A random sample of 500 of the smallest businesses operating in Lancaster County,

Nebraska as included in the Dun and Bradstreet's Million Dollar Database as of January 2011

was selected for a direct mail campaign to recruit participants for the survey. Participants

received a postcard addressed to the principal place of business (or current resident) as listed in
the Dun and Bradstreet's Million Dollar Database inviting them to participate in a study on small
business owners and directing them to the URL of <a href="www.beyondmeasurement.com">www.beyondmeasurement.com</a> on the
internet where the survey link was posted. The postcard requested them to indicate they received
a direct mail postcard inviting to them participate in the referral text box. Approximately 10%

were returned undeliverable with no forwarding address.

Small Business Interest Group Networking. Invitations to participate in this study were sent to the membership of several organizations associated with new business start-up and growth to identify other potential study participants. The following organizations agreed to send out an invitation for this study: the Lincoln Independent Business Association, the Nebraska Business Development Center and the Nebraska Center for Entrepreneurship. Participants were recruited via an invitation that was emailed to them either directly or as part of the association's

routine electronic communication. The invitation included the following text with a live link to the website URL:

Researchers at the University of Nebraska are conducting a survey to understand more about hiring problems in small business. Our organization, (insert organization name) would like to invite you to participate in this research as it pertains to business owners like yourself, or those you work with. The researcher has agreed to share the preliminary results of this research with our group at the conclusion of the project. Click: <a href="https://www.beyondmeasurement.com">www.beyondmeasurement.com</a> for more information.

Thank you,
(Organizational Leader and Contact Information)

**Student Recruited Sample.** Recognizing that databases and small business advocacy organizations are not the only means to identify the almost invisible one-person-enterprises, this study employed a method of participant recruitment that has been successful in several previous studies where students identify qualified participants from within their personal social networks (e. g., Avey, Luthans, Smith, & Palmer, 2010; Smith & Combs, 2008). These previous studies have sought working adult participants and two of the studies achieved over 1,000 participants. In addition, previous entrepreneurship classes have had students have interview one or more entrepreneurs each semester, suggesting that student populations have access to small business owners in their personal networks. Consistent with procedures used in the aforementioned studies, announcements were made in class introducing the study and the guidelines for receiving extra credit for recruiting participants (e. g., Avey, Luthans, Smith, & Palmer, 2010; Smith & Combs, 2008). An email invitation was emailed to the students that they then forwarded to prospective study participants inviting them to participate by following the link to the website. The date collected resulted in two samples being prepared, a full sample for the creation of the dependent variable, and a subset of the sample consisting of just one-person enterprises.

**Social Networking.** In addition to the aforementioned methods of recruitment, personal social networks were tapped via personal email, notices sent and posted on social networking sites including LinkedIn.com and Facebook.com. OPEs operate in a variety of contexts and several participants were identified via these means of social networking that would not have been identified otherwise.

## **Sample Demographics**.

There were 188 participants who completed the surveys, ranging in age from 18 to 71 (x = 43, sd = 13.4) of which 68% were male and 32% were female. The majority of participants (84%) identified themselves as white while 16% indicated they were of another ethnic origin (Asian, Black/African-American, Hispanic, Native American/American Indian or other ethnic background). Participants' education ranged from some high school to doctoral degrees with the largest percentage (47%) of participants indicating an earned bachelor's degree, followed by having completed some college (17%) or holding graduate degrees (17%). Businesses were operated primarily in Nebraska (40%), Georgia (35%) and in other areas within the United States (25%). Referral sources are presented in Table 3.1. Businesses in the full sample represented 16 different types of industry classifications and are presented in Table 3.2.

### **One-Person Enterprises (OPE).**

One-person enterprises were identified from the full sample of small business owners based on the survey they completed (have not yet hired employees) and those that responded zero to the question "How many employees do you currently have in this business?" There were 128 participants that indicated they had no current employees. Sample statistics for this subset of participants were consistent to the proportions of the main sample on several of the descriptive statistics ranging in age from 18 to 71 (x = 42.62, x = 14.11) (67% male, 33% female), of which

83% identified themselves as white and 17% indicated they were of another ethnic origin (Asian, Black/African-American, Hispanic, Native American/American Indian or other ethnic background). Participants' education ranged from some high school to doctoral degrees with the largest percentage (48%) of participants indicating an earned bachelor's degree, followed by having completed some college (20%) or holding graduate degrees (20%). Means, standard deviations and correlations of the variables in this study are presented in Table 4.1. Businesses were operated primarily in Nebraska (42%), Georgia (31%) and in other areas within the United States (27%).

Table 3.1. Sample Referral Source and OPE status

Referral Source	Total	% of Total	Non-OPEs	OPEs
LIBA	1	0.01	0	1
NBDC	1	0.01	1	0
NCE	3	0.02	0	3
Student Recruited	122	0.65	41	81
Dun & Bradstreet	4	0.02	2	2
Researcher Recruited	18	0.10	4	14
Not Identified	39	0.21	11	27
Total*	188	1.00	59	128
* 1 participant did not indicated number of e	mployees			

In an effort to assess the representativeness of our sample compared to other larger studies of entrepreneurship, additional descriptive information about the sample was collected and is presented in Table 3.2 and 3.3.

Table 3.2. Participating Businesses by Type of Industry

	Frequency	Valid Percent	Cumulative Percent	PSED Sample (1997- 1998)	Firms with Employees (SBA:1998)			Frequency	Valid Percent	Cumulative Percent
Retail Store / Retail Trade	19	13.29	13.29	24.00%	13.20%	1.40	Retail Store / Retail Trade	17.00	13.28	13.28
Restaurant Bar or Tavern	6	4.20	17.48	0.40	7.50	1.40	Restaurant Bar or Tavern	5.00	3.91	17.19
Customer or Consumer Service	27	18.88	36.36			13.90	Customer or Consumer Service	23.00	17.97	35.16
Health Educ Soc Svc	5	3.50	39.86	6.20	10.40	10.30	Health Educ Soc Svc	4.00	3.13	38.28
Manufacturing	4	2.80	42.66	4.70	5.70	1.60	Manufacturing	1.00	0.78	39.06
Construction	10	6.99	49.65	7.00	12.30	11.70	Construction	10.00	7.81	46.88
Agriculture Forestry Fishing	1	0.70	50.35	2.40	0.50	1.20	Agriculture Forestry Fishing	4.00	3.13	50.00
Mining	0	0.00	50.35	0.00	0.40	0.50	Mining	0.00	0.00	44.68
Wholesale Trade Distribution	3	2.10	52.45			2.10	Wholesale Trade Distribution	2.00	1.56	51.56
Transportation	2	1.40	53.85			4.60	Transportation	0.00	0.00	45.74
Utilities	1	0.70	54.55	0.10	0.10		Utilities	1.00	0.78	52.34
Communications	9	6.29	60.84				Communications	8.00	6.25	58.59
Finance	5	3.50	64.34	2.70	4.00	3.70	Finance	2.00	1.56	60.16
Insurance	5	3.50	67.83				Insurance	3.00	2.34	62.50
Real Estate	5	3.50	71.33	3.60	4.30	0.70	Real Estate	3.00	2.34	64.84
Biz Service - Biz Consulting	39	27.27	98.60			21.70	Biz Service - Biz Consulting	40.00	31.25	96.09
Something Else	2	1.40	100.00				Something Else	5.00	3.91	100.00
Total	143	100.00					Total	128.00	100.00	
Missing	4						Missing	0.00		
Total	147						Total	128.00		

Table 3.3. Business Sample Characteristics

		Work Locatioca	tion						Work Locatiocation	on		
	Frequency Percent Valid Cumulati								Frequency	Percent	Valid	Cumulative
				Percent	Percent						Percent	Percent
Valid	Home Office	69	46.94	48.94	48.94		Valid	Home Office	74.00	57.81	61.16	61.16
	Outside Office	72	48.98	51.06	100.00			Outside Office	47.00	36.72	38.84	100.00
	Total	141	95.92	100.00				Total	121.00	94.53	100.00	
Missing	-99	6	4.08				Missing	-99	7.00	5.47		
Total		147	100.00				Total		128.00	100.00		

		Biz Legal For	m					Biz Legal Form			
		Frequency	Percent	Valid	Cumulative			Frequency	Percent	Valid	Cumulative
Valid	Sole Proprietor	39	26.53	27.27	27.27	Valid	Sole Proprietor	42.00	32.81	34.15	34.15
	General Partnership	3	2.04	2.10	29.37		General Partnership	2.00	1.56	1.63	35.77
	Limited Partnership	2	1.36	1.40	30.77		Limited Partnership	3.00	2.34	2.44	38.21
	LLC	46	31.29	32.17	62.94		LLC	35.00	27.34	28.46	66.67
	Subchapter S Corp	29	19.73	20.28	83.22		Subchapter S Corp	15.00	11.72	12.20	78.86
	General Corporation	14	9.52	9.79	93.01		General Corporation	9.00	7.03	7.32	86.18
	Not Yet Determined	10	6.80	6.99	100.00		Not Yet Determined	17.00	13.28	13.82	100.00
	Total	143	97.28	100.00			Total	123.00	96.09	100.00	
Missing	-99	4	2.72			Missing	-99	5.00	3.91		
Total		147	100.00			Total		128.00	100.00		

	Whe	ere Biz Came	From				Where Biz Came From					
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	Current Work Activity	27	18.37	18.62	18.62	Valid	Current Work Activity	23.00	17.97	18.25	18.25	
	Previous Work Activity	43	29.25	29.66	48.28		Previous Work Activity	35.00	27.34	27.78	46.03	
	Separate Business that you now own and manage	11	7.48	7.59	55.86		Separate Business that you now own and manage	7.00	5.47	5.56	51.59	
	Hobby or Recreational Pastime	19	12.93	13.10	68.97		Hobby or Recreational Pastime	20.00	15.63	15.87	67.46	
	Academic Scientific or Applied Research	7	4.76	4.83	73.79		Academic Scientific or Applied Research	7.00	5.47	5.56	73.02	
	Idea from self or other member of startup team	31	21.09	21.38	95.17		Idea from self or other member of startup team	28.00	21.88	22.22	95.24	
	Other	7	4.76	4.83	100.00		Other	6.00	4.69	4.76	100.00	
	Total	145	98.64	100.00			Total	126.00	98.44	100.00		
Missing	-99	2	1.36			Missing	-99	2.00	1.56			
Total		147	100.00			Total		128.00	100.00			

					Describ	e Business					
		Frequency	Percent	Valid Percent	Cumulative Percent			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Independent New Business	103	70.07	73.57	73.57	Valid	Independent New Business	92.00	71.88	76.67	76.67
	Purchase / Take- over of an Existing Business	13	8.84	9.29	82.86		Purchase / Take-over of an Existing Business	6.00	4.69	5.00	81.67
	Franchise	3	2.04	2.14	85.00		Franchise	1.00	0.78	0.83	82.50
	Multi-Level Mktg Initiative	2	1.36	1.43	86.43		Multi-Level Mktg Initiative	3.00	2.34	2.50	85.00
	New Biz sponsored by Existing	6	4.08	4.29	90.71		New Biz sponsored by Existing	5.00	3.91	4.17	89.17
	Other	13	8.84	9.29	100.00		Other	13.00	10.16	10.83	100.00
	Total	140	95.24	100.00			Total	120.00	93.75	100.00	
Missing	-99	7	4.76			Missing	-99	8.00	6.25		
Total		147	100.00			Total		128.00	100.00		

					II.	NCSTATE				
		Frequency	Percent	Valid	Cumulative		Frequency	Percent	Valid	Cumulative
				Percent	Percent				Percent	Percent
Valid	Yes	89	60.54	62.24	62.24	Yes	61.00	47.66	49.19	49.19
	No	52	35.37	36.36	98.60	No	60.00	46.88	48.39	97.58
	N/A	2	1.36	1.40	100.00	N/A	3.00	2.34	2.42	100.00
	Total	143	97.28	100.00		Total	124.00	96.88	100.00	
Missing	-99	4	2.72			-99	4.00	3.13		
Total		147	100.00				128.00	100.00		

# Power Analysis.

A power analysis was calculated to determine the sample size needed to maximize statistical power (Cohen, 1988) and minimize Type II error in these analyses. A power analysis assesses the relationship between the Type I and Type II error rates ( $\alpha$  and  $\beta$ ), the sample size (N) and the size of the effect (r) (Friedman, 1982). The Type I error rate ( $\alpha$ ), also known as a significance criterion, is an estimate of the probability or chance of concluding that an effect is

present in the population when there really is not an effect (Snedecor & Cochran, 1980). The Type II error rate suggests the probability of concluding an effect is absent when in fact, it truly exists (Murphy & Myors, 1998). Consistent with convention in the behavioral sciences, the Type I error rate ( $\alpha$ ), was set at .05 and power was set at .80 (Cohen, 1988). In addition to these error rates, an effect size must be estimated to ascertain the level of relationship that can be expected to detect between the variables of interest. Based on the acquired sample size of 128 participants with data available for the criterion, the power of this study should be able to detect effect sizes that are greater than .25 for effects that are truly present (Cohen, 1988 & Garbin, 2008).

### QUESTIONNAIRE DEVELOPMENT AND ADMINISTRATION

This research was conducted via an online survey. All participants were directed to the primary investigator's privately owned URL on the internet, <a href="www.beyondmeasurement.com">www.beyondmeasurement.com</a>. The survey was administered through the Qualtrics survey tool, which was used in accordance with a site license currently retained by the University of Nebraska-Lincoln's College of Business.

### **Questionnaire Development.**

The purpose of this study was to examine how the one-person enterprises think about becoming an employer. The intent was to identify individuals who own and operate their own business before they hire employees. Due to the temporal nature of the research question and the reality that when a business owner is identified we do not want to miss out on their participation simply because they have hired an employee, two different options were made available on the website <a href="www.beyondmeasurement.com">www.beyondmeasurement.com</a>. The participants had the choice to take one of the following surveys: "have not hired any employees" or "have already hired employees". The

purpose of the two surveys was to minimize the confusion for the participant based on how the questions were worded in relationship to their experiences with hiring employees.

Consistent with previous research on decision making, participants were asked to respond to the decision making questions first, followed by measures assessing personality characteristics, in an effort to not influence the participant's responses based on introspection from personality or other individual difference measures. The survey consisted of a demographic questionnaire, a series of questions about their business' startup, staffing decisions, organizational structure, and current operations. Additional measures were included that examine the entrepreneur's individual differences in personality, skills and abilities.

This study required the criterion measure to be constructed prior to assessing the relationships hypothesized in this study. To answer this question a series of items were developed in an effort to create a latent construct of the Becoming an Employer Problem (BEP). Initial items were included and created based on previous research conducted in Europe on one-person enterprises. The Expert Group (European Commission, 2005) identified 40 constraints to the hiring process as perceived by one person enterprises. Based on a qualitative study by David and Watts (2007, 2008) two additional items were created that were not present in the Expert group's study. These 42 items were combined for use in a small pilot study to check for the validity of the concerns as perceived by business owners in the United States. Pilot study participants were asked to rate each of the items on a scale of agreement (1=strongly disagree to 5=strongly agree) indicating their perception of the impact of each would have on business owner's like themselves in deciding whether or not to hire employees for the first time. In addition, the following open ended questions were included: "What are the reasons you would not consider hiring an employee or adding an employee to your business?" and "What concerns

and what constraints do you have about becoming an employer and/or hiring your first employee?"

The pilot study verified the relevance of the European items as all being relevant to small business owners in the United States and all of the items were retained as reasons why a small business might not hire an employee. From the qualitative responses, an additional 38 items were created to cover the range of reasons, concerns and constraints that were mentioned as additional unique reasons as to why a small business owner might not hire an employee. The resulting set included 80 items that addressed 12 concerns. These included the size, scale and prospects of the business; administrative burdens of being an employer (e.g., hire paperwork, payroll); compensation and benefits; general costs and expenses; impact of having employees on the business or the owner; desire for the owner to be and/or remain independent and autonomous; liabilities and obligations related to being an employer; lost time and or the investment of time in employees; management's personal abilities; the task of finding the right employee; concerns regarding the processes of recruitment selection and hiring; and concerns regarding sharing information and trusting others.

#### **MEASURES**

The nascent process of entrepreneurship has received a considerable amount of attention in recent years. A collaborative research agenda called the Panel Study of Entrepreneurial Dynamics (PSED) has been conducted on a national sample with several waves two times over the past several years. Gartner, Shaver, Carter and Reynolds published a handbook of the research conducted in the PSED studies including the questions and preliminary findings from the studies. Communication with the lead author on the handbook, (W. B. Gartner, personal

communication, November 8, 2010), has confirmed that the questions used in the PSED studies are available for use in future research. Where possible, questions from the PSED handbook were administered with the goal of increasing our ability to consistently operationalize constructs within the field of entrepreneurship.

The measures in this study include the criterion, Becoming an Employer Problem (BEP) which is constructed as part of this study, along with several person-related and situation-related predictors.

## The Criterion Variable: Becoming an Employer Problem.

In the official study, participants were asked to rate each of these reasons for not hiring using a 7-point scale as to what extent each was a concern for them as to why they would not hire an employee in the operation of their business. The Becoming an Employer Problem (BEP) was identified as a higher-order construct comprised of three latent constructs: problems associated with administrative and legal responsibilities (ADLGL), recruitment and selection process concerns (REC), and concerns related to a OPE's management abilities and preferences (MNGT) and is presented in Figure 3.1. A list of the individual items and the structure of the dependent variable are listed in the appendix.

For the purposes of estimating the appropriate factor structure of the latent variable, the Becoming an Employer Problem (BEP), the entire sample (n=148) that was available as of March 8, 2011 represented approximately 50% OPEs and 50% businesses with employees and was therefore used in the construction of the criterion. The following steps were taken. First, a series of reliabilities were estimated on the hypothesized 12 factors -- size and scale of the business; administrative burdens of being an employer (i.e. paperwork); concerns about costs and obligations associated with compensation and benefits; general costs and expenses; impact of the

employee on the business; desires and preferences for independence and autonomy; liabilities and obligations (i.e. taxes, training, legal); lost time; the owner's current management abilities; being able to find the "right" employee; knowledge of the process of recruitment and selection; and concerns related to sharing of information and trusting others, presented in the 80 items – were conducted. The reliabilities for most of these factors were very high, with all but two of them in the .8 to .9 range and are presented in Table 3.4. These high reliabilities suggest internal consistency among the variables within the various hypothesized factors.

Table 3.4 Reliabilities of initial hypothesized factors

Hypothesized Factors	Reliability	Number
	$(\alpha)$	of Items
1. Size and scale of the business	.677	4
2. Administrative burdens of being an employer (i.e. paperwork)	.943	5
3. Concerns about costs and obligations associated with	.928	3
compensation and benefits		
4. General costs and expenses	.937	6
5. Impact of the employee on the business	.708	3
6. Desires and preferences for independence and autonomy	.812	4
7. Liabilities and obligations (i.e. taxes, training, legal)	.972	14
8. Lost time	.955	8
9. The owner's current management abilities	.925	10
10. Being able to find the "right" employee	.967	9
11. Knowledge of the process of recruitment and selection	.917	6
12. Concerns related to sharing of information and trusting others	.911	7

Next, an exploratory factor analysis (EFA) was performed using MPlus on the 80 items in the dependent variable. These results suggested three to four factors and grouping the items in a different combination than had been predicted a priori. A parceling approach was selected as the statistical approach to use with these data. Bandalos (2002) has shown that a process such as parceling (also known as "partial disaggregation" modeling by Bagozzi & Edwards, 1998; Bagozzi & Heatherton, 1994) can be helpful to applied researchers who are conducting research

in new areas, with items that appear to be roughly categorized and/or uni-dimensional when determining factor structures. The process of parceling involves creating a parcel score from the sum or the average of at least two items and using the parcel score in the place of item scores when conducting an SEM analysis (Bandalos, 2002). The process of parceling reduces the number of parameters required for the analysis and thereby increases model fit as evidenced by root mean squared error of approximation (RMSEA), comparative fit indices (CFI) and chisquare tests, especially when working with small sample sizes (100 to 250) with roughly organized categories. Using a parceling approach, an iterative process that proceeded as follows was used. Creating parcels based on the average of several items based on the researcher's a priori hypotheses of the relationship between the items and the information from the loadings as reported in the EFA. The parcels were created as mean scores within SPSS and exported into MPlus software. The initial analysis started with 13 parcels loading on 4 hypothesized latent variables of administrative and legal (ADLGL), recruitment and selection (RECSEL), management abilities (MNGT) and sharing information and control (SHRIN) loading onto one latent higher-order construct, the Becoming an Employer Problem (BEP).

The administrative and legal factor included 4 indicators (parcels of paperwork, costs, legal and regulatory obligations, training obligations) comprised of 34 items with an  $\alpha$  = .984. The recruitment and selection factor included 3 indicators (parcels of recruitment and selection procedures, finding an appropriate employee, time lost in the HR process) comprised of 21 items with an  $\alpha$  = .98. The management abilities factor included 3 indicators (parcels of management abilities, independence, business attributes) comprised of 13 items with an  $\alpha$  = .948. The sharing information and control indicator included 3 indicators (parcels of trust, preference for sharing information, concerns about sharing information) comprised of 9 items with an  $\alpha$  = .891.

Based on the fit statistics and reliability estimates of the individual parcels, the distribution of the items among the initial set of parcels was reexamined. In order to support four indicators, some of the parcels were much smaller than others, suggesting that a more parsimonious model of three indicators might be possible with a better representation of the data. The management abilities and sharing information and control indicators were collapsed into the Management Abilities and Preferences indicator (still labeled MNGT) to include management abilities and preferences (mngtabm), independence (indepm), business attributes (bizattm), general preferences (genprfm), concerns about sharing specific business information (spcinfm), and concerns about competition (compm). Additional models were tested for model fit with different inclusion of the MNGT parcel items assigned to different parcels. Finally, the indicator of ADLGL was reexamined and the items in the training (trngm) parcel were reallocated to the parcels of costs, independent business, and legal and regulatory obligations and the parcel of trngm was eliminated.

A series of models were tested in MPlus to determine the best fitting model. The model with the best fit had the three factors of administrative and legal (ADLGL), recruitment and selection (RECSEL) and management abilities and preferences (MNGT) with 3 indicators each, for a total of 9 indicators. These indicators include: paperwork, costs and legal/regulatory loading on administrative and Legal Obligations (ADLGL); recruitment/selection process concerns, finding employees, and lost time loading on Recruitment and Selection (REC) and the owner's management abilities and preferences, concerns regarding independence and around sharing information and trust loading on Management Abilities and Preferences (MNGT). The model had a reasonable fit of the data according to the CFI and SRMR fit statistics which have been shown to better fit indices when working with smaller samples (Hu & Bentler, 1999).

Global model fit indices for the final model were  $X^2$  (24) = 100.551, p < .05; CFI = .932, RMSEA = .151, SRMR = .071. Final model parameter estimates are presented in Table 6 and the model fit statistics are presented in Table 3.5. A diagram showing the relationships between the higher order construct, the latent variables and the respective indicators is presented in Figure 3.1. A listing of the sample items associated with each factor is presented in the appendix.

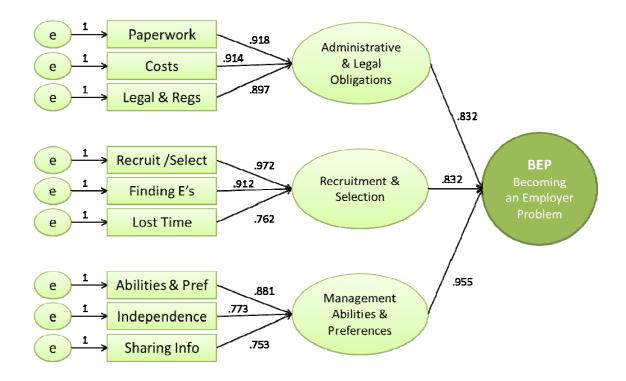


Figure 3.1. Factor Structure of the Becoming an Employer Problem

Table 3.5. Final Model Parameter Estimates

Item	Loading	SE	STD	Residual	Residual SE	STD
ADLGL	.832	.040	20.587	.307	.067	4.570
Paperwork	.918	.018	50.374	.157	.033	4.704
Costs	.914	.019	49.136	.165	.034	4.866
Legal and Regs	.897	.021	43.024	.195	.037	5.211
REC	.832	.040	20.587	.308	.067	4.632
Recruit/Select	.972	.013	73.535	.056	.026	2.185
Finding E's	.912	.017	52.456	.169	.032	5.317
Lost Time	.762	.040	19.269	.419	.060	6.940
MNGT	.955	.035	27.016	.088	.068	1.297
Abilities and	.881	.029	30.275	.223	.051	4.350
Pref						
Independence	.773	.041	18.689	.402	.064	6.290
Sharing Info	.753	.043	17.611	.433	.064	6.717

Table 3.6. Model Statistics for the BEP Construct

Model	ChiSquare	df	RMSEA	CFI	SRMR
Measure of BEP with 3 latent factors	100.551*	24	.151	.932	.071

<sup>\*</sup> p < .05

Table 3.7. Reliabilities of final model indicators

BEP Model Indicators	Reliability	Number
	$(\alpha)$	of Items
Paperwork	.948	8
Costs	.945	9
Legal and Regs	.972	15
Recruit/Select	.917	6
Finding E's	.967	9
Lost Time	.961	7
Abilities and Pref	.934	10
Independence	.820	9
Sharing Info	.913	6

Once the factor structure was identified using MPlus, the corresponding latent factor scores (ADLGL, REC and MNGT) were created within SPSS using standardized versions of the items. The dependent variable of BEP was then calculated based on a weighted summation of the latent factors. This process allows the higher-order construct as well as the individual factors of ADLGL, REC and MNGT to be analyzed as dependent variables.

The full sample included small business owners who had not yet hired, had already hired and those that currently had employees as well as those we were seeking to continue without any current employees. The model for the BEP was identified using the largest sample possible (n=148), which included all participants regardless of if they have hired employees already or not and whether or not they were currently operating with no employees.

This study is specifically interested in how OPEs construct the problem of becoming an employer. Therefore, before testing the study's hypotheses, the dependent variable was

examined to assess whether or not it was not significantly different for those business that had employees compared to those who did not. A finding of a significant difference would suggest that the entrepreneur's circumstances (with or without employees) influence their perception of the BEP.

To test for mean differences, four t-tests were conducted for each of the latent factors (ADLGL, RECSEL, MNGT) and the higher order construct (BEP) to understand their use as dependent variables. There were approximately 20 participants with missing data on the dependent variable, resulting in a sample of 127 for these analyses. The results of the t-tests suggested that one-person enterprises do think about the problems associated with becoming an employer problem differently based on the administrative and legal concerns, and those issues related to management abilities and preferences. There were no differences between the two groups of their perception of the recruitment and selection process of employees as a problem. The test of the difference of the overall BEP was not significant at the .05 level. The results of these t-tests are in table 3.8.

Table 3.8. Test of mean differences between OPEs and Businesses with Employees

	Model	Sum of	df	Mean	F	Sig.
		Squares		Square		
BEP	Between Groups (combined)	9111.985	1	9111.985	3.439	.066
	Within Groups	333876.495	126	2649.813		
	Total	342988.480	127			
ADLGL	Between Groups (combined)	100.824	1	100.824	5.317	.023
	Within Groups	2389.325	126	18.963		
	Total	2490.148	127			
REC	Between Groups (combined)	.008	1	.008	.000	.984
	Within Groups	2483.545	125	19.868		
	Total	2483.553	126			
MNGT	Between Groups (combined)	51.8	1	51.800	4.400	.038
	Within Groups	1471.483	125	11.772		
	Total	1523.282	126			

#### Personal Influences.

A variety of personal and individual difference constructs were measured and tested for their relationship with the dependent variable. These include education, functional experience, functional expertise, and personality. For the purpose of this study and in an effort to align with previous research in entrepreneurship, measures of experience, expertise and education, from the previous administrations of the PSED as published in the chapters by Brush and Manolova (2004). These items are available in the Gartner, Shaver, Carter and Reynolds (2004) Handbook of Entrepreneurial Dynamics: The Process of Business Creation as well as the actual surveys, which are available for download through the University of Michigan.

**Functional Expertise and Experience.** Expertise and Experience in specific functional areas of management (general, human and financial, operations) was assessed using the PSED questions QF1 and QF2 (Brush & Manolova, 2004, p. 84). Expertise and experience were measured based on participant's responses to nine items indicating both the number of courses (expertise) in or years of experience with several functional areas of business such as: sales or marketing management, accounting, financial control, and personnel, human resources management, etc. After the removal of extreme scores, the number of courses ranged from 0 to 7, and the years experience from 0 to 45. Both functional expertise (courses) and experience were computed using the factor score procedure as outlined in Brush and Manolova (2004) to create a composite score for each.

**Education**. Education was measured with the PSED question number Q343, which asked participants "What is the highest level of education you have completed so far?" with responses available ranging from none to doctoral level education. Participants in this sample

ranged from some high school to doctoral level education, with the majority of the sample (44%) holding a bachelor's degree.

Regulatory focus. Regulatory focus has been a variable of interest in several research studies in entrepreneurship as it relates to an individual's general dispositional nature towards goal pursuit. It has also been studied in alignment with creative problem solving and the problem construction process. Regulatory Focus was measured using Higgins et al.'s (2001) 11-item Regulatory Focus Questionnaire, which assesses an individual's promotion pride and prevention pride (or focus) as a measure of achievement motivation. Individuals responded to 11 items using on a 5-point scale with anchors based on frequency of behavior or personal perception of how applicable to them they perceive a particular characteristic to be an accurate reflection of themselves. Reliabilities for this measure as reported by Higgins' et. al. were  $\alpha = .73$  for the Promotion scale; and  $\alpha = .80$  for the Prevention scale; with no significant correlation between the two scales. Our sample was consistent with no correlation between the two scales (r =-.007, n.s.) and  $\alpha = .527$  for the Promotion scale; and  $\alpha = .744$  for the Prevention scale. The emphasis in this study is on the influence of Promotion pride so it was included as a predictor, and prevention pride was included as a control.

### Situational and Contextual Influences.

Entrepreneurship research is very context dependent and at any given time an entrepreneur will be operating with respect to a variety of situationally specific influences. For the purpose of this study I assessed the several situational variables that were based on the business itself (growth aspirations for the business, the presence of a written business plan for the business, and preferred future size of the business,); several that were relevant to the entrepreneur's reasons for starting their business (motivation for starting), and their current

contextual experiences while working within the business (marital status, social support, positive and negative affect, spouse's employment status, and perceived role in relationship to the business).

**Growth Aspirations.** Growth aspirations was measured based on both actions/behaviors and cognitions about growth. Participants were asked if they had a written business plan for this business measured with a yes or a no. Having a business plan demonstrates a planning activity and has been associated with various entrepreneurial outcomes, such as growth (e.g., Reynolds & White, 1997; Dunkelberg, Cooper, Woo & Denis, 1987; Schutgens & Wever, 2000).

**Motivation for Starting.** Motivation for starting a business and business ownership was measured using items administered in previous research, including the PSED, to assess intrinsic motivation for starting the business. Intrinsic motivation for starting one's own business was measured using Reynolds and Curtin's (2008) 14-item measure. This measure includes four factors of intrinsic motivation: autonomy, wealth, status and respect. This measure of intrinsic motivation has emerged from a series of research studies (e.g., Scheinberg & Macmillan, 1988; Shane, Kolvereid & Westhead, 1991; Birley & Westhead, 1994) assessing motivation to start their own business and reasons for choosing an entrepreneurial career. The 18 items from the various studies culminated in the most recent administration of the Panel Study of Entrepreneurial Dynamics, the PSED2 (Carter, Gartner & Shaver, 2004). Based on the PSED2, additional factor analyses supported a 14 item, 4 factor scale of intrinsic motivation including the constructs of autonomy, wealth, status/achievement and respect as reasons the participants were motivated to start a business. Scale reliabilities reported in previous research were autonomy ( $\alpha$ = .64), wealth ( $\alpha$  = .79), status/achievement ( $\alpha$  = .76) and respect ( $\alpha$  = .767). Reliabilities for this sample were similar with autonomy ( $\alpha = .67$ ), wealth ( $\alpha = .805$ ), status/achievement ( $\alpha = .805$ )

.735), and respect ( $\alpha$  = .775). Intrinsic motivation for this study was constructed as a single latent factor comprised of the weighted average of the four factors. ( $\alpha$  = .859).

Situational Cues / Context. Context has been identified as a critical component of entrepreneurship research entrepreneurs operate within the nexus of the individual and the opportunity nexus (Shane, 2003). Since the act of entrepreneurship occurs within the context of each entrepreneur's unique situation, this study assesses several aspects of the entrepreneurs' situations that have been previously identified in the literature as being associated with various outcomes, as well as some that are proposed to be related to how they might perceive the problem of Becoming an Employer. These include marital statusl/living arrangements, stress operationalized as social support, and positive and negative affect.

### **Personal Situation.**

**Marital Status/Living Arrangement.** Marital status was assessed using the following items: married (69%), living with a partner (2.7%), divorced (5.9%), widowed (.5%), or never married (21.9%). This item was coded 1 for married and/or living with a partner (68%), and 0 for not married or living with a partner (32%) following similar coding procedures used in Sanders and Nee (19960 when assessing their role in regards to social support.

Current Level of Stress. Stress has often been cited as a source that influences an individual's perception, judgment and cognitions (Gaines & Jermier, 1983). For this study, two measures that are often related to stressful situations were utilized, the influence of positive affect and the presence of social support from family and friends.

**Positive Affect.** Positive affect was measured using the 10-item short form of the PANAS (Thompson, 2007), in which the five positive items are alert, inspired, determined,

attentive and active. Reliabilities for the scale of positive affect in previous studies averaged  $\alpha =$  .78 and in this sample the alpha for positive affect was  $\alpha =$  .752.

**Social support.** Social support was measured using an 8 item scale ( $\alpha$  =.817) representing strong (spouse/life partner, parents, friends, relatives) and weak ties (business partners, acquaintances, former employers and co-workers) commonly associated with social support (Bruderl & Priesendorfer, 1998). Reponses were measured on a 1 to 5 scale of agreement, and an average level of social support from all sources was calculated.

#### Control Variables.

Several variables were included as controls in this study. These include age, gender, minority status, operating state location, type of business (industry) and previous hiring experience.

Age, Gender and Minority Status. Research in entrepreneurship has consistently found gender and ethnicity differences among entrepreneurs (Carter & Brush, 2004) in regards to the types of ventures they found (Shane, 2003) and the amount and types of financing they employ (Reynolds, 2007). Consistent with previous studies of new ventures, men (67%) were more present in the sample than women (33%), and minorities, in general, were underrepresented.

**Business Type / Industry**. Research in entrepreneurship and strategic management has consistently found effects of industry. Business type was measured consistent with the PSED2's measure of 17 business types presented in Reynolds (2004). Data suggest that this sample includes a variety of businesses that are representative of non-employer firms in the United States (see Table 3.2 for a comparison).

**Operating State / Location.** Data was collected in a convenience sample in the states of Nebraska (42%) and Georgia (31%), with participants from a range of other states as well (27%).

By offering the survey on the internet, the likelihood of participants from around the globe was increased. Participants were asked to identify the city, state, county and country within which they operate their business. Location of the business was measured based on city, state and country as a means to control for any effects of location based on economic climate, regulations (e.g. Baumol, 1990).

#### **CHAPTER 4**

### **ANALYSES and RESULTS**

Descriptive statistics for all items and measures were calculated to assess both the patterns of normalcy prior to data analysis. Outliers based on extreme values were managed using the technique of windsorizing a process that computes an acceptable range of scores based off on the inter-quartile range and proposes that extreme values are replaced with the largest and/or smallest acceptable values. This technique was employed for the number of functional management courses for the upper bound only as the lowest possible value could have been zero for number of specific courses completed. Missing data was generally retained as missing data with the exception of a few circumstances. For a few participants they had one missing item within a scale, and the values for those items were replaced with the sample mean for that item. Five participants did not report their age, and to include them in the analyses, a process of meanitem replacement was used in which the missing age of these participants was replaced with the average age of the sample so that these five participants could be retained for the analyses. There were a few additional cases of missing data within the scales of interest. When data for only one item was missing it was replaced with the sample mean for that item. This process was completed for less than five additional records.

# **Hypothesis Testing**

Several hypotheses were proposed for this dissertation based on person and situational influences. These encompassed the individual's business knowledge, entrepreneurial aspirations and aspects of their enterprise context. Correlation and multiple regression analyses were conducted to examine the relationships between the BEP and these person and situation predictors. A series of hierarchical regressions were tested to examine the contribution of

explained variance of personal demographic control variables, personal characteristic and contextual variables on the criterion variable of the becoming an employer problem. In these models demographic control variables (age, gender, minority status, previous hiring experience) including coded variables to represent current operating location by state (Nebraska, Georgia, and all others) and the 17 different industries were entered in the first step, adding the remaining predictors in the second step, to identify which, if any of the control variables contributed to the variance explained in BEP. The only control variable that reached the significance level of .05 was chronological age. In order to maximize explanatory power, only age was retained in as a demographic control variable in the final regression, along with predictor of prevention pride to enable the correct theoretical interpretation of the effect of promotion pride on the criterion. This final multiple regression model with all of the predictors was significant,  $R^2 = .296$ , F(11, 92) = 3.518, p < .01; suggesting that almost 30% of the variance in BEP can be explained with this study's predictors. This model was used to test the study's nine hypotheses and the results of the full regression model are presented in Table 4.2.

Hypotheses 1-3 proposed that there would be an inverse relationship between a OPE's functional experience, functional expertise and level of education (respectively) and their perception of the BEP. An examination of the bivariate correlations and the beta weights in the multiple regression model were in the expected direction for educational level (r = -.028, n.s.;  $\beta = -.039$ , n.s.) and functional experience (r = -.191, p < .05;  $\beta = -.093$ , n.s), but not for functional expertise (r = .010, n.s.;  $\beta = .211$ , p < .05). When tested at the .05 level of significance, the corresponding beta weights for hypotheses 1 and 3 were not significant and therefore these hypotheses were not supported. Hypothesis 2 was not supported in the hypothesized direction. However, the test of this hypothesis identified a significant direct relationship with the criterion,

suggesting that functional experience in specific areas of management directly influence how problems of becoming an employer are perceived. Those that have more functional expertise perceive more problems with becoming an employer which is likely to be based on having access to more experience in general giving them more insight into the various types of problems that could be encountered.

Hypothesis 4 proposed that there would be a direct relationship between a OPE's motivation to start their own business and their perception of the BEP. An examination of the bivariate correlations and the beta weights in the multiple regression for the measure of starting motivation (r = .236, p < .05;  $\beta = .084$ , n.s.) suggest that the direction was supported for the bivariate correlation but not when in consideration of all of the variables in the model. When tested at the .05 level of significance, Hypothesis 4 was not supported for the motivation of starting a business when measured a weighted factor.

Hypothesis 5 proposed that there would be an inverse relationship between the OPE's growth aspirations and their perception of the BEP. Growth aspirations were measured by the completion of a business plan. An examination of the bivariate correlations and the beta weights for business plan completion in the multiple regression model indicate the relationships were in the expected direction (r = -.163, n.s.;  $\beta = -.214$ , p < .05) and significant at the .05 level as a predictor of the BEP after controlling for the influence of all the other variables. Hypothesis 5 was supported, suggesting that those OPEs who participate in the process of business planning for their business perceive the BEP as a less of a problem after controlling for all the other variables.

Hypothesis 6 proposed that there would be an inverse relationship between the OPE's promotion pride – regulatory focus and their perception of the BEP. An examination of the

bivariate correlations and the beta weights for promotion pride in the multiple regression model suggest that that the relationships were in the expected direction and significant for both the bivariate correlation and the regression coefficient (r = -.348, p < .001;  $\beta = -.323$ , p < .01) after controlling for all the other variables in the model including prevention pride-regulatory focus. Hypothesis 6 was supported.

Hypothesis 7 proposed that there would be an inverse relationship between the OPE's marital status and their perception of the BEP. An examination of the bivariate correlations and the beta weights for marital status in the multiple regression model were in the expected direction for both the bivariate correlation and the regression coefficient (r = -.081, n.s.;  $\beta = -.258$ , p < .05). Hypothesis 7 was supported, suggesting that OPEs who are married or living with a partner, perceive the BEP as less of a problem after controlling for all the other variables in the model.

Hypothesis 8 proposed that there would be an inverse relationship between the OPE's level of social support and their perception of the BEP. An examination of the bivariate correlations and the beta weights for social support in the multiple regression model were not expected significant (r = .022, n.s.;  $\beta = .033$ , n.s.). Hypothesis 8 was not supported.

Hypothesis 9 proposed that there would be an inverse relationship between the OPE's level of positive affect and their perception of the BEP. An examination of the bivariate correlations and the beta weights for positive affect in the multiple regression model were not significant (r = .000, n.s.;  $\beta = -.020$ , n.s.). Hypothesis 9 was not supported.

The final model with all of the predictors is presented in Table 4.2. There was a main effect for age ( $\beta$  = .300, p < .05), functional expertise ( $\beta$  = .211, p < .05), business planning ( $\beta$  = -.216, p < .05), promotion focus ( $\beta$  = -.323, p < .01), and marital status ( $\beta$  = -.258, p < .05) after

controlling for all the other variables in the model including the prevention pride-regulatory focus, functional experience, level of education, motivation to start their business, social support and positive affect. These combined predictors account for approximately 30% of the variance in perception of becoming an employer after controlling for all of the other variables. The standardized regression coefficients suggest that those who are older, prepared a business plan, approach goals with a promotion orientation and are married experience the BEP as less of a problem, and those who have more expertise in the functional areas of management are more likely to perceive the BEP as more of a problem after controlling for all the other variables in the model. The regression model was significant,  $R^2 = .394$ . F (11, 92) = 3.518, p  $\leq$  .05.

Table 4.1. Descriptive Statistics for Measured Variables <sup>a</sup>

	Min	Max	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I. BEP	64.11	409.54	254.13	77.92																
2. Age	18.00	71.00	42.62	14.11	171															
	0.00	1.00	1 22	471	(111)	0.52														
3. Gender	0.00	1.00	1.33	.471	040 (111)	.052 (128)														
. Minority	0.00	1.00	1.17	.379	.110	191	.034													
tatus					(111)	(128)	(128)													
. Industry	0.00	17.00	9.12	6.24	172	.048	051	242												
. Hired	0.00	1.00	.20	.40	(111) .137	(128)	(128) 022	(128) .027	091											
Already	0.00	1.00	.20	.40	(111)	(128)	(128)	(128)	(128)											
. State	1.00	3.00	1.85	.824	036	155	097	.082	.069	.068										
					(111)	(128)	(128)	(128)	(128)	(128)										
. Prevention	7.00	23.00	16.53	2.89	076	.216	022	180	.052	147	030									
ocus					(110)	(125)	(125)	(125)	(125)	(125)	(125)									
). Functional	0.00	31.50	9.99	7.69	.010	.031	045	064	.405	.093	.101	.001								
duc. 0. Functional	0.00	173.00	40.34	46.17	(111) 191	(128) .628	(128) 116	(128) 260	(128)	(128) .231	(128) 096	(125) .201	.344							
xper.	0.00	175.00	40.54	40.17	(107)	(124)	(124)	(124)	(124)	(124)	(124)	(121)	(124)							
Education	1.00	10.00	7.2	1.69	028	.064	.047	016	.297	.142	.183	154	.431	.094						
Level					(110)	(127)	(127)	(127)	(127)	(127)	(127)	(124)	(127)	(123)						
2. Motivation	5.45	22.86	13.47	3.72	.236	307	.045	.169	.041	009	.105	166	.010	310	.035					
2 D	1.00	2.00	1.40	40	(110)	(124)	(124)	(124)	(124)	(124)	(124)	(123)	(124)	(120)	(123)	103				
3. Business Plan	1.00	2.00	1.40	.49	163 (111)	134 (124)	132 (124)	037 (124)	.220 (124)	.021 (124)	.280 (124)	082 (123)	.323 (124)	.058 (120)	.145 (123)	.182 (123)				
4. Promotion	15.00	29.00	22.36	3.06	348	.217	.060	294	.212	047	095	007	.117	.246	.097	109	.135			
ocus					(111)	(126)	(126)	(126)	(126)	(126)	(126)	(125)	(126)	(122)	(125)	(124)	(124)			
5. Marital	0.00	1.00	1.32	.47	081	595	123	002	.005	097	.185	147	005	353	021	.056	.075	016		
Status					(111)	(128)	(128)	(128)	(128)	(128)	(128)	(125)	(128)	(124)	(127)	(124)	(124)	(126)		
6. Social	1.00	5.00	3.15	.83	.022	180	063	.011	.125	.059	.014	026	.016	118	002	.246	.000	.041	.036	
Support					(111)	(124)	(124)	(124)	(124)	(124)	(124)	(123)	(124)	(120)	(123)	(123)	(124)	(124)	(124)	
17. PA	11	25	15.25	23.31	.000	.161	042	.066	048	.005	152	.050	120	.042	.036	.005	123	.234	210	002
					(111)	(128)	(128)	(128)	(128)	(128)	(128)	(125)	(128)	(124)	(127)	(124)	(124)	(126)	(128)	(124)

a All correlations  $\geq$  .18 are significant at  $p \leq$  .05

Table 4.2. Regression results predicting BEP from all Control Variables

Criterion		Becoming	Model				
Predictor	b	β	t	p	SE	F	$R^2$
Intercept	2.543		.272	.786	18.074	1.00	.468
Age	-3.294	184	-1.720	.089			
Gender	-2.684	067	629	.531			
Minority Status	3.353	.070	.605	.546			
State: NE	.363	.010	.092	.927			
HiredAlready	5.729	.130	1.173	.244			
Prevention Focus	372	019	178 .859	.859			
Retail Store / Trade	575	011	091	.928			
Restaurant / Bar	-3.843	040	346	.730			
Health Ed SocSvc	.410	.004	.041	.068			
Mnfg	4.877	.026	.250	.803			
Construction	-1.694	026	222	.825			
Agric Forest Fish	11.042	.115	1.052	.295			
Whlse Trade Dist	-24.288	180	-1.789	.077			
Communications	-13.933	189	-1.699	.093			
Finance	14.887	.111	1.071	.287			
Insurance	2.115	.019	.182	.856			
Real Estate	-6.639	060	586	.559			
<b>Business Consulting</b>	-5.791	150	-1.125	.263			

Table 4.3. Regression results predicting BEP from Hypothesized Variables and Significant Controls

Criterion		Becoming	g an Employer I	Problem		M	odel
Predictor	b	β	t	p	SE	F	$R^2$
_							
Intercept	19.250		2.032*	.045	9.472	3.518***	.296
Age	-5.298	300	-2.179*	.032			
Prevention Focus	743	041	437	.663			
Func. Expertise	5.706	.211	1.988*	.050			
Func. Experience	-2.403	093	783	.436			
Education Level	410	039	396	.693			
Motivation	1.454	.084	.851	.397			
Business Plan	-7.538	214	-2.238*	.028			
Promotion Focus	-6.069	323	-3.362*	.001			
Marital Status	-9.553	258	-2.228*	.028			
Social Support	.678	.033	.361	.719			
Positive Affect	.453	.020	.218	.828			

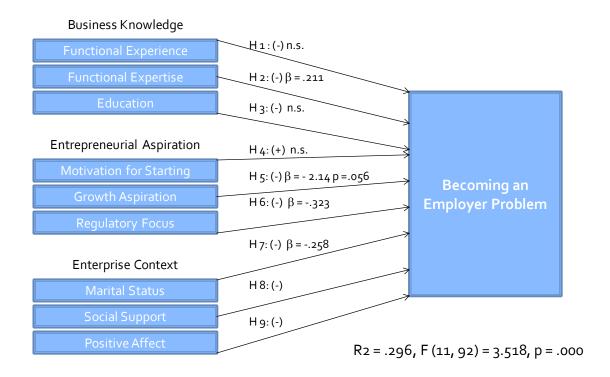


Figure 4.1. Model of Hypothesis Results

#### **CHAPTER 5**

### DISCUSSION AND CONCLUSION

The overall goal of this study was to identify what the problems were as perceived by the small business owner and ultimately, the one-person enterprise. Through the development of the criterion variable, this research identified three latent constructs and one higher order factor of the Becoming an Employer Problem that is comprised of nine classifications of specific problems or concerns as perceived by very small businesses. These include: Administrative and Legal Concerns and Obligations (ADLGL: concerns regarding paperwork, costs, legal and regulatory obligations); concerns regarding the Recruitment and Selection Process (REC: the process of recruitment and selection, the ability to identify and find a suitable employee, and the lost time invested in the process of recruitment and selection); and problems associated with the individuals Management Abilities and Preferences (MNGT: their personal abilities, concerns regarding being independent and the sharing of information).

The characteristics of the person (age, functional expertise, promotion pride orientation) combined with their business planning activities and marital status explained approximately 30% of the variance in their perception of the Becoming an Employer Problem. Results of this study are encouraging and future research is recommended to better understand the antecedents and consequences of the Becoming an Employer Problem.

The results of this study suggest that additional research should be conducted to inform our understanding of the becoming an employer problem. This study proposed nine hypotheses of which four were supported (Hypothesis 2: functional expertise,

Hypothesis 5: business planning Hypothesis 6: promotion pride and Hypothesis 7: marital status).

The results of this study are informative to our understanding of how entrepreneurs, especially the one-person enterprises think about problems they encounter as they operate and consider growing their business. The significant effect of age, suggests that there may be an effect of general life experience that was not specifically measured. The significant effect of functional expertise suggests that the more one knows about a particular area of business, the more likely one is to know what also might be encountered in terms of foresight and future challenges. The significant effect of business planning supports commonly held expectations that the process of planning enables the planner to have more realistic expectations about the future. It could also be that the intent to hire or not to hire an employee may have been an element considered in the activity of planning. A significant effect for promotion pride (controlling for prevention pride) suggests that the individual's success with past goals has oriented them in a positive way towards the BEP. The significant effect of marital status suggests that those OPEs who reported being married or living with a partner, might actually be different from those OPEs who are truly operating alone. Marital status may also be influencing an implicit measure of social support or other support that is not measured by marital status alone, and should be investigated further...

#### Limitations

This study, as is no study, without limitations. Despite the small sample size, significant effects were identified, and future research in this area is included.

Limitations of this current study primarily include size of the sample, and the use of only self-reported content.

**Sample Size and Power.** This study is less strong due to the size of the sample of one-person enterprises being limited to 128 participants. In this study these analyses were only able to detect effects that were significant at the .25 level or greater. Data collection should continue as part of a future research agenda in order to increase the sample size and assess more complicated relationships with more robust statistics.

For example, a goal of future research would be to have a large enough sample to assess the relationships between all of the 80 indicators and the latent construct (BEP) at the item level to better test the structural relationships with more sophistication. The larger sample would also afford the simultaneous testing of all of our predictors on the dependent variable either via regression or structural equation modeling. Finally, a test of metric invariance would be possible to compare how the different types of problems are more or less meaningful to different types and sizes of entrepreneurs or those operating in different industries.

Recruitment Student recruited samples tended to be the most effective and will be continued and expanded via relationships with colleagues at peer institutions throughout the United States. Recruitment from the Dun and Bradstreet database and the small business advocacy groups generated significantly less participation than expected. This is likely due to several factors, the timing of the invitations was sent prior to tax preparation season when small business owners have an additional administrative burden, contact with these samples did not have additional reminders or contact with the

investigator beyond the first postcard or first email. A plan for increasing involvement from these groups is discussed in the section on future research.

### **Future Research**

Increase Sample Size. In an effort to increase participation and improve the sample size, the researcher's role and visibility in the process as the primary investigator will need to increase.

Increase Participation. More engagement in the professional community within which data would be collected. To make announcements, place advertising and promote the research more consistently and effectively, further relationships with specific industry professional organizations both locally and nationally (e.g., Homebuilder's Association, Realtor's Association) to recruit sector-specific participation should be made.

Create more incentives for participation. The incentives for participation were minimal, which included only access to the preliminary findings and invitation to participate in a report out of the findings and if the entrepreneur was interested a free consultation with the primary investigator after the conclusion of the study. In addition to shortening the length of the survey, additional incentives should be researched on what might increase participation by these small businesses.

Reconsider some of the items and measures for financial data. In addition, different ways to gather the items associated with total investment, past sales performance and future sales goals as a means to classify businesses in terms of scale and size goals need to be considered. One way would be through the survey instrument itself, by creating meaningful categories of these financial a opposed to open response or both.

#### **Future Research**

Starting Alone. Future potential research may examine the extent to which whether or not the entrepreneur started alone or with others influences on their perception of the BEP. An assumption made in this study is that the entrepreneur is currently operating their business alone and has no employees, however, it did not account for whether or not, and why they started their business by themselves and this may be a significant predictor of the influence of some problems more than others. The available research on starting a lone is more theoretical than empirical. This is an opportunity for future research.

### Better understanding of the involvement and support of Spouse/Partner.

This study found a significant effect for marital status as measured by married and/or living with a partner and theoretically would suggest that those OPE's are not really operating all alone, rather they at least have the involvement and support of another person in their life even if they are not involved or supportive of their business. Future research should more clearly examine the involvement in and support of the business, and the owner as provided by the spouse / partner. There could be significant differences for those who are operating their business alone, and who have involved and supportive spouses versus those that are not involved, and/or not supportive, as well as qualitative differences in type of involvement and support.

**Interventions.** Once the BEP is better understood, it is reasonable to assume that research could assess the influence of interventions both at the individual level and via public policy incentives on perceptions of the problem of becoming an employer or outcomes of becoming an employer (i.e. job creation, or firms that became employers).

This might be possible by employing even more sophisticated modeling techniques to examine different levels of this issue separately or simultaneously. With job creation and economic development a significant public and economic issues, it would make sense that any effort we can make to better understand what is inhibiting firms becoming employers and thereby creating jobs is a worthy research agenda to pursue.

# **Implications**

This study proposed several practical implications for education and pedagogy, future research, entrepreneurship and public policy and the practice of human resources in entrepreneurship.

Educational. As educators of entrepreneurship we consult and encourage students on the business start-up process, yet we have very little research to assist us in understanding the complexities of transitioning a very small firm, especially those that have chosen to start alone on how to transition to a firm with employees. This research attempts to investigate the problems associated with a small company's growth and having that information we can direct students of entrepreneurship towards different exercises and experiences that may increase the confidence when dealing with each different type of problem.

In addition, the findings here suggest that those who are married or living with a partner perceive the problems differently than those that are not otherwise engaged in a similar relationship. For our students who may often be single we might encourage them to engage a mentor or trusted other in the process if for no other reason than to have someone to talk about the problems with, which is what is likely to occur among married couples regardless of how involved or supportive the spouse is of the business.

**Theory.** With respect to the academic field of entrepreneurship, this research contributes in the following ways: it advances our understanding of the entrepreneurial process; it identifies and emphasizes the unique problems associated with a specific activity during growth, that of becoming an employer. In addition, it advances the cognitive perspective of entrepreneurship by including the domain of ill-defined problems and the concept of problem construction as theoretical perspectives from which to examine the entrepreneurial process. There is a movement both in the cognitive aspect of entrepreneurship and the intersection of human resources and entrepreneurship but they have yet to fully examine this topic (cf. Ward, 2004). This dissertation will contribute to those discussions in a new and novel way.

Policy. This research has policy implications as well. Prior to this research study very little was known about the perceptions small business owners especially OPEs have about job creation and becoming an employer, yet job creation is a goal of much public policy. At a minimum this research can educate policymakers, many of whom are not small business owners, on the currently held perceptions of small business owners and encourage them to take their perspective when crafting and evaluating public policy designed to encourage job creation and among small businesses. Second, they should be encouraged to take this perspective when crafting and evaluating public policy designed to encourage job creation. Third, increase the relevance of the issues impact by framing the problems and solution in ways that are meaningful to their communities. For example, in a city, such as Lincoln, Nebraska, there are 12,000 microbusiness (with less than 10 employees) and 6,000 currently unemployed. Assuming that all of the unemployed were employable, if 50% of those 12,000 businesses were to create one new

job, the effect on the job market could eradicate the unemployment problem. While it is not likely that a solution would happen in that manner, the idea is that solutions become more feasible when the perspective changes.

**Practice.** There are several practical implications from this research. At a minimum, this research proposes that there at least nine different types of symptoms that a OPE might perceive as impediments or barriers to become an employer. Understanding that these perceptions exist can help identify means by which to help small businesses, especially those who are operating alone, consider ways around them via accessing other professional resources, or designing their organization in such a way that minimizes the concerns about becoming an employer. This research could be applied to practice in several ways. First, as a diagnostic tool for consulting the very small businesses, regarding issues of becoming an employer and managing growth, especially the oneperson enterprise to assist with recruitment, selection and job design as many of the concerns identified can be overcome with the right human resources systems. Second, the items in the BEP could be used as objectives for employment law, tax and payroll seminars offered by attorneys and accountants. These seminars could be offered as outreach programs as well as a means to gain new clients for their respective practices. For example, an OPE who is hesitant to become an employer because of all the payroll paperwork required might be well-served to be informed about the payroll services that offer special packages to very small businesses. Third, the findings from this research can be applied in ways that extend previous practical and theoretical work by others. For example, Cascio (2000) has written a book on Costing Human Resources. It is practically a one of a kind resource for the field in which he offers HR Practitioners

mathematical and financial models to account for their programs and services. Several of the items in the BEP could be extended to help OPEs and small business owners better predict when they can afford to hire an employee, how to estimate future costs associated and to determine an appropriate cost/benefit to having an additional employee on staff. Finally, organizational and job design issues can be addressed for the OPE and growing business building on Eisenhardt's (1985) models of management and control systems to help the owners adapt their organizational processes to accommodate their individual differences regarding aspects of the business such as reward structures, task characteristics and information systems.

### References

Abelson, R. P. & Levi, A. (1985). Decision making and decision theory. In G. Lindzey & E. Aronson (Eds.), Handbook of Social Psychology (3<sup>rd</sup> ed.) (Vol. 1, pp. 231-310). New York: Random House.

Aldrich, H. & Langdon, N. (1998). Human resource management and organizational life cycles. In P. Reynolds, W. Bygrave, N. Carter, S. Manigart, C. Mason, G. D. Meyer and K. Shaver (eds). Frontiers of Entrepreneurship Research, Babson Park, US: Babson College, pp.349-358.

Aldrich, H. E., & Reuf, M. (2006). Organizations Evolving, 2<sup>nd</sup> edition. Thousand Oaks: Sage.

Alpander, G.G., Carter, K. D., & Forsgren, R. A. (1990). Managerial issues and problem-solving in the formative years. Journal of Small Business Management, 28(2), 9-19.

Alvarez, S, A. & Mallow, J. C. (2006). Why human resources management differes in entrepreneurial and established firms: Theoretical foundations. In J.W. Tansky and R.L. Heneman (eds.) Human Resource Strategies for the High Growth Entrepreneurial Firm: A Volume in Research in Human Resource Management, Greenwich, CT: Information Age Publishing.

Alvarez, S. A., & Barney, J. B. (2005). How do entrepreneurs organize firms under conditions of uncertainty? Journal of Management, 31(5), 776-793.

Amba-Rao, S. C. & Prendse, D. (1985). Human resources compensation and maintenance practices. Amercian Journal of Small Business, 19-29.

Arlin, P. K. (1989). The Problem of the Problem. In J. A. Sinnott, (Ed.). Everyday Problem Solving: Theory and Applications. New York: Praeger.

Avey, J. Luthans, F., Smith, R. M., & Palmer, N. (2010). Impact of Positive Psychological Capital on Employee Well-Being Over Time. Journal of Occupational Health Psychology, 15(1), 17-28.

Bagozzi, R. P., & Edwards, J. R. (1998). A general approach for representing constructs in organizational research. Organizational Research Methods, 1, 45-87.

Bagozzi, R. P., & Heatherton, T. E. (1994). A general approach to representing multifaceted personality constructs: Application o state self-esteem. Structural Equation Modeling, 1, 35-67.

Baker, T., & Aldrich, H. (1994). Human resource management and new ventures. Paper presented at the Babson Conference on Entrepreneurship, Babson Park, MA. US.

Bandalos, D. L. (2002). The effects of item parceling on goodness-of-fit and parameter estimate bias in structural equation modeling. Structural Equation Modeling, 9 (1), 78-102.

Bandura, A. (1986). Social foundations of thought and action. Englewood Cliffs, NJ. Prentice

Baron, R. A. & Ward, T. B. (2004). Expanding entrepreneurial cognitions toolbox: Potential contributions from the field of cognitive science. Entrepreneurship Theory and Practice, 28 (6) 553-573.

Baron, R. A. (1998) Cognitive mechanisms in entrepreneurship: Why and when entrepreneurs think differently than other people. Journal of Business Venturing, 13, 275-294.

Baron, R.A. (2003). Human resource management and entrepreneurship: Some reciprocal benefits of closer links. Human Resource Management Review, 13, 253-256.

Barrett, R., & Mayson, S., (2006). Exploring the intersection of HRM and entrepreneurship: Guest editor's introduction to the special edition on HRM and Entrepreneurship. Human Resource Management Review, *16*, 443-446.

Bates, T. (1995). Self-employment across industry groups. Journal of Business Venturing, 10, 143-156.

Baum, J. R. & Locke, E. A. (2004). The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. Journal of Applied Psychology, 89(4), 587-598.

Baum, J. R., Locke, E. A. & Smith, K. G. (2001). A multidimensional model of venture growth. Academy of Management Journal, 44(2), 292-303.

Baumol, W. S. (1990). Entrepreneurship: Productive, unproductive and destructive. Journal of Political Economy, 98 (5), 893-921.

Bernard, H. R. (2000). Social Research Methods. Thousand Oaks, CA: Sage Publications.

Bhide, A. (2000). The origin and evolution of new businesses. New York, US: Oxford University Press.

Birch, D. L. (1979). The job generation process. Unpublished report prepared by the Massachusetts Institute of Technology Program on Neighborhood and Regional Change for the Economic Development Administration, U.S. Department of Commerce, Washington, D.C.

Bird, B. (1992). The operation of intentions in time: The emergence of the new venture. Entrepreneurship Theory & Practice, 17(1), 11-20.

Birley, S. & Westhead, P.(1990). Growth and performance contrasts between 'types' of small firms. Strategic Management Journal, 11, 535-557.

Birley, S., & Westhead, P. (1994). A taxonomy of business startup reasons and their impact on firm growth and size. Journal of Business Venturing, 9, 7-31.

Blau, D. (1987). A time series analysis of self-employment in the United States, Journal of Political Economy, 95, 445-467.

Bruderl, J. & Preisendorfer, P. (1998). Network support and the success of newly founded businesses. Small Business Economics, 10, 213-225.

Brush, C. G. & Manolova, T. S. (2004). Personal Background. In Gartner, W. B., Shaver, K. G., Carter, N. M. & Reynolds, P. D. Eds. Handbook of Entrepreneurial Dynamics: The Process of Business Creation. Thousand Oaks: Sage Publications.

Brush, C. G. & Manolova, T. S. (2004). Start-up Problems. In Gartner, W. B., Shaver, K. G., Carter, N. M. & Reynolds, P. D. Eds. Handbook of Entrepreneurial Dynamics: The Process of Business Creation. Thousand Oaks: Sage Publications.

Busenitz, L. & Lau, C. (1996). A cross-cultural cognitive model of new venture creation. Entrepreneurship Theory & Practice, 20(4), 25-39.

Busenitz, L. & Barney, J. (1997). Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making, Journal of Business Venturing, 12 (1), 9-30.

Busenitz, L. W., West, G. P., Shepherd, D., Nelson, T., Chandler, G. N., Zacharakis, A., (2003). Entrepreneurship research in emergence: Past trends and future directions. Journal of Management, 29 (3), 285-308.

Cardon, M.S., & Stevens, C.E., (2004). Managing human resources in small organizations: What do we know? *Human Resource Management Review*, 14, 295 – 323.

Cardozo, R., Ardichvili, A, Reynolds, P., & Miller, B. (1992). New firm growth and the role of founding circumstances. In N. Churchill, S. Birley, W. Bygrave, D. Muzyka, C. Wahlbin and W. Wetzel (eds), Frontiers of Entrepreneurship Research, Babson Park, US: Babson College.

Carroll, M., Marchington, M., Earnshaw, J. & Taylor, S. (1999). Recruitment in small firms: Processes, methods and problems. Employee Relations, 21(3), 236-250.

Carroll, R., Holtz-Eakin, D., Rider, M. & Rosen, H. S. (2000). Income taxes and entrepreneurs' use of labor. Journal of Labor Economics, 18(2), 324 - 351.

Carter, N. M. & Brush, C. G. (2004). Gender. In Gartner, W. B., Shaver, K. G., Carter, N. M. & Reynolds, P. D. Eds. Handbook of Entrepreneurial Dynamics: The Process of Business Creation. Thousand Oaks: Sage Publications.

Carter, N. M., Gartner, W. B., & Reynolds, P. D. (2004). Firm Founding. In W.B. Gartner, K. G. Shaver, N. M. Carter and P. D. Reynolds, Handbook of Entrepreneurial Dynamics: The Process of Business Creation. Sage: Thousand Oaks.

Carter, N. M., Gartner, W. B., & Shaver, K. G. (2004). Career Reasons. In W.B. Gartner, K. G. Shaver, N. M. Carter and P. D. Reynolds, Handbook of Entrepreneurial Dynamics: The Process of Business Creation. Sage: Thousand Oaks.

Carter, N. M., Gartner, W. B., Shaver, K. G., & Gatewood, E. J. (2003). The career reasons of nascent entrepreneurs. Journal of Business Venturing, 18, 13-39.

Case, J. (1992) How to survive without a job. Inc. 14(6), 32-44.

Chi, T., (1994). Trading in strategic resources: Necessary conditions, transaction cost problems and choice of exchange structure. *Strategic Management Journal*, *15*(4), 271-290.

Coase, R.H., (1937). The Nature of the Firm. Economica, New Series, 4 (16), 386 – 405.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences, second edition. Hillsdale, NJ: Lawrence Erlbaum Associates.

Cooper, A. C. (1979). Strategic Management: New Ventures & Small Business. In D. E. Schendel and C. W. Hofer. Strategic Management: A New View of Business Policy and Planning. Boston: Little Brown & Company.

Cooper, A. C., Gimeno-Gascon, F.J., Woo, C. Y. (1994). Initial human and financial capital as predictor of new venture performance. Journal of Business Venturing, 6 (2), 93-115.

Cowan, D. A. (1986). Developing a process model of problem recognition.

Academy of Management Review, 11(4), 763-776.

Cowling, M. (2003). The Contribution of the Self-Employed to Employment in the EU: A Report to the Small Business Service. Retrieved from:

Cowling, M., Taylor, M. and Mitchell, P. (2004). Job Creators. The Manchester School, 72 (5), 601-617.

Crowe, E. & Higgins, E. T. (1997). Regulatory focus and strategic inclinations: Promotion and prevention in decision making. Organizational Behavior and Human Decision Processes, 69, 117-132.

Csikszentmihalyi, M., & Getzels, J. W. (1971). Discovery-oriented behavior and the originality of creative products: A study with artists. Journal of Personality and Social Psychology, 19, 47-52.

Curran, J. (1988). Training and research strategies for small firm. Journal of General Management, 13(3), 24-37.

Curran, J., & Stanworth, J. (1979). Self-selection and the small firm worker – a critique and an alternative view. Sociology, 13(3), 427-444.

D'Ambroise, G. & Muldowny, M. (1988). Management theory for small business: Attempts and requirements. Academy of Management Review, 12(2), 226-240.

David, H. & Watts, G. (2007). Working Paper on Becoming an Employer

David, H. & Watts, G. (2008). Becoming an employer. In R. Barrett and S.

Mayson eds. International Handbook of Entrepreneurship and Human Resources

Management. Cheltenham, UK: Edward Elgar.

Davidsson, P., Lindmark, L., & Olafsson, C. (1998). The extent of overestimation of small firm job creation – an empirical examination of the regression bias. Small Business Economics, 11, 87-100.

Davis, S. J. & Haltiwanger, J. (1994). Small business and job creation: Dissecting the myth and reassessing the facts. Business Economics, 29(3), 13-22.

Delmar, F. & Davidsson, P. (2000). Where do they come from? Prevalence and characteristics of nascent entrepreneurs, Entrepreneurship and Regional Development, 12, 1-23.

Delmar, F., & Wiklund, J. (2008). The effect of small business managers' growth motivations on firm growth: A longitudinal study. Entrepreneurship Theory and Practice. May, 437-457.

Dencker, J. C., Gruber, M., & Shah, S. K. (2009). Individual and opportunity factors influencing job creation in new firms. Academy of Management Journal, 52(6), 1125-1147.

Duncan, J. W., & Handler, D. P. (1994). The misunderstood role of small business. Business Economics, 29(3), 7-13.

Dunkleberg, W. Cooper, A. Woo., C., & Denis, W. (1987). New firm growth and performance. In N. Churchill, J. Hornaday, B. Kirchoff, O. Krasner and K. Vesper. Frontiers of Entrepreneurship Research, Babson Park, US: Babson College, 307-321.

Evans, D. S. & Leighton, L.S. (1989). Some empirical aspects of entrepreneurship. The American Economic Review, 79(3), 519-535.

Evans, J. R. (1992). Creativity in MS/OR: Improving problem solving through creative thinking. Interfaces, 22(2), 87-91.

Expert Group. (2005). First Employee Obstacles to growth: Recruiting the first employee. European Commission Enterprise and Industry Directorate-General

Fairfield-Sonn, J.W. (1987). A Strategic process model for small business training and development. Journal of Small Business Management, 25(1), 11-18.

Feldman, D. C, & Bolino, M. C. (2000). Career patterns of the self-employed: Career motivations and career outcomes. Journal of Small Business Management, 38(3), 53-67.

Fernandes, R., & Simon, H. A., (1999). A study of how individuals solve complex and ill-structured problems. Policy Sciences, 32, 225-245.

Folster, S. (2000). Do entrepreneurs create jobs? Small Business and Economics, 14, 137-148.

Ford, M. W. & Matthews, C. H. (2004). Individual Problem Solving. In Gartner, W. B., Shaver, K. G., Carter, N. M. & Reynolds, P. D. Eds. Handbook of Entrepreneurial Dynamics: The Process of Business Creation. Thousand Oaks: Sage Publications.

Forgas, J. P. (1995). Mood and judgment: The affect infusion model (AIM). Psychological Bulletin, 117(1), 39-66.

Gaines, J., & Jermier, J. M. (1983). Emotional exhaustion in a high stress organization. Academy of Management Journal, 26, 567-586.

Garbin, C.P. (2008). Power, effect size & sample size. Retrieved June 18, 2008, from http://psych.unl.edu/psycrs/statpage/mrpower.pdf

Gartner, W. B. & Shane, S. A. (1995). Measuring entrepreneurship over time. Journal of Business Venturing, 10, 283-301.

Gartner, W.B., Shaver, K. G., Carter, N. M. & Reynolds, P. D. Handbook of Entrepreneurial Dynamics: The Process of Business Creation. Thousand Oaks: Sage.

Gatewood, R. D., & Field, H. S. (1987). A personnel selection program for small business management. Journal of Small Business Managemeng, 25(4), 16-24.

Getzels, J. W. & Smilansky, J. (1983). Individual differences in pupil perceptions of school problems. British Journal of Educational Psychology, 53, 307-316.

Getzels, J. W. (1982). The problem of the problem. In R. M. Hogarth ed.

Question Framing and Response Consistency, San Francisco: Jossey Bass.

Getzels, J.W. (1975). Problem-finding and the inventiveness of solutions. Journal of Creative Behavior, 9, 12-18.

Granovetter, M. S. (1983). The strength of weak ties: A network theory revisited. In R. Collins (ed.), Sociological Theory, San Francisco, CA: Jossey-Bass, pp. 201-233.

Hamilton, B. 2000. Does entrepreneurship pay? An empirical analysis of the returns of self-employment. Journal of Political Economy, 108(3): 604-631.

Hechavarria, D. M., Schenkel, M. T., & Matthews, C. H. (2009). Contextual motivation and growth aspirations among nascent entrepreneurs. In P. D. Reynolds and R. T. Curtin (Eds.) New Firm Creation in the United States, International Studies in Entrepreneurship. Springer.

Heneman, H. G., & Berkley, R. A. (1999). Applicant attraction practices and outcomes among small businesses. Journal of Small Business Management, 37(1), 53-74.

Heneman, R. L., & Tansky, J. W. (2002). Human Resources Management models for entrepreneurial opportunity: Existing knowledge and new directions.

Managing people in entrepreneurial organizations, 5, 55-81.

Herman, A. & Reiter-Palmon, R. (2011). The effect of regulatory focus on idea generation and idea evaluation. Psychology of Aesthetics, Creativity and the Arts, 5(1), 13-20.

Hershey, D. A., Walsh, D. A., Read, S. J. & Chulef, A. S., (1990). The effects of expertise on financial problem solving: Evidence for goal-directed, problem-solving scripts. Organizational Behavior and Human Decision Processes, 46(1), 77-91.

Higgins, E. T. (1997). Self discrepancy: A theory relating self and affect. Psychological Review, 94, 319-340.

Higgins, E. T. (1998). Continuities and discontinuities in self-regulatory and self-evaluative processes: A developmental theory relating self and affect. Journal of Personality, 57, 407-444.

Higgins, E. T. (2002). How self-regulation creates distinct values: The case of promotion and prevention decision making. Journal of Consumer Psychology, 12(3), 177-191.

Higgins, E. T., Friedman, R. S., Harlow, R. E., Idson, L. C., Ayduk, O. N. & Taylor, A. (2001). Achievement orientations from subjective histories of success: promotion pride versus prevention pride. European Journal of Social Psychology, 31, 3-23.

Hipple, S. (2004). Self-employment in the United States: An update. Monthly Labor Review, July, 13-24.

Hmieleski, K.& Ensley, M.(2005). An upper-echelons theory approach to the emergence of organizational learning in nascent firms. Entrepreneurship Conference Paper Abstracts, Academy of Management Annual Meeting Proceedings.

Holley, W. H. & Wolters, R. S. (1987). Employment at will: An emerging issue for small business. Journal of Small Business Management, 25(4), 1-8.

Holyoak, K.J. (1984). Mental models in problem solving. Tutorials in Learning and Memory. Eds. J.R. Anderson, S. M. Kosslyn, San Francisco, CA: W.H. Freeman & Co.

Hornsby, J. S. & Kuratko, D. F. (1990). Human Resources Management in small business: Critical issues for the 1990's. Journal of Small Business Management, 28(3), 9-18

Hu, L. & Bentler, P. M. (1999). Cutoff criteria for fit indixes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, 6(1), 1-55.

Ireland, R. D., Reutzel, C. R., & Webb, J. W., (2005). Entrepreneurship research in AMJ: What has been published, and what might the future hold? Academy of Management Journal, 48(4), 556-564.

Jack. S., Hyman, J., & Osborne, F. (2006). Small entrepreneurial ventures culture, change and the impact on HRM: A critical review. Human Resource Management Review, 16, 456-466.

Johnson, E. J. & Tversky, A. (1983). Affect, generalization, and the perception of risk. Journal of Personality and Social Psychology, 45(1), 20-31.

Kalleberg, A. L., & Leight, K. (1991). Gender and organizational performance: Determinants of small business survival and success. Academy of Management Journal, 34(1), 136-161.

Kalleberg, A.L., Marsden, P. V., Aldrich, H. E., & Cassell, J. W. (1990).

Comparing organizational sampling frames. Administrative Science Quarterly, 35, 658-688.

Katz, J. A. (1990). Longitudinal analysis of self-employment follow through. Entrepreneurship and Regional Development, 2, 15-25.

Katz, J.A., Aldrich, H. E., Welbourne, T. M., Williams, P. M. (2000). Guest editor's comments special issue on human resource management and the SME: Towards a new synthesis. Entrepreneurship Theory and Practice, 25(1), 7-10.

Khaire, M. (2010). Young and no money? Never mind: The material impact of social resources on new venture growth. Organization Science, 21(1) 168-185.

Kirchoff, B. A. (1996). Self-employment and dynamic capitalism. Journal of Labor Research. 27(4), 627-643.

Knaup. A. E. (2005). Survival and longevity in the business employment dynamics data. Monthly Labor Review. 50-56.

Kuratko, D. F. & Hodgetts, R. M. (2006). Entrepreneurship: Theory, Process, Practice. South-Western Publishing.

Lichtenstein, B. M. B & Brush, C. G. (2001). How do "resource bundles" develop and change in new ventures? A dynamic model and longitudinal exploration.

Entrepreneurship Theory and Practice, 25(3) 37-58.

Little, B. L. (1986). The performance of personnel duties in small Louisiana firms: A research note. Journal of Small Business Management, 24(4), 66-69.

Low, M.B., & MacMillan, I.C. (1988). Entrepreneurship: Past research and future challenges. Journal of Management, 14(2), 139-161.

March, J. G., & Simon, A. H., (1958). Organizations. New York: John Wiley.

Marlow, S. (2006). Human resource management in smaller firms: A contradiction in terms? Human Resource Management Review, 16, 467-477.

Matthews, C. H. & Human, S. E. (2004). Family Background. In Gartner, W. B., Shaver, K. G., Carter, N. M. & Reynolds, P. D. Eds. Handbook of Entrepreneurial Dynamics: The Process of Business Creation. Thousand Oaks: Sage Publications.

Matusik, S. (1997). Motives, use patterns and effects of contingent resource use in entrepreneurial firms. In P. Reynolds, W. Bygrave, N. Carter, P. Davidsson, W. Gartner, C. Mason, and P. McDougall (eds), Frontiers of Entrepreneurship Research, Babson, Park, US: Babson College.

Maurer, S. D. & Fay, C. H. (1986). Legally fair hiring practices for small business. Journal of Small Business Management, 24(1), 47-53.

McEvoy, G. M., (1984). Small business personnel practices. Journal of Small Business Management, 22(4), 1-8.

McMullen, J. S. & DeCastro, J. (2003). Promotion focus and entrepreneurial sensemaking: The mount everest disaster. Entrepreneurship Conference Paper Abstracts, Academy of Management Annual Meeting Proceedings.

McMullen, J. S. & Shepherd, D. A. (2002). Regulatory focus and entrepreneurial intention: Action bias in the recognition and evaluation of opportunities. In W. D. Bygrave, C. G. Brush, P. Davidsson, J. Fiet, P. G. Greene, R. T. Harrison, M. Lerner, G. D. Meyer, J. Sohl & A. Zacharakis (Ed.s). Frontiers of Entrepreneurship Research: Proceedings of the Twenty-Second Annual Entrepreneurship Research Conference.

Miner, A. S. (1987). Idiosyncratic jobs in formalized organizations.

Administrative Science Quarterly, 32, 327-351.

Mitchell, R. K., Busenitz, L., Lant, T., McDougall, P. P., Morse, E. A., Smith, J. B. (2004). The distinctive and inclusive domain of entrepreneurial cognition research. Entrepreneurship Theory and Practice, 18(6), 505 – 518.

Mitchell, R. K., Busenitz, L., Lant, T., McDougall, P., Morse, E. A., Smith, J. B. (2002). Toward a theory of entrepreneurial cognition: Rethinking the people side of entrepreneurship research. Entrepreneurship Theory and Practice, 27(2), 93-104.

Mitchell, R. K., Busenitz, L.W., Bird, B., Gaglio, C. M., McMullen, J. S., Morse, E. A., Smith, J. B. (2007). The central question in entrepreneurial cognition research 2007. *Entrepreneurship Theory & Practice*, 31(1), 1-27.

Mullins, J. W. (1996). Early growth decisions of entrepreneurs: The influence of competency and prior performance under changing market conditions. Journal of Business Venturing, 11(2), 89-105.

Mumford, M. D. & Gustafson, S. B. (1988). Creativity syndrome: Integration, application and innovation. Psychological Bulletin, 103, 27-43.

Mumford, M. D., Baughman, W. A., Threlfall, K. V., Supinksi, E. P., & Costanza, D. P. (1996). Process based measures of creative problem-solving skills: Problem construction. Creativity Research Journal, 9 (1), 63-76.

Mumford, M. D., Mobley, M. I., Uhlman, C. E., Reiter-Palmon, R., & Doares, L. M. (1991). Process analytic models of creative capacities. Creativity Research Journal, 4(2), 91-122.

Mumford, M. D., Reiter-Palmon, R., & Redmond, M., (1994). Problem construction and cognition: Applying representations in ill-defined domains. In M.

Runco (Ed.), Problem finding, problem solving, and creativity (pp. 3-39). Norwood, NJ: Ablex.

Mumford, M. D., Whetzel, D. L., & Reiter-Palmon, R. (1997). Thining creatively at work: Organizational influences on creative problem solving. Journal of Creative Behavior, 31 (1), 7-17.

Murphy, K.R., & Myors, B. (1998). Statistical power analysis: A simple and general model for traditional and modern hypothesis tests. Mahwah, NJ: Lawrence Erlbaum Associates.

O'Neill, H. M., & Duker, J. (1986). Survival and failure in small business. Journal of Small Business Management, 24(1), 30-37.

Okuda, S. M. Runco, M. A. & Berger, D. E. (1991). Creativity and the finding and solving of real-world problems. Journal of Psychoeducational Assessment, 9, 45-53.

Parker, S. C. (2006). Entrepreneurship self-employment and the labour market. In M. Casson, B, Yeung, A. Basu and N. Wadeson (eds.) The Oxford Handbook of Entrepreneurship. Oxford: Oxford University Press.

Penrose, E. T. (1959, 1968, 1995). The theory of the growth of the firm. Oxford: Basil Blackwell.

Pfeffer, J., & Salancik, G. (1978). The external control of organizations: A resource dependence perspective. New York: Harper & Row.

Piaget, J. (1976). L'equilibration des structures cognitives. Paris: Presses Universitaires de France.

Polanyi, M. (1958). Personal knowledge. Chicago: University of Chicago Press.

Rauch, A. & Frese, M. (2007). Let's put the person back into entrepreneurship: A meta-analysis on the relationship between business owner's personality traits, business creation and success. European Journal of Work and Organizational Psychology, 16 (4), 353-385.

Reiter-Palmon, R. (2009). A dialectic perspective on problem identification and construction. Industrial and Organizational Psychology, 2, 349-352.

Reiter-Palmon, R. & Robinson, E. J. (2009). Problem identification and construction: What do we know, what is the future? Psychology of Aesthetics, Creativity and the Arts, 3(1), 43-47.

Reiter-Palmon, R. Mumford, M. D., & Threlfall, K. V. (1998). Solving everyday problems creatively: The role of problem construction and problem type. Creativity Research Journal, 11(3), 187-197.

Reiter-Palmon, R., Mumford, M.D., & Threlfall, K. V., (1998). Solving everyday problems creatively: The role of problem construction and personality type. Creativity Research Journal, 11(3) 187-197.

Reiter-Palmon, R., Mumford, M.D., Boes, J. O., Runco, M. A., (1997). Problem construction and creativity: The role of ability, cue consistency, and active processing. Creativity Research Journal, 10 (1) 9-23.

Reitman, W. R. (1965). Cognition and Thought. New York: Wiley.

Reynolds, P. & White, S. (1997). The entrepreneurial process: Economic growth, men, women and minorities, Westport, CT US: Quorum Books.

Reynolds, P. & White, S. (1997). The Entrepreneurial Process: Economic Growth, Men, Women and Minorities, Westport, CT, US: Quorum Books.

Reynolds, P. (1987). New firms societal contribution vs. survival potential. Journal of Business Venturing, 2, 231-246.

Reynolds, P. & Curtin, R. T. (2008). Business creation in the United Sttaes: Panel study of entrepreneurial dynamics II: Initial assessment. Foundations and Trends in Entrepreneurship, 4(3), 155-307.

Reynolds, P. & Curtin, R. T. (2008). Business creation in the United States: Panel study of entrepreneurial dynamics II: Initial assessment. Foundations and Trends in Entrepreneurship, 4(3), 155-307.

Reynolds, P. & Miller, B. (1992). New firm gestation: Conception, birth and implications for research. Journal of Business Venturing, 7, 405-417.

Reynolds, P. (2004). Nature of Business Startups. In Gartner, W. B., Shaver, K. G., Carter, N. M. & Reynolds, P. D. Eds. Handbook of Entrepreneurial Dynamics: The Process of Business Creation. Thousand Oaks: Sage Publications.

Reynolds, P. 2007. New Firm Creation in the U.S. A PSED I Overview. Hanover, NH, Now Publishers, Sections A and D.

Reynolds, P. D., & Curtin, R. T. (2008). Business creation in the United States: Panel study of entrepreneurial dynamics II initial assessment. Foundations and Trends in Entrepreneurship, 4(3), 155-317.

Runco, M. A. & Okuda, S. A. (1988). Problem-discovery, divergent thinking, and the creative process. Journal of Youth and Adolescence, 17, 211-220.

Said, K. E., & Hughey, J. K., (1977). Managerial problems of the small firm, Journal of Small Business Management, 15(1), 37-47.

Sanders, J. M. & Nee, V. (1996). Immigrant self-employment: The family as social capital and the value of human capital. American Sociological Review, 61(2), 231-249.

Schein, E.H. (1983). The role of the founder in creating organizational culture. Organizational Dynamics, 12(1), 13-28.

Scheinberg, S., & Macmillan, I.C. (1988). An 11 country study of motivations to start a business. In B. A. Kirchoff, W. A. Long, W. E. McMullan, K. H. Vesper, & W. E. Wetzel, Jr. (Eds.), Frontiers in Entrepreneurship research (pp. 669-687). Wellesley, MA: Babson College.

Schindehutte, M., Morris, M. H., & Kurtako, D. F. (2000). Classification as a factor in the scientific evolution of entrepreneurship. Journal of Small Business Strategy, 11(2), 1-20.

Schraw, G., Dunkle, M. E., & Bendixen, L. E., (1995). Cognitive processes in well-defined and ill-defined problem solving. Applied Cognitive Psychology, 9, 523-538.

Schumpeter, J. (1934). Theory of economic development: An inquiry into profits, capital, credit, interest and the business cycle. Cambridge: Harvard University Press.

Schutgens, V. & Wever, E. (2000). Determinants of new firm success. Papers in Regional Science, 79, 135-159.

Shane, S, & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. Academy of Management Review, 25(1), 217-226.

Shane, S. & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. Academy of Management Review, 26(1), 13-17.

Shane, S. A. (2003). A General Theory of Entrepreneurship: The Individual-Opportunity Nexus. Cheltenham, UK: Edward Elgar.

Shane, S. A., (2008). The Illusions of Entrepreneurship: The costly myths that entrepreneurs, investors and policy makers live by. New Haven, CT: Yale University Press:

Shane, S. A., Kolvereid, L. & Westhead, P. (1991). An exploratory examination of the reasons leading to new firm formation across country and gender. Journal of Business Venturing, 6, 431-446.

Shane. S., Locke, E. A., & Collins, C. J., (2003). Entrepreneurial motivation. Human Resources Management Review, 13, 257-279.

Shaw, J., Higgins, E. T., & Friedman, R. S. (1998). Performance incentives and means: How regulatory focus influences goal attainment. Journal of Personality and Social Psychology, 74(2), 285-293.

Simon, H. A. (1960). The new science of management. New York: Harper & Row.

Simon, M., Houghton, S. M. & Aquino, K. (2000). Cognitive biases, risk perception, and venture formation: How individuals decide to start companies. Journal of Business Venturing, 14(5), 113-134.

Smith, R. M., & Combs, G.M. (2008). Lost in Transition: Facilitating Cross-Generational Knowledge Transfer. Paper presented at the Academy of Management annual meeting, Anaheim, CA.

Snedecor, G.W., & Cochran, W.G. (1980). Statistical methods, seventh edition.

Ames, IA: The Iowa State University Press.

Star, A. D. (1979). Estimates of the number of quasi and small businesses, 1948 to 1972. American Journal of Small Business, 4(2), 44-52.

Stevenson, W. B., & Gilly, M. C. (1991). Information processing and problem solving: The migration of problems through formal positions and networks of ties.

Academy of Management Journal, 34(4), 918-928.

Stinchcombe, A. L., (1965). Social Structure and Organizations. In James G. March Handbook of Organizations Chicago: Rand McNally.

Susbauer, J. C. (1979). Commentary. Cooper, A. C. Strategic Management: New Ventures & Small Business. In D. E. Schendel and C. W. Hofer. Strategic Management: A New View of Business Policy and Planning. Boston: Little Brown & Company.

Taylor, S. (2006). Acquantaince, meritocracy and critical realism: Researching recruitment and selection processes in smaller and growth organizations. Human Resources Management review, 16, 478-489.

Thompson, E. R. (2007). Development and validation of an internationally reliable short-form of the positive and negative affect schedule (PANAS). Journal of Cross-Cultural Psychology, 38 (2), 227-242.

Tullar, W. (2001). Russian entrepreneurial motive patterns: A validation of the miner sentence completion scale in Russia. Applied Psychology: An international review, 50(3), 422-435.

Ucbasaran, D, Westhead, P., & Wright, M. (2006). Habitual Entrepreneurs. In M. Casson, B, Yeung, A. Basu and N. Wadeson (eds.) The Oxford Handbook of Entrepreneurship. Oxford: Oxford University Press.

U.S. Small Business Administration, Office of Advocacy

http://web.sba.gov/faqs/faqIndexAll.cfm?areaid=24 - Retrieved 3/27/2011

Van Praag, C. M. & Cramer, J. S. (2001). The roots of entrepreneurship and labour demand: Individual ability and low risk aversion. Economica, 68(269), 45-62.

Venkataraman, S. (1997). The distinctive domain of entrepreneurial research An editor's perspective. In J. Katz & R. Bruckhaus (Eds.) Advances in Entrepreneurship Firm Emergence and Growth, 3, Greenwhich, CT, US: JAI Press, 119-138.

Verser, T. G. (1987). Owner's perceptions of personnel problems in small business. Mid-American Journal of Business. 13-17.

Vesper, K.H. (1979). Commentary. Cooper, A. C. Strategic Management: New Ventures & Small Business. In D. E. Schendel and C. W. Hofer. Strategic Management: A New View of Business Policy and Planning. Boston: Little Brown & Company.

Wadeson, N. (2006) Cognitive aspects of entrepreneurship: Decision making and attitudes to risk. In M. Casson, B, Yeung, A. Basu and N. Wadeson eds. The Oxford Handbook of Entrepreneurship. Oxford: Oxford University Press.

Wang, J. & Lee, A. Y. (2006). The role of regulatory focus in preference construction. Journal of Marketing Research, 43(1), 28-38.

Ward, T. B. (2004). Cognition, creativity and entrepreneurship. Journal of Business Venturing, 19, 173-188.

Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of a brief measure of positive and negative affect: the PANAS scales. Journal of Personality and Social Psychology, 54(6), 1063-1070.

Weber, C. E. (1984). Strategic Thinking – Dealing with uncertainty. Long Range Planning, 17(5), 60-70.

Wernerfelt, B. (1984). A resource-based view of the firm. Strategic Management Journal, 5, 171-180.

West, M. A. & Farr, J. L. (1989). Innovation at work: Psychological perspectives. Social Behavior, 3, 31-57.

Wicker, A., & King, J. (1989). Employment, ownership and survival in microbusiness: A study of new retail and service establishments. Small Business Economics, 1, 137-152.

Wilk, S.L., & Cappelli, P.C., (2003). Understanding the determinants of employer use of selection methods. *Personnel Psychology*, *56*, 103-124.

The White House Office of the Press Secretary (2009, December 8). President Obama Announces Proposals to Accelerate Job Growth and Lay the Foundation for Robust Economic Growth. Retrieved September 24, 2010, from http://www.whitehouse.gov/the-press-office/president-obama-announces-proposals-accelerate-job-growth-and-lay-foundation-robust

### APPENDIX A

# Items from the Criterion: Becoming an Employer.

Below are examples of the items in each of the Latent Factors. The full measure is currently under development.

### **ADMINISTRATIVE and LEGAL CONCERNS**

PAPERWORK: Administrative Burdens of: Recruitment, Hiring, Managing

Determining: Appropriate compensation

COSTS: Costs in general and specific costs

LEGAL and REGULATORY OBLIGATIONS: Complexity of legal and

administrative procedures, various legal obligations

### **RECRUITMENT and SELECTION**

RECRUITMENT and SELECTION PROCESS CONCERNS: Understanding of the overall process, how to predict performance

FINDING EMPLOYEES: Where and how to find employees of specific skill sets, determining fit

LOST TIME DUE TO EMPLOYEES: Investment of personal time in various aspects of selection, training, etc.

### **MANAGEMENT ABILITIES and PREFERENCES**

ENTREPRENEUR'S MANAGEMENT ABILITIES: I am concerned about my confidence as an employer, ability to design jobs

ISSUES of INDEPENDENCE / BUSINESS ATTRIBUTES: I desire to keep full control of the business

CONCERNS ABOUT SHARING INFORMATION: I prefer not to share information in general or about specific aspects of the business

# APPENDIX B

Control Variables.		
<b>Age.</b> What year were you born?		
<b>Gender.</b> What is your gender:		
Male		
Female		
Location. In what State do you ope	rate your business	
Ethnicity.		
Which best describes your e	thnicity?	
☐ White/Caucasian	☐ Asian	
☐ African American	☐ Hispanic	
☐ Native American	☐ Pacific Islander	
☐ Other:		

**Number of Employees.** How many employees do you currently have and pay taxes for?

### **APPENDIX C**

# Permission to use PSED Questions.

This study included several questions that have been previously used and published. These items were used with permission, but are not republished here.

